

The New Zealand
Internet
Orchid Review

Issue 1

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Publication Details and Charges

It is intended to publish the *New Zealand Internet Orchid Review* on a quarterly basis, with publication in March, June, September and December.

The email subscription rate is **zero**. The print subscription rate (including postage) has yet to be determined, as the decision as to whether to provide printed copies depends upon demand. We would like to eventually publish a printed version, but there would need to be sufficient demand to make it practical.

Deadlines for copy

All written copy for articles must be emailed to the Editors no later than one week before publication date. A reminder will be emailed to all regular contributors two weeks before each deadline. Society notices and classified advertising must be emailed to the Editors no later than one week before publication date. If you are running late, please email the editors (ncmiller@orcon.net.nz).

Classified advertising (non-commercial growers only) and Society notices will be published free of charge. A reminder notice will go to all subscribers and Society contacts shortly before each publication deadline.

Advertising

If you are interested in advertising in this publication, please email the editors for an information sheet. Our advertising rates are extremely reasonable, being set at \$10 for a page, part pages on a pro-rata basis. Graphics and photos incur no extra charge, provided that you supply them.

Classified advertisements, society notices

These are published free of charge, maximum of 30 words for a classified ad please.

Letters

Feel free to write letters to the editor. As long as they are not anonymous, obscene, time-wasting or libellous we will publish them!

Questions and answer section

If you have any questions relating to any aspect of the growing of orchids or companion plants, we will solicit replies from our panel of experts. Any responses received will be emailed to the questioner, and the question and answers will be published in the next issue. This way you can receive a prompt response to your question but other readers can subsequently benefit as well.

Spread the word

If you have any friends who grow orchids or 'companion plants', let them know of this publication. All they have to do to subscribe is to send an email. If they haven't joined the computer age and/or would be interested in subscribing to a print version, ask them to contact the editors by mail or telephone or else send an email on their behalf.

Please write for us

All submissions are welcome – long or short. If you're not too fluent with the written word, we are happy to edit your copy. Without writers there will be no magazine.

We welcome feedback

We would like to hear your reactions to this new magazine. Comments and suggestions on content, appearance, format etc will all be taken aboard. At this stage we have held the format to that of a simple word processing document, and have eschewed columns and other elaborate devices. Is the file size too large for those on dial-up internet access? What do you think? All feedback will receive a reply!

That address again

ncmiller@orcon.net.nz

Editorial

Welcome to the first issue of our email orchid magazine, *The New Zealand Internet Orchid Review*. Since the demise of *Orchids in New Zealand*, it has been apparent that the lack of a regular, nationwide periodical has been harming the hobby and frustrating keen orchid hobbyists. This publication aims to fill the void by coming out every three months. We hope that it will assist in reviving a delightful and rewarding hobby, together with the small-scale enterprises that cater to its enthusiasts' needs.

The editors admit that most people prefer to read a 'hard copy' publication (we do so ourselves) but the shrinkage in the number of orchid enthusiasts renders that option (possibly) impractical and uneconomic. If we receive sufficient requests for a printed version (which would require a subscription) we will examine the possibility. Email distribution, on the other hand, can cover a large or a small readership at minimal cost. When you have received this issue, you can always print it out and read it that way, if you prefer. Since the Editors last had anything to do with an orchid magazine (*Orchids in New Zealand*) in the mid to late 1980s, technology has changed a great deal! In those days, assembling a magazine was truly a cut-and-paste operation. However, we have been sending out a quarterly email newsletter, *LakeScience Rotorua*, for some time, and that has proved to be a useful precedent.

The annual subscription to this publication has been set at **nil**, to cover four issues per year. Advertising is available at very favourable rates. Classified advertising (for hobby growers) and club notices, show dates etc, will be published free of charge. The minimal advertising charges are designed to cover some editorial time and other costs. It should be pointed out that this magazine is being produced as a non-profit venture, with the sole interest of helping to revive the hobby.

The title of this magazine honours and commemorates *The New Zealand Orchid Review*, which was published by the New Zealand Orchid Society for many years. Eventually it was incorporated into *Orchids in New Zealand*, just a few years before that publication ceased to exist. We are proud and happy to resurrect the title, slightly modified, with the kind permission of the New Zealand Orchid Society.

Obviously, this magazine cannot thrive without contributions, of both articles and pictures. We welcome both. With the widespread adoption of computers, writing is easy and quick, and communication is almost instantaneous. Good quality photographs are particularly welcome, either from film based or digital cameras. If you wish to send us prints or (preferably) slides, we can scan these and return them. Alternatively you may email us your digital offerings. The same goes for text – if you have not joined the computer age, we can accept typescript. Handwriting? – talk to us first!

We hope that you enjoy and support this magazine, support your local orchid society and support our advertisers. And please write for us! The success of this magazine depends on our writers and subscribers. We intend to have some coverage of suitable 'companion plants' for orchids (hoyas, epiphytic plants, ferns, gesneriads, bromeliads, clivias, vireyas, etc) and welcome copy or advertising relating to these plants.

Nick and Elizabeth Miller

Introducing your Editors

Nick and Elizabeth Miller edited *Orchids in New Zealand* in the mid to late 1980s. They have subsequently been involved in the preparation and editing of a considerable amount of text and graphics material, mostly of a scientific nature. For several years Nick edited and sent out an email newsletter, *LakeScience Rotorua*, on behalf of The Lakes Water Quality Society, which has been lobbying to protect the water quality of the Rotorua Lakes and other NZ lakes.

Nick has grown orchids since he was a teenager, in the late 1960s. In the 1970s Nick and Elizabeth imported orchid plants commercially, from the United Kingdom (Mansell & Hatcher) and the USA (Beall's) and sold them to eager customers throughout New Zealand. They now grow orchids (plus many other plants) on a hobby basis.

They live at Lake Rotoiti (North Island), where Nick is self employed as an environmental consultant and technical writer, while Elizabeth works as a botanist at Scion (previously Forest Research). They grow a variety of orchids and other plants. Some readers may have read their series, 'The Cool Subtropics' in *Subtropicals* magazine. They are members of the Bay of Plenty Orchid Society plus a variety of other plant societies.

Editorial and subscription enquiries to:

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Instructions for Contributors

- We prefer to receive written material electronically, as Word or text files. However, text written in your email client software (Outlook, Eudora, Pegasus etc) is also acceptable. Contributors without computer access may submit a typescript, which we will scan and OCR. Please consult us before submitting a hand-written offering, unless it is very short.
- Photographs may be submitted as digital files, preferably in the jpeg format (jpg), and this is the preferred method of sending, or alternatively as prints or colour slides which we will scan and return to sender. Colour slides give much better results than prints and these are preferred. We reserve the right to shrink image file size to suit email distribution.
- Production of this magazine is heavily based on digital technology, and we prefer email communication whenever possible.

