ORCHIDS IN NEW ZEALAND

air new zealand

JANUARY/FEBRUARY 1980

OFFICIAL CARRIERS FOR OUR 1980 INTERNATIONAL CONFERENCE

BECK'S
ORCHID MIXES
Available at

A. BECK
R.D. 2, Ngatea
Hauraki Plains

ASQUITH NURSERIES
67 Asquith Avenue
Mt. Albert
Auckland
Phone 862-826

GORDON BRUCE
509 Carrington Road
New Plymouth
Phone 34-583

NORM PORTER
443 Te Moana Road
Waikanae
Phone 6977

BRYAN CLARK
R.D. 5
Hastings
Phone 88-734

TOM GRIMSON
162 Stout Street
Gisborne
Phone 4450

YOUNG'S ORCHIDS
Cambridge Road
Tamahere
Hamilton
Phone 65-411

ARTHUR MORRIS
24 Sussex Street
Masterton
Phone 6854

AVALON ORCHIDS
23 Mabey Street
Lower Hutt
Phone 67-7729

BECK'S

ORCHID MIXES

Proven
Ready to Use
Free Flowing
Fast Draining
Screened
Fertilised

MIX IS BAGGED IN DRY CONDITION AND SHOULD BE DAMPED PREFERABLY THE DAY BEFORE USE. IN FOUR SIZES FOR YOUR CONVENIENCE

HADFIELD ORCHIDS
409 Tremaine Avenue
Palmerston North
Phone 83-489

LINWOOD ORCHIDS
10 Seaview Road,
Milford, Auckland 9
Phone 466-429

ORCHIDS OF NEW ZEALAND

Volume 5, No. 4 **Published bi-monthly.** **January — February**

OFFICIAL PUBLICATION OF THE ORCHID COUNCIL OF NEW ZEALAND — ISSN 0110-5256

Contents

Page

Annual Subscriptions, including postage:
New Zealand $5.50.
Surface rate: All overseas countries $NZ6.00.

Advertising Rates: Available on request.

All manuscripts, photographs, news items, etc. to reach Editor six weeks prior to publication.

COVER PHOTO: Cymbidium La Belle 'Wild Rose.' This lovely Cymbidium is in the private collection of Mr Norman G. Wood of Palmerston North. Parentage is Babylon 'Castle Hill' x Flare. Photo by courtesy of the grower.

NEW ZEALAND INDIGENOUS ORCHIDS

by Albert H. Blackmore

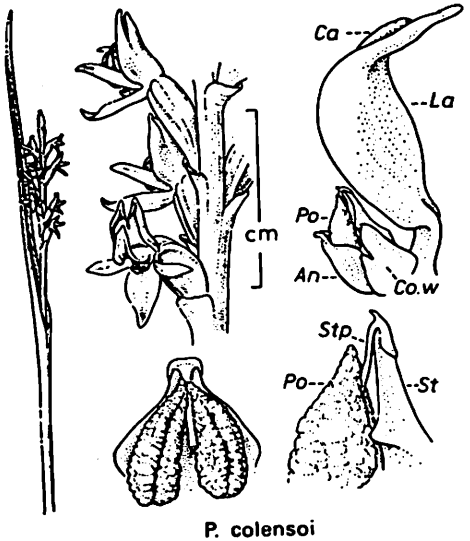
(Continued from last issue)

12 CALEANA one species only, namely, minor, A terrestrial. Found north of 38° latitude in scrublands, Kaitaia, Rotorua, Waiotapu. Stem of flower very slender, smooth, leaves very narrow linear, much shorter than stem. Flowers few or reduced to one. Greenish except deeply coloured labellum, which is long, cup like showing above the rest of the flower. Flowers October and November.

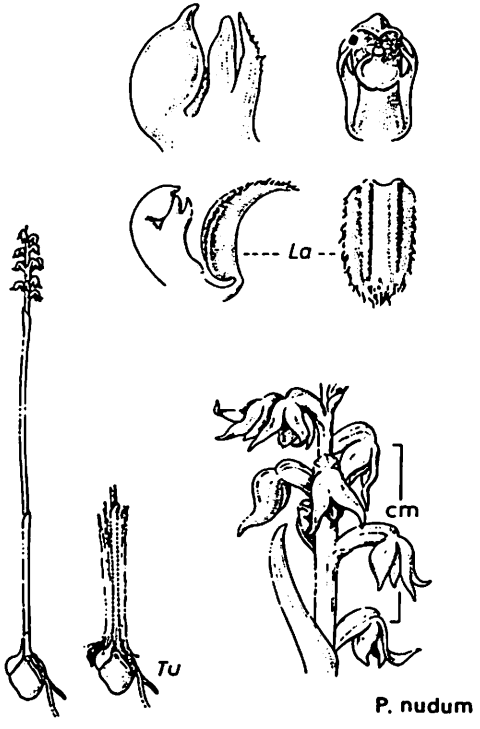
Fig. 9. Prasophyllum. In P. patens the nearer lateral sepal and petal have been removed to expose labellum and column.