The next issue will be published on Friday 7 December 2007. Please ensure all copy reaches the editors by Friday 30 November.

Our Cover Photograph

This superbly grown specimen of *Dendrobium aurantiroseum* won Grand Champion at the Wanganui Orchid Society 40th Anniversary Show, held in June of this year. We failed to get the name of the grower who produced this fine plant – if he or she contacts the Editors we will be happy to give due credit in our next issue.

(Photographer N.C. Miller)

Beginning to Grow Orchids

Margaret Dunseath (marg.dunseath@orcon.net.nz)

This is the first of a series for beginners, incorporating that basic information which is so necessary to grow orchids well. We recommend our more experienced growers read it too – it's surprising what we can forget or overlook as we go along! Eds.

You have just staggered home with your first orchid, one you just had to get because you fell in love with it. Problem is, once you have got it home, where do you put it and how do you care for it?

The label on the plant would hopefully give brief care instructions which would keep the plant going until it is time to repot it.

So, the question is **How do I repot my plant???**

To solve this question, we need to understand how most orchids grow. The majority grow perched up in trees, not as parasites which feed off the trees they have attached to, but as epiphytes which just happened to land there as a seed, germinate and grow, using debris washed down from the forest canopy as food. How does the plant attach? It grows special roots which are able to alter the cell surface to adhere to whatever it has decided it would like to attach itself to. These roots also have another function. If the plant grows up in trees, not in soil, the roots have to be able to absorb water very easily, and then store that water for later use once the sky has cleared and the bark on the tree has dried out. This means that the roots are adapted to an environment which has a wet/dry surface cycle, with further moisture being absorbed from the humidity generated by the forest. The wet/dry surface cycle can be different depending on where the plants come from. Some grow in rain forest which is moist all year. Others come from areas where there is a warm 'monsoon' type season and a cooler dry season. It is important to have an idea of the plants requirements for moisture to grow the plant successfully.

One of the important needs of the root system, apart from appropriate watering, is access to air. This is where a lot of orchids differ from plants which grow in the ground. Air circulation around the roots is crucial. So, for potting purposes, we need a medium which will hold some water, but also leave air pockets within the pot to allow the roots to dry out within a reasonable space of time to maintain healthy roots. Bark mixes are available which supply the moisture retention as well as the air gaps. It is important to remove all the old potting medium as you repot your plant, as this will otherwise decay and fill in the air gaps, leading to an unhealthy and rotting root system. Remember to cut off any dead roots while the plant is out of the pot, choose a pot size that will comfortably fit the root system, hold the plant in place, and pour the pre-moistened mix around the root system, firming gently to stabilize the plant, but not so firmly that the roots are damaged. Water the plant, and then put it somewhere cooler and shadier than its normal growing spot for a couple of weeks, to allow the plant to recover. Once the plant shows signs of recovery, begin watering appropriate for the time of year, more in summer, less in winter. It is best to repot a plant while it is actively growing. Spring is the main repotting time for most orchids, as they are starting the growth cycle for the year and have time to re-establish a healthy, strong root system during that growth cycle.

Some Thoughts about Growing Orchids in NZ

Russell Hutton (lrorchids@xtra.co.nz)

Russell Hutton has been growing and selling species orchids for many years and needs little introduction to most NZ growers. It is good to see his nursery staging a comeback. There is much food for thought in this article. Eds.

How many of you have given thought to where the orchids we grow come from? What is the climate and habitat like where they grow naturally? And, more importantly, how does this compare with the climate here in New Zealand? To me this has been an important and interesting aspect of orchid culture. It gives you some 'prior knowledge' of the plant/ plants you have purchased, been given, whatever, and want to grow and bloom; not just 'pot luck' or 'seat of the pants' growing. The structure of the plant can tell you a lot about how it grows and why, but I get side-tracked, or do I? As I am thinking and writing this, so much seems inter-related, it is difficult to know quite where and how to start and where to finish. Never mind I will carry on and hopefully give some of you orchid enthusiasts out there some logical and more importantly, useful, information about orchid growing.

Many parts of NZ have year round temperatures suited to a surprisingly large variety of orchids if grown in an unheated greenhouse, a shadehouse or similar growing area. Especially those places which are frost free or nearly so. This is where our climate here is at odds with where the plants grow naturally. This is why; although many of the orchids we grow come from regions which have a temperature range similar to those in more-or-less frost free areas of New Zealand the rainy season is by and large opposite to ours. The majority of the orchids we grow are epiphytic (grow on trees) or lithophytic (grow on rock) in nature and come from areas where seasons are unlike our own climate.

Typically where these plants grow the colder months or winter are not wet and plants are subjected to periods ranging from several weeks to several months of nil to very little rainfall. Such plants may also or only receive very minimal water during this season from dew or mist. Often the skies are clear so the plants receive more light and also many grow on deciduous or semi-deciduous trees which again affords more light. Typically the light level in the growing season is lower as this is the wet season and the trees are in leaf. Many orchids which grow in these areas are also deciduous (eg many soft cane Dendrobiums, Pleione, some Calanthe) for the same reason as the trees – to conserve moisture within the plant, no leaves = no transpiration. Either of the afore mentioned conditions or both together act as kind of 'trigger' for flower production in the late winter, spring to early summer.

This is almost the opposite of NZ climatic conditions, typically our winters are wetter than summer.

With this in mind it is very much better for the plants health to grow them in an area which is protected from autumn and winter rain. In fact cold and wet roots/potting mix for some species even though rated as cool to intermediate types is a recipe for disaster and therefore disappointment. A very good rule for orchid plants particularly if grown in pots rather than mounted or in hanging baskets is – roots/pot cold and wet NOT GOOD but roots/pot cold and dry OK. The reason being of course is these plants have evolved to grow and bloom in places where during the 'winter' months

water/rainfall is very minimal. They require this for their well-being. This does not necessarily apply to mounted plants or plants growing on trees or tree-fern poles in your garden. I have plants of *Laelia anceps*, *Dendrobium thyrsoflorum*, *Laelia pumila*, *Coelogyne cristata* for example growing on trees or tree-fern outside and exposed to year round rainfall and they grow and bloom quite well. Just another small point here is that our rain during winter is very cold often below 10°C and I am told that rainfall in the plant's natural habitat is much warmer. I use collected rain water but town supply can be warmer. My plants are all (cold growing through to warm growing) watered with water at around 25°C. Wonderful for warmer types as you do not chill the plant with cold water and drop the temperature in your greenhouse. For anyone interested, I used an ornamental pond submersible pump in a 200 litre plastic drum to heat the water for plants of *Paphiopedilum* and *Phalaenopsis* etc in quarantine. The pump ran 24/7 and kept the water just tepid.

It has been my experience that some plants will be tolerant of winter night temperatures as low as minus 2 or 3°C provided the root system is dry. I must say here that although I have had temperatures as low as minus 3°C in unheated greenhouses I do not know for how many hours during the night this was. Probably around 4 to 6. Also it was not repeated many nights in succession. Maybe 1 or 2 or 3 nights and then the night temperature rose above frost level. Examples of plants which were growing in these areas are *Arpophyllum giganteum*, *Angraecum sororium* (this plant never bloomed until it got this treatment!!), *Ansellia nilotica (africana)*, *Coelogyne cristata*, *Cymbidium* spp. and hybrids, *Dendrobium fimbriatum* var. *occulatum*, *Dendrobium infundibulum*, *Dendrobium moschatum*, *Dendrobium thyrsoflorum*, *Dendrobium transperense*, *Isochilus* spp., *Laelia anceps*, *Laelia gouldiana*, *Laelia pumila*, *Laelia jongheana*, *Laelia purpurata* varieties, *Laelia superbiens*, *Masdevallia coccinea*, *Masdevallia veitchiana*, *Oncidium flexuosum*, *Oncidium incurvum*, *Sarcochilus hartmannii*, *Sobralia macrantha*, *Vanda (Holcoglossum) kimballiana*. There are many more but too many to list.

There is something here which it is important to take into account; it must be remembered that these plants were growing in high light throughout the year so had developed 'harder' pseudobulbs/canes which are far less prone to cold damage than soft growth. This was some years back too when we had far more regular seasons; summer progressed to autumn, autumn to winter and so on; not the unpredictable 'hotch potch' we seem to get of recent years.

I know I will be teaching some of you how to 'suck those proverbial eggs' but for those less experienced, try sparrow's eggs or blackbird's, they are smaller and you don't have to open your mouth so wide!! Ha. Ha. Now seriously, there are ways of determining whether a plant is likely to need a dry to dryish 'rest' period over the cold months by its growth structure. Such characteristics may be :-

- Hard and compact growth (typically combined with the next) e.g.. *Laelia sincorana*, *Laelia furfuracea*, *Sophranitis rosea*.
- Thick and hard leaves e.g. *Laelia briegei* and other 'rupicolous' Laelias, *Laelia albida* and other Mexican Laelias, *Rhyncholaelia glauca*, *Rhyncholaelia digbyana*.

- Rather hard leathery leaves e.g. *Cuitlauzina pendula*, some *Coelogyne*, *Dendrobium thyrsoiflorum*, *Dendrobium densiflorum*.
- The plant has fleshy canes and the leaves begin to yellow and fall off from late autumn to winter - e.g. *Dendrobium primulinum*, *Dendrobium aureum* (*heterocarpum*), *Dendrobium crystallinum* and *Dendrobium nobile* although with this species the leaves should not yellow and fall from the most recent cane.

As well as looking at the structure of the plant you can check whether the plant is showing signs of active growth, particularly root growth. If the tips of the roots have a long greenish growing tip then this is usually a sign that the plant is actively growing and therefore needs water. If the greenish root tips are very short or almost sealed over this is an indication that the plant is not actively growing and therefore may require reduced water. *Vanda coerulea* and *Vanda kimballiana* show this quite markedly.

If a new shoot is forming at the base of the newest pseudobulb or cane AND there are new roots developing at the base of this new shoot then this too is a sign of needing water. The important thing here is the new root development from the base of the new shoot. Some plants such as *Laelia speciosa* and *Cuitlauzina pendula* can begin new growth towards the end of winter but there is no simultaneous root development. Both of these plants produce their flower stems from within the developing new growth and flower at the end of the 'dry' season. If *Laelia speciosa* is watered too soon then the flower stem withers and dies, with *Cuitlauzina pendula* if water is given too soon then the new shoot will not produce a flower spike(s).

So, where to from here? We have looked at temperature and found that many parts of New Zealand have a temperature range agreeable to a wide range of orchids. We have figured out the rainfall problem, that is, come to realise that the wet season for a good many orchids is the spring/summer/growing season, but this leaves us with another moisture related issue, humidity. Have you noticed that flowering plants of species such as *Laelia anceps*, *Laelia gouldiana*, *Laelia autumnalis*, *Laelia pumila* which are plants which bloom from late autumn (*Laelia pumila*) and mid to late winter/early spring will have flowers which become damaged quickly by botrytis fungal infection (watery or brown spots on the blooms) or the blooms do not last long if it is wet and cold?, especially if the plants are growing in an enclosed situation such as a greenhouse? The reason for this goes back to our untimely rainfall which raises the humidity level above what is optimum for the plant at that time of the year. You can counteract this to some extent by having the plants in an airy situation, lots of fresh air passing through or bring them into your home and enjoy the flowers.

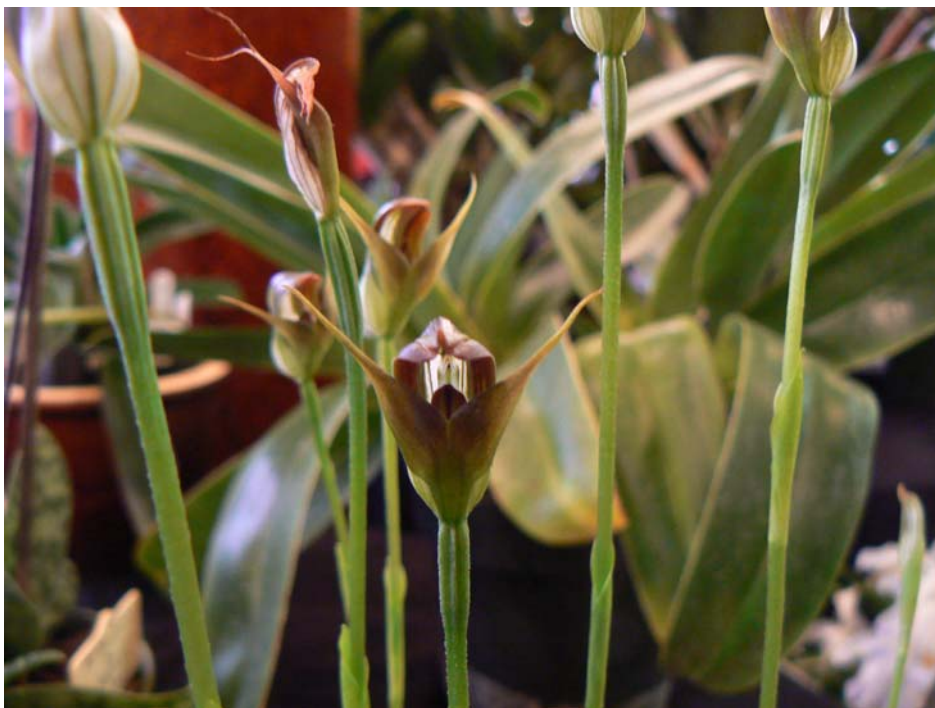
Well I sincerely hope that what you have just read will be of some help and not act as a deterrent. It is really not as complicated as it may at first sound, just take it step by step through the year and reap the rewards with strong vigorous plants and reliable flower production.