13 PRASOPHYLLUM has four species in New Zealand, namely colensoi, nudium, patens and pumilum. They are terrestrial, onion leaved orchids.

a. collensoi, abundant in subalpine grasslands from central volcanoes southwards, upper quarter of the stalk bears the tiny, faintly sweet-scented flowers about 5mm long, seated on a green ovary, coloured reddish or yellowish green. Flowers November to January.

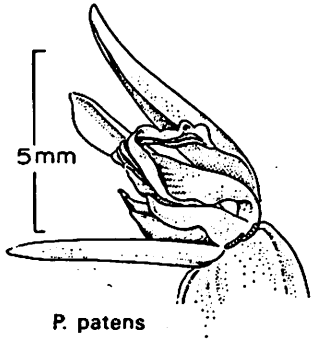


P. colensoi



P. nudum

b. nudium, found in both Islands south of Auckland in low scrub, mostly lowlands. Flowers reddish often dark, labellum dark red. Flowers April and May



P. patens

c. patens, found north of 40° latitude in bog and wet places, also in scattered localities both lowland and upland. Flowers yellowish green from November to January.

P. pumilum

d. Pumilum, found north of 38° latitude in open and lightly shaded places. Flowers pale green bent on overy to face downwards during April and May.

SIMPLE PHOTOGRAPHY FOR THE ORCHID LOVER

BY Gordon Sylvester, Wainuiomata

Have you envied the results of those whose photographs appear in this Journal from time to time. Like the average photographer my results were hit or miss, but a chance remark by friends on capturing the sometimes fleeting beauty of our native orchids gave me the right lead.

Early results were disappointing, but once the bug had bitten, the alternatives were to carry on or give up.

The method I finally adopted works well, the important thing being that it is cheap as far as accessories are concerned. I should state at this point my own equipment consists of a Pentax S3., 55mm focal length lens and coupled exposure meter. Accessories used are 2x teleconverter and a Zoom closeup lens. Best results are obtained with either the teleconverter and primary lens or the closeup and primary lens, not all three together. I use 100asa colour print film commercially printed.

When taking the photos first focus on the subject using whatever lens set up you prefer. Next operate the f stop ring in the manual setting until the flower appears brightest within the centre focus grid of your

camera, recheck the focus, operate the shutter. I have found 1/60th of a second is about the best speed in normal light levels, but in lower light a slower speed and a tripod is as effective.

To date I have no need of an electronic flash owing to (I think) using my camera on a manual setting. The average difference between the meter reading and personal judgement is 4 "stops", eg on the meter f8 my judgement f4.

Finally good luck and many hours of pleasure in capturing your blooms on photographs.

For those growers who put plants up for awards, please remember that the background for the photos is to be of a blue-grey colour. Lighting, preferably diffused daylight from behind the camera. For further particulars contact your regional judging Registrar.

Editor

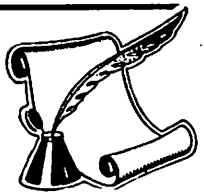
JOHN EASTON AWARD 1979

The John Easton Award for the most outstanding contribution to the culture and promotion of orchids in New Zealand was presented at the Hawke's Bay Orchid Society show this year to:

GEORGE FULLER

This award is administered by the Hawke's Bay Society. To date the recipients have been:
1977: Albert H. Blackmore, Auckland
1978: Tom French, New Plymouth.

LETTER TO THE EDITOR



9443C Heaney Circle
Santee, Calif. 92071
USA
12 November 1979

Mr G. Boon, Editor,
Orchids of New Zealand

Through the pages of your magazine I would like to extend our thanks to all the wonderful orchid people in New Zealand that made our recent trip to your beautiful country such a memorable event. It would be nearly impossible to say thanks to each and everyone of them personally. The open-armed and warm hospitality shown by all certainly cancelled any thoughts of the often inclement weather we ran into on our trip this year. We met so many at stops along the way that sometimes it is difficult to remember just who we met where. For seven of our group, it was a sentimental journey remembering the wonderful time we had in 1975. And believe us, we were not disappointed!