Seen at the Tauranga Orchid Society show.

This show opened today (14 September 2007) and continues over the weekend. Below are a couple of plants that caught the photographer's eye. N.C.M.



Oncidium tigrinum x loxense Grower Ron Maunder



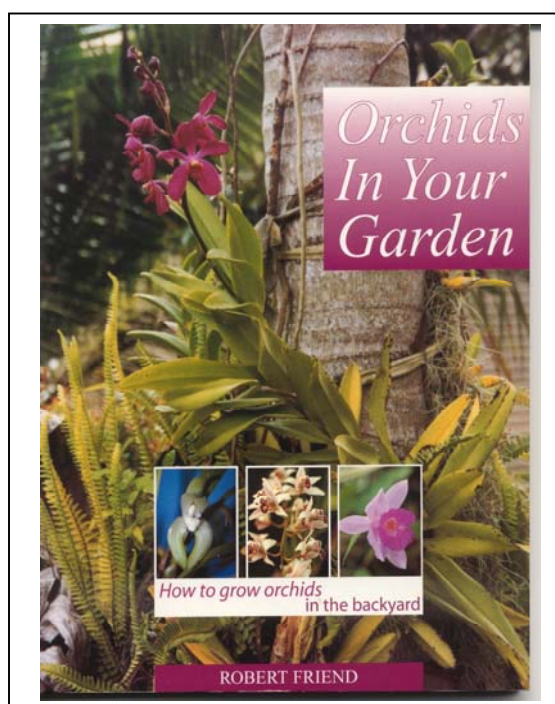
Pterostylis curta Grower not known

Book Review

Orchids In Your Garden, by Robert Friend

I usually notice new books on orchids, but missed this one, so when I saw it a few years ago in Border's I couldn't resist the temptation to purchase a copy. The Australian author has been involved with orchids for many years. This book is aimed almost exclusively at those who wish to use orchids as garden plants, which makes it quite distinct from most orchid books.

The book is aimed at three overall climate types, tropical, subtropical and cool, so first category is likely to be of less interest to New Zealand readers. The growing of orchids on trees, on rocks and walls, and in the ground are each dealt with in separate chapters, with suitable orchid species being listed and described for each type of habitat.



Various types of garden (large, suburban, courtyard and 'marginal areas') are then considered, followed by a section on growing in containers, both indoors and outdoors. This is followed by a useful table of recommended orchids, then a bibliography and a list of (Australian) suppliers, many of whom New Zealand growers will recognise.

This book contains much interesting information, with a number of useful ideas. For example, I had not previously considered *Tibouchina* (lasiandra) as a suitable host tree for orchids and other epiphytes, but apparently it serves well. This is not another orchid-growing book, rather it is a book on how to grow orchids as part of

the landscape.

Inevitably there are one or two errors – the pendulous flowers of *Stanhopea oculata* are illustrated upside down, an easy error to make. A soft-cover book, it contains 144 pages, and has numerous colour photographs of various orchid species and their natural and garden habitats, plus a number of line drawings.

At approximately \$40, this book is recommended to those who would like to try an exotic touch in their garden. It does not seem to have been widely distributed and you may have to order a copy through your local bookshop, or through Touchwood Books.

Nick Miller

Orchids in Your Garden. Robert Friend. 2000. Halstead Press, Sydney.
ISBN 1 875684 48 4

(An earlier version of this review was previously published in *Subtropicals*)

***Clivia mirabilis* – Its Introduction into New Zealand**

Alick McLeman, Secretary, NZ Clivia Club (clivia@xtra.co.nz)

As most keen gardeners will be aware, the flow of new plants into New Zealand has virtually halted in recent years, due to the introduction of new legislation and the advent of a biosecurity bureaucracy. The following piece may be of interest to those who would like to see new orchid genetic material available. Eds.

2002 was an exciting year for Clivia growers with the official announcement of the discovery of a new Clivia species, *C. mirabilis* Rourke, Family – Amaryllidaceae – Amaryllis Family, published in: *Bothalia* 32(1): 1/2002). For Clivia enthusiasts the burning question became “HOW CAN WE GET IT INTO NEW ZEALAND?”

Interestingly, at the time, there were 6 named species of Clivia (*miniata*, *gardenii*, *nobilis*, *robusta*, *caulescens* & *mirabilis*) of which only 3 were included in MAF’s Plants Biosecurity Index. Thanks to submissions to both the Minister and to ERMA by Dr Keith Hammett, then Chairman of the New Zealand Clivia Club (the Club), it was acknowledged that two further species, *robusta* and *caulescens*, had been in the country prior to the HSNO Act, and were not therefore new organisms in terms of the Act. These species were then added to MAF’s Biosecurity Index without too much difficulty or expense. It was also agreed with ERMA that in the case of *mirabilis* they would consider an application for “Rapid Assessment” for release of the new organism because of the existence in New Zealand of other Clivia species.

‘Rapid release’ means different things to different people.

After an initial period of informal consultation with ERMA, our 14 page application, based on a template downloaded from ERMA’s website, was submitted by the Club in August 2006. The ERMA cost of submission was \$565 (insignificant in relation to the \$35000 cost of a standard application). Absolutely critical to our application and the eventual success was an annexed ‘Weed Risk Assessment’ by Landcare Research New Zealand Limited, a further cost. Our application was returned to us in November 2006 with comment added by both MAF and ERMA.

The next step was consultation with Maori. Again using a template downloaded from ERMA’s website we prepared a document for submission to Maori Iwi, which incorporated a photo page and the Weed Risk Assessment. This was then resubmitted to ERMA for their comment, and after much to-ing



Clivia mirabilis

and from a final document emerged which included ERMA comment specific to certain Maori cultural issues.

111 copies of the final 7-page consultation document were then posted in April 2007 to various Maori based on an address list furnished by ERMA. Six weeks were allowed for the response. There were 9 responses of which 2 gave unqualified approval, 3 gave a qualified approval, 2 were undecided and 2 recommended the application be declined because of a perceived threat to natural habitat areas.