Hopefully I will have a group large enough to be able to return to New Zealand next year to take part in the First International Orchid Congress in Auckland. So far I have six people that have committed themselves to the trip.

I look forward to meeting some of my 1975 friends that I missed in 1979.

Sincerely,

Ben Hardy
Tour Co-ordinator
San Diego County Orchid Society

CYMBIDIUM TISSUE CULTURE

by Philip Wyatt, R.D. 1, Cambridge.

Over the past year or so some of us have been subjected to a continuous barrage on the merits of tissue culture as a means of obtaining a large quantity of plants in a hurry. There are probably few growers who have the experience to objectively discuss the real ins and outs of Cymbidium tissue culture. The points I am going to make in this article have been drawn from my own tissue culturing over the past five years and from discussions I have had with overseas growers and owners of tissue culture laboratories. With the large batches of mericlones currently being produced for intending cut flower exporters the next three years shall give local growers the experience needed to successfully select and grow these plants as has been done in Europe and USA.

In 1960 when Dr Georges Morel introduced tissue culture to the Orchid world there were many sceptics who preached the doom of orchid growing as a challenging hobby. These mericlones would replace seedlings leaving hybridisation to only a few, while most growers would scramble to get a mericlone of a formerly expensive plant. The sceptics even suggested that the bulk of these 'mericlones' being produced would not grow true to the parent clone, would be weak and unproductive and generally become a research tool after a few years.

After twenty years of raising mericlones one would think that the overwhelming mass of plants produced, grown and flowered that they would be accepted by all as being an economical method to obtain good quality clones. But not so, there is still the odd sceptic crying out in the wilderness that mericlones are evil. Well let's face it, many of us would still like a piece off an original plant more for its intrinsic value than anything else and are prepared to pay a reasonable amount for it. But at $6 — $10 each who can resist purchasing an established mericlone plant and growing it on for a few years to flowering. The major importance of producing orchids by tissue culture is the low cost, especially where large numbers are needed to regulate flower periods for the cut flower grower, or for distribution to hobby growers so that they may share the best with the rest. It has also speeded up the time in which new varieties may be distributed in sufficient quantity to satisfy demand.

There are still a few contentious issues to be sorted out — what should the requirements be before a plant is selected for tissue culture? The usual criteria are either a recent award or popularity, and often its true flowering characteristics are not considered. A seedling may be tissue cultured on its first flowering and on subsequent flowerings may not measure up to the expected standard, so in order to sell the plants an intensive advertising campaign is mounted and all the plants are sold for a high price. So by selecting clones which have flowered for a few years one can be

sure of just what he is buying. The source of material used for tissue culture is also very important. If you are going to grow 500 plants of Highland Mist 'Dillibira' you certainly do not want something quite different. The best plant source for tissue culture is from a flowering plant which you retain until the mericlones produced from it come into flower. In the event that you are going to prepare thousands of plants of a single variety it pays to put a limit on either the time over which the plant is proliferated or the number of plants produced from a single incision. This is of special importance in New Zealand where the volume of plants produced is relatively low and often the same tissue may be carried on over many years. A tissue culture laboratory offering plants for sale must bear this in mind, and retain the parent plant, be it a backbulb, or larger specimen. A selection of plants produced should also be retained for flowering. Although this makes it a little more expensive to produce mericlones it also provides the buyer with some assurance that the seller is keeping tabs on the flower produced.

There are many other aspects of quality control that may be used, and each laboratory should have worked out their own. Continuing the proliferation of corms from a flask purchased from another laboratory can be a dangerous practice. The plant material should be true to label but if mutation en masse is going to creep in, this can be one source that really is uncontrollable. Sometimes a flask is the only readily available source of material and one finds that he has to resort to this practice. Do not hesitate when buying a flask of mericlones or mericlone plants to enquire if these plants are the result of 'imported tissue' or are from a mother plant held by that laboratory.