The Club was then required to resubmit in June 2007 a final full-length application to ERMA, this time incorporating comment on the Maori consultation process. After being processed by ERMA the final decision was promulgated on 10th August 2007. MAF kindly listed *C. mirabilis* on the Plants Biosecurity Index the following day, almost a year to the day from the submission of our original application. The whole process may be accessed on ERMA's website.

A final comment: The people we dealt with at ERMA were amazing and we could never have completed the process successfully without their cooperation, patience and guidance. The cost to the Club was about \$1000, taking into account the application fees, weed risk assessment, stationery, postage and copying, and a lot of grey hairs for committee members.

ERMA = Environmental Risk Management Authority

MAF = Ministry of Agriculture & Forestry



Ascocenda Memoria Kay Killington 'Sandra' .

This plant attracted much attention at the recent 40th Anniversary Show of the Wanganui O.S. It proved very difficult to correctly capture the intense deep indigo (almost black) colour of the flowers, but the upper flowers in this photo give some idea, at least. The *Vanda coerulea* hybrid in the background was actually quite a decent blue, but the exposure compensation necessary to capture the *Ascocenda* washed the vanda's colour out almost completely. If the grower contacts the Editors, we will be happy to give due credit in our next issue. (Photo N.C. Miller)

Angraecoid Corner

Margaret Dunseath (marg.dunseath@orcon.net.nz)

Margaret has also commenced a series on her favourite angraecoids, concentrating on species which are fairly easily obtained in New Zealand. These charmers from Africa are often much hardier than one would expect. Eds.

Mystical Moonflowers – *Angraecum germinyanum*

According to Fred Hillerman, *Angraecum germinyanum* is native to the Central Plateau region of Madagascar as well as the Comoro Islands. The altitude he gives is 4000-5000ft. Joyce Stewart states that the plant is native to the Comoro Islands at an altitude of 1000 – 2000m.

The summer season in the natural habitat tends to be warm and wet, with a drier season occurring in the winter months along with lower night time temperatures, although days in winter are still warm.

The winter drier season still provides the plants with plenty of moisture in the form of mist and heavy overnight dews which maintains good moisture levels. This is quite important for *A. germinyanum* as it has very slender roots and non-succulent leaves, so it really does not have capacity for water storage like some of the thick rooted, harder leaved angraecoids.

Angraecum germinyanum can grow cool (i.e. Below 10°C at night) quite happily, but needs to be kept a bit drier particularly overnight when temperatures are low. If grown cool, it also needs warm days in the region of 20°C to maintain good health. Lower daytime temperatures for an extended period of time, would weaken the plant.

Grown at intermediate temperatures, the plant seems to maintain active growth all year, which does not appear to inhibit flowering. The main flowering period seems to be over the winter/spring months, however intermittent blooms appear at other times of the year. Other cultural requirements include a lightly shaded spot and regular misting.



Angraecum germinyanum
Photo: Margaret Dunseath

One thing to watch for: these plants can go into a sudden decline which it is impossible to reverse. Usually this is caused by stem rot, and once symptoms are noticed it is already too late for the plant. The root system needs a very defined wet/dry cycle so I find this plant grows better for me when it is mounted on cork bark, with regular misting.

Boisduval Scale

Jim James, Hamilton (jamesj-r@ihug.co.nz)

Jim James of Hamilton discusses a problem that many of us are all too familiar with!

Boisduval scale is a persistent pest of orchid plants. Reports from orchid growers from around New Zealand seem to suggest that infestations have become worse over recent years.

The associated white cottony mass, said to be the male form of the species, is fairly easy to kill but the hard scale is a different proposition. Sprays based on mineral or vegetable oil can kill them but as complete coverage of the plant is necessary it is a time consuming undertaking unless you only have a few plants. Furthermore, what may appear to be a complete kill, is, in my experience, usually illusory with the infestation coming back as bad as ever in a year or so.

I have found a better solution to the problem using Confidor(Imidacloprid). Confidor aerosols will kill them but they are expensive and care is necessary to avoid damage to the plant. The only other form of Confidor available now to the hobbyist grower seems to be that in a packet containing 5 x5g sachets. The recommended strength is 1x5g sachet in 5litres of water and you are still supposed to only spray the leaves.

To kill the scale I make a solution at one quarter the recommended strength. That is, one sachet in 20 litres of water. Using a hand sprayer I spray the leaves and drench the pot with this solution. The plants are treated thus four times, immediately after each successive watering. The result of this seems to be a wipe out of the scale – not a live one to be found in my collection.

On the downside, the Confidor is a little expensive. The cheapest source I have found is the Warehouse where it is \$16 a packet. However it goes a fairly long way if, when drenching, just enough is applied to get a very small trickle of water coming from the bottom of the pot. This drenching is essential as the chemical can enter the plant through the roots.

Of great interest was a recent internet posting on the Orchid Guide Digest. An orchid grower in the USA had treated his plants in much the same way as described above. He said that a year after treatment his greenhouses were still completely free of scale. I can only hope it works this way with us – the plants were treated only a few months ago but I recommend you try it.

Growing Odontoglossums for Pleasure!

Ron Maunder, Paradise Orchids, Tauranga (ronmaunder@paradise.net.nz)

All photographs by the author

Today we think of Odontoglossums as not just the beautiful, full shaped crispum-types but the wide range of man-made hybrids which may or may not have *Odm crispum* in their blood. Intergeneric hybridising began in the mid 1800's and now with blood from five, six and possibly seven diverse related genera involved in various combinations we have over 200 registered Odontoglossum allied genera. Combinations of genera such as Brassias, Cochliodas, Miltonias, and Oncidiums with crispum-types have brought a wider range of colours and patterning and certainly an ease of culture to the alliance.



Odm. Violetta von Holm

The crispum-types are still stunning but are difficult to grow well unless you have a heap of them and give more time and exacting conditions to them than to most other cool genera. They require repotting every year or 18 months, cooler temperatures in summer with extra shading when its hot, and definitely need frequent watering. Top commercial growers overseas heat them in winter and cool them in summer and try to keep temperatures in the 15°C to 20°C range. They often automate watering and feeding and always move the air with fans. A visit to McBeans in Sussex or Eric Young Foundation on Jersey Is is a humbling experience when you see the incredible standard and quality of their crispum-type Odontos!

Unfortunately very few if any NZ growers bother to grow their crispum-types in the above temperature regime. We let them get down to near freezing in winter and slap on more shade in summer but still enjoy nice flowers. Probably only in the cooler parts of the country where winter heating is essential can we expect to see plants closer to their full potential. The brief introduction of Cochlioda blood in the 1800s to make the more common Odontiodas (Odm x Cda) may have changed the genus name but an Oda has majority crispum-type blood so still is fairly demanding in its cultural requirements .



Oda. Heatonensis

Oncidiums were introduced into the bloodline in the late 1800's to make Wilsonaras (Oda x Onc) and Odontocidiums (Odm x Onc). Generally these are far more vigorous

and easy to grow than most crispum-types. They have bigger bulbs, branched upright spikes and can stand the heat and cold better, higher light of summer and even some irregular watering. The most common Oncidium parent has been *Onc. tigrinum* which introduced yellow colours into the patterning and lips particularly of the Odontocidiums.

These two intergenerics have spawned other members of the Odontoglossum Alliance – or what is more correctly called the Oncidiinae, to produce more beautiful and striking genera and crosses. What other orchid alliance offers such a diverse array of shapes and colour combinations and ease of culture for our temperate NZ climate?.



Easy to grow examples that have hybrid vigour are Maclellanaras (Odcdm x Brassia) and Alexanderaras (Oda x Brassia). These can have meter long stems with 12-15 10cm wide green/brown/chocolate patterned flowers and sometimes small branches. Others often encountered are Odontobrassias (Odm x Brassia), Sanderaras (Oda x Brassia), Beallaras (Brassia x Cochlioda x Miltonia x Odontoglossum) and Alicearas (Brassia x Miltonia x Oncidium). There are still others that are more compact growers in the red colours such as Burragearas (Cochlioda x Miltonia x Odontoglossum x Oncidium) and Vuylstekearas (Odontoglossum x Cochlioda x Miltonia) and so on.

One could go on and on discussing this group but without photos it will not mean much to the beginner or hobbyists who haven't seen the flowers.

The more common of the genera seen in NZ can be grown quite easily with minimal heat in winter to keep temperatures above 5-8°C. They all do well in bark mixes with good drainage. The closer the breeding to their crispum ancestors the finer the mix and even sphagnum moss can be an excellent substrate. Regular watering and maintaining a good humidity is an important requirement. Sit pots on stones over a tray of water when bringing the flowering plant inside. They do well in clay or plastic pots with plenty of drainage holes. Grow them on mesh benches so they can get air around them and drain freely. They don't need a dry rest during the year. 50% shade is about right for most genera. Watch out for garlic and bush snails living in the mix and chewing the root tips off. Try Mesurool blue mollusc baits spread thinly so cats don't eat them as they are quite poisonous! Always use rubber gloves to handle them and WASH YOUR HANDS afterwards as the powder rubbed in your eye is extremely painful and impairs your vision for hours!.

Around the world various free draining mixtures of coconut fibre, peat, perlite, pumice, scoria, chopped “pillow” foams, oasis, and chopped styrene foam are being used successfully. On the down side perhaps, some of the complex genera need to have an extra couple of pseudobulbs behind them to flower. But then, you can get flower spikes out both sides and often from the tip of the flowering bulb, so the extra wait is worth it! Unfortunately hybridisers often get just a dozen or so plants from their complex intergeneric breeding (or nothing at all!) so small seedling plants are hard to come by. Thankfully however, unlike their crispum relatives, the best plants can now be mass produced by tissue culture. Their slowness to reach maturity will probably always preclude them from becoming cut flowers but they will nevertheless be sought after as pot plants. Already in Europe and USA there are many cloned varieties being sold in the big pot plant markets.



Ronmaunderara Paradise

So you ask, where might you find them here in NZ? Unfortunately with the ever increasing bureaucracy and hurdles being put in place for importing plants into our country your chances of getting many new types are rather slim. The best place to find them is to join a club and haunt the club or show sales tables and ask owners of plants in displays if they have spare pieces for sale. Another good source is at sales of old collections and occasionally one or two will turn up in garden centres. They don't go cheaply but they will be well worth the outlay and always be much admired. Good luck and good growing.

Series - Featured Species

Frank Zumbuhl (franzanda@xtra.co.nz)

This series originally appeared in the Wellington Orchid Society, Inc. Bulletin under the title 'My Orchids of the Month'. We think it deserves a wider audience and are grateful to the WOS for permission to publish this series. As we do not publish monthly, a new title seemed appropriate. We will endeavour to match the selected species to the season of publication. Eds.

Cattleya gaskelliana alba Rchb.f. 1883

and

Cattleya warneri coerulea Moore 1862

Yes, a pair! I chose to tell you about these two cattleyas for: 1) their ease of culture, 2) their beauty and 3) their rapid growth into specimen plants.

C. gaskelliana alba is a native of Venezuela and Colombia occurring at 750-1000m. The pseudobulbs are compressed and grooved and look shrivelled and like a bit neglected. Up to 20 x 2cm, they are topped by a single 25x2cm thick leaf. There are 3 to 4 pure white flowers, all about 16cm broad, per inflorescence,. The petals measure 8x5.5cm and have wavy edges. The narrow sepals are 7x2cm. The lip is typically "cattleya": wide open mouth with crisped margins. The mid-lobe is streaked with pale, but "warm" yellow.

And the SCENT!!!!



C. gaskelliana alba (Photography F. Zumbuhl)

C. warneri coerulea hails from southern Brazil and belongs to the *labiata* group of cattleyas.

The club shaped pseudobulbs are 17x3.5cm, flattened and furrowed with age. The single, very leathery, leaf is almost egg-shaped, 20x9.5cm. The very pale rose flowers measure ca. 16cm across and are very open and rather floppy. The big lip is sporting a yellow lined tube. A white crisped margin is framing the blueish front-lobe.



Cattleya warneri coerulea (Photography F. Zumbuhl)

These two cattleyas grow on the top shelf in the heated glasshouse, but they are doing equally well in the unheated, but much brighter, Eden glasshouse. They are stuck in coarse bark in biggish pots and get rather dry between watering.

Both plants flower simultaneously in Oct./Nov., so there is always a toss-up of which gets the premier spot in our sitting room. FZ

Plant Society Pages

We welcome notes and notices from Orchid societies and societies involved with other plants that may be grown with orchids. These are published free of charge. Due to our email distribution, Society notices can be accepted up to 1 week before the publication date. So if you have a show coming up, or a particularly interesting topic for a meeting, spread the news through our publication.

Howick Orchid Society

Our show this year is Sat. 29th Sept. 10am to 4pm at the Fencible Lounge, Uxbridge Rd. Howick. (Adjacent to library) Benching Friday 28th Sept from 2pm to 6pm. Entry \$4. Plant sales and raffle.

We have a website with photos and newsletter on <http://hos.inetgardens.com>

Tauranga Orchid Society

Spring show , Tauranga Racecourse (Greerton end of Cameron Road), Friday 14 to Sunday 16 September 2007. 10 am to 4 pm daily. Lunches available, orchids, bromeliads, cacti, succulents, porcelain painting. Displays, sales. Entry \$2.00.

Hawkes Bay Orchid Society

Annual Spring Show at the Taradale Town Hall on 6th & 7th October. Our theme for the Show is 'Happy'. We will have Russell Hutton, Tudor Orchids, Jim Gilchrist from Pottering About in Whakatane & Cliff & Ruth Coles selling plants, plus our own sales tables so there will be plenty to see & buy. The show is open from 10 to 4 on the Saturday then a Dinner that night at the Hall where we will be presenting the John Easton Award, and on Sunday open from 10 to 4 again.

We will also be holding a Sarcocylus Show on the 10th November & Lorraine Fagg will be coming over from Australia. She is arriving in time for the Wellington Show on the 3rd & 4th November then coming up to have a week with us.

Bay of Islands Orchid Society

Bay of Islands Orchid Society Annual Show, this Friday and Saturday 14th and 15th September, being held at the Union Church Hall, on round-about

as you enter Kerikeri township.

Open - Friday 14th 12 noon to 5pm

Saturday 15th 9.30 am to 3pm.

Orchid Displays by Whangarei and Dargaville plus Bay of islands Orchid Societies, plus floral, bromeliads, and embroidery displays.

Sales Area of orchids of various genera, including Auckland growers.

Come along, admire and enjoy the various displays.

Contact Phone numbers, Bob Wallace 09 407 9567,

Elaine Byers 09 405 9493 or 021 981 889

Wellington Orchid Society

November 3rd and 4th will see members of the Wellington Orchid Society celebrating the club's 30th Anniversary with a special Anniversary Show.

It is being held at the Hutt Valley Horticultural Hall, Laing Street, Lower Hutt and the Wellington Orchid Society wish to invite everyone to come and help them celebrate their 30th Anniversary. Orchids and Friendship go hand-in-hand, so come and meet old friends and make new ones.

Clive Halls and Lorraine Fagg will be guest speakers for the weekend and there will be an Anniversary Dinner on Saturday night. If you want to book in for the dinner for \$25.00 please contact Lois Dougherty 04 235 8221, email doubled@paradise.net.nz .

Canterbury Orchid Society

Canterbury Orchid Society Show to be held in the Canterbury Horticultural Society Rooms, Riccarton Avenue, Christchurch.

Saturday October 6th 10-00am to 5-00 pm

Sunday October 7th 9-00am to 4-00 pm.

Admission \$4.00, accompanied children free.

NZ Clivia Club

NZ Clivia Club (Ph 09 5213062)

Auckland Clivia Show at Botanical Gardens, Hill Road, Manurewa.

Saturday 29th September 9.00am to 4.00pm. New varieties & colours; workshops; plants on sale. Visitors welcome.

Talks:

10.00am "A South African Clivia Safari" (Slide presentation by David Olsen)

12.00pm "A walk through the Show" with Dr Keith Hammett

2.30pm "California Dreaming" (Slide presentation by Diana Holt)

NZ Clivia Club (Ph 07 5524962)

Tauranga Clivia Show at Plant Struck Nursery, 139 Te Puna Road, Te Puna, Tauranga.

Saturday 6th October 9.00am to 4.00pm. New varieties & colours; workshops; plants on sale. Visitors welcome

Talks:

11.00am "California Dreaming" (Slide presentation by Diana Holt)

2.30pm "Clivia Breeding" (Slide presentation by Alick Mcleman)

An Invitation to visit the Te Puna Quarry park

Bring your Children, your Dog on a leash, get some exercise and fresh air and enjoy a day out. It is Spring in the Quarry, the Magnolias are out and the Orchids are coming into flower, it is worth a trip out to see them, there are Cymbidiums, many different Dendrobiums, Pleiones and many others and they are growing outside in the Quarry rocky soil. The park is located at Te Puna, north of Tauranga on the Waihi road. Look for the signs.

Visit the Quarry see how they grow, then come to the Tauranga orchid show with all your questions, there will be growers to help and advise you(see above) There is no charge at the Quarry but all the work is done by volunteers so any donation is gratefully accepted to help with more development the next being a Butterfly garden, for the Orchid show there is a \$2 charge. Inquires phone 07) 576 4752.

Mary Parkinson.

Classified Advertising

This is a free service, offered to non-commercial readers. Please limit your message to 40 words, and include both an email address and phone number in your advertisement.

I am seeking pollen of Aerangis species, and also Aerangis plants. Margaret Dunseath (marg.dunseath@orcon.net.nz) 64 Acacia Crescent, Glenview, Hamilton. Ph: (07) 843 8291

Orchid Notes

Amesiella monticola

At the Wanganui Judging Seminar, we discovered a mislabelled *Amesiella monticola*. According to David Banks this plant will not self. I am trying to source pollen overseas however would be interested to know if there are any other plants in NZ which could make breeding the plant more successful. *Amesiella monticola* is from the Philippines and resembles a white phalaenopsis with one important variable - it has a spur. Margaret Dunseath (marg.dunseath@orcon.net.nz)

Age of the orchids

Some readers may have wondered how long orchids have been around on this planet. A recently published paper in *Nature* casts some light on this matter, reporting the only authenticated discovery of an orchid fossil. A pollinarium (orchid pollen mass) was found firmly attached to the dorsal surface of the thorax of a bee, preserved in amber, that has been dated to 15 to 20 million years old. The amber was found in the Dominican republic. The pollinarium closely resembles those of modern members of the orchid subtribe Goodyerinae. The orchid has been named as *Meliorchis caribaea*, a new genus and a new species. Based on this find, cladistic analysis was used to indicate that the most recent common ancestor of modern orchids lived in the Late Cretaceous (76 to 84 Myr ago) and that the dramatic radiation (ie evolutionary burst) of orchids began shortly after the mass extinctions at the K/T boundary. The K/T (Cretaceous/Tertiary) boundary marks the boundary in rock deposits at which an asteroid is believed to have struck the Earth and rendered the dinosaurs and many other life forms extinct. Presumably some of the early orchids survived this event. As the authors state in low-key fashion: "These results further support the hypothesis of an ancient origin for Orchidaceae." (NCM)

S.R. Ramirez, B. Gravindeel, R.B. Singer, C.R. Marshall, N.E. Pierce. Dating the origin of the Orchidaceae from a fossil orchid with its pollinator. *Nature* **448**, 1042-1045 (30 August 2007).

Grower's Notes

A low-toxicity clean-up spray

At a recent meeting of the Bay of Plenty Orchid Society, Selwyn Hatrick (Rotorua) gave a presentation on Pahiopedilums. During the talk he mentioned a general clean-up spray that he uses against mealybug and other pests. This or a similar recipe was frequently mentioned in society newsletters in earlier years, but we feel that it bears repeating. This mixture is not to be relied upon to stop severe infestations of pests, but it is a good general preventative measure, to be used on a reasonably regular basis.

2 tablespoons (30 ml) each of:

methyalted spirits

Cold Water Surf (or similar)

Winter Oil, other horticultural oil or cooking oil

All added to 1 gallon (approx 4.5 litres) of water. This mixture, stored in a sealed container, will remain effective for at least two years. Shake well before use, place in a sprayer and spray as appropriate.

Labelling plants

Labelling of plants is a perennial problem, meriting an article in its own right – that’s in the pipeline. Generally the use of pencil, on as durable a label as possible, is a good start. However, when you have potted up a batch of seedlings from a flask that can mean a lot of repetitive writing. I find that the Brother P-Touch label maker provides a good solution to this problem. The clear plastic self-adhesive labels that this machine produces may be applied to a plastic or metal label and should remain clearly legible for at least five years under garden or greenhouse conditions. Just enter the name of the plant on the keyboard (there is a LCD display to ensure that you have got it right), then press the ‘Print’ button as many times as you need labels. The label tapes are rather expensive so you might want to reserve this machine for repetitive label writing. They may be obtained from DSE, Warehouse Stationary and similar outlets.

Confusingly, Brother also makes a P-touch QL-550 label **printer** which connects to a computer and is used for printing address labels etc. The Brother label stock that I have so far tried with this printer does not retain readability for more than a few months – the labels seem fairly durable but the printing fades rapidly. (Nick Miller)

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Do you have a problem plant? Bring it along and there is sure to be someone to help you out.

There will be sausage sizzles and other refreshments plus a free raffle for an orchid plant each day.

Hosted by:

K & R Orchids - Russel Hutton & Kimi Ishida will have a huge range of orchid species

Villa Orchids - Joe and Betty Vance will be there with a selection of fine Cymbidiums and Odontoglossums

Studfall Orchids - Graham Leafberg will have Aussie Dendrobiums and Sarcophilus

Brian J Main Orchids - Brian Main with his gorgeous Phalaenopsis

Tucker Orchids - Ross and Susan Tucker with a selection of hybrids from Cymbidium, Oncidium, Odontoglossum, Cattleya etc

Paradise Orchids - Ron Maunder and his large selection of Masdevallia and Disa

Keith Goodwin Paphs - Keith and Vanessa with their selection of beautiful and some now hard to get Paph species.

Napier Orchid Supplies - Bill Liddy and a wide selection of orchid 'hardware' – real orchid pots, trays, pot hangers etc, etc.

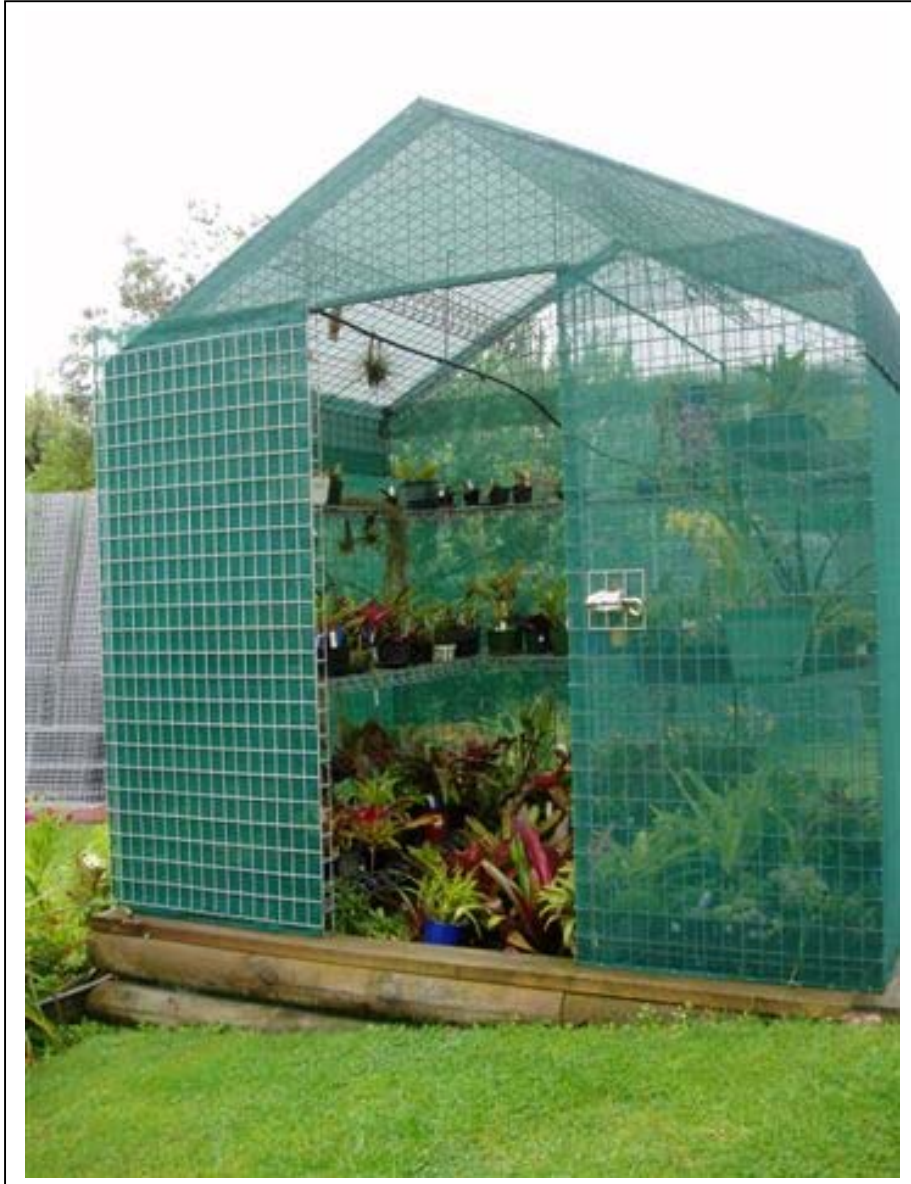
Easy Orchids - Murray Shergold will be bringing a selection of flasks from Australia, as will

Tinonee Orchids (Ray Clement) also from Australia

Where	K & R Orchids 178 Dominion Rd Tuakau Phone 09 236 8392
When	<u>20th, 21st, 22nd October</u> (Labour Weekend)
Time	10am - 4pm daily

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NZ Internet Orchid Review

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