I have mentioned the possibility of mutation and how easily it can be multiplied and introduced into the mainstream of plants. One should not read too much into the possibility of mutations occuring en masse, as the rate has been estimated at one in ten thousand or greater depending on the clone and the methods used in the laboratory. Mutations can take many forms, but they must not be confused with variations in growing conditions. There would be few collections in New Zealand with the thousands of mericlones of a single variety needed to adequately display the uniformity of mericlones in flower. Possibly the most common mutation would be minor colour and marking variations within the flower, followed perhaps by the doubling of chromosome numbers. Occasionally there are gross mutations such as mentioned in Joseph Arditti's book 'Biology and Perspectives,' but these on the whole are very rare. Some interesting results of mutations were seen during a recent visit to Australia involving apparent ploidity changes. One, a batch of Highland Glen 'Cooksbridge' appeared to revert from its tetraploid form to the diploid. Another at the same nursery, but only on a single bulb plant, was an apparent doubling of chromosomes of Sea Gem 'Lewes,' giving a much fuller improved flower, but its performance on a larger plant will be very interesting; closer to home — apparent octaploid forms of Bud March 'Rosetta' have been flowered but

these plants would be of curiosity value only. It would be interesting to see if any one has used them for breeding. The chemical mutagen colchicine has been responsible for some very interesting conversions to tetraploids. These converted tetraploids and chance tetraploids are now being used very successfully for breeding, and judging from some of the progeny I have seen using Fanfare'St, Francis' 4N, and Rincon 'Clarise' 4N, I am most impressed. The characteristics of the converted parents do appear to be somewhat reinforced in their progeny so most mutated plants, and there are not too many, are being put to good use.

When working with proliferating tissue some corm material after a while appears different to its counterparts and by discarding this an apparent mutation may be arrested. Also by utilising all the meristematic areas available in the plant initially, tends to 'spread the load'. Being too impatient with tissue and trying to force it by dividing it too quickly appears to be another source of mutation, especially after the tissue has been worked a while. Wrong labelling a plant can lead to further upset and this has been more frequent than masses of mutated mericlones.

Another important aspect is the consideration of the time it takes to grow a mericlone to flowering size. Often, plants grown to a standard worthy of a cultural certificate, i.e. lots of flowers, are the result of a sudden mass of blooms and they may not repeat the performance on a regular basis. Back to the little mericlone out of the flask. By observing a few simple guide-lines a mericlone can be built up to flowering within three years, although with most growers the normal period is more in the region of four years. This is done by using relatively high nitrogen feed in a frequent programme to grow the plant to the bulb and lead stage while using bottom heat from a hot bed. It is essential to maintain this initial growth through the first winter so there is no set-back. The hot bed temperature is maintained at around 15°C (60°F) which keeps the roots actively feeding all year round. Once the first lead from the initial bulb is formed it could produce a flower spike but ideally the second set of shoots should start showing just what the plant is capable of producing. Forcing the mericlone to maturity in this manner is not detrimental but is providing the plant with a good base to start its flowering life from. Of course a much diluted feed is used, as frequent applications of weak fertiliser would have a similar total feed level as feeding at normal strength periodically. Once the flowering stage has been reached, the mericlone is then best treated along with the remainder of your flowering stock. Just how a mericlone can be best grown to full production is demonstrated during the mericlone competitions that are so popular around the country at the moment.

When Dr Morel introduced orchid tissue culture it was intended primarily as a tool to free plants of virus. The techniques he used were very fine and painstaking, and most probably went a long way to freeing the plants of virus. By the techniques used today, where a much larger piece of initial incision material is used, any virus present in the plant would be transferred

and proliferated through the progeny. The mother plant may appear to be free from virus by a visual examination, so a more elaborate check needs to be carried out on plants for tissue culture. A note at this point, although a plant may be checked against virus and has been found to be apparently virus free this is no guarantee that there is not a non-virulent virus present, which may show up at a later date, especially if a plant is exposed to stress, such as cold, lack of water or lack of fertiliser. Nevertheless it is far easier to check a mother plant for virus plus a sample of its progeny than it is to check a large number of large plants. When purchasing a flask of mericlones from a reliable laboratory you will find that the plants have been checked for known virus.

If the tissue culture laboratory that you purchase your mericlones from, or have your plants mericloned by, knows what it is doing, the chance of collecting disease-ridden, mutated, wrongly labelled and unwanted plants is very remote.

Notes made on a trip overseas

Ella O. Campbell

As the purpose of my short trip overseas was not primarily to look at orchids, such notes as I have made reflect only a small part of what is happening in the orchid world.

In Singapore and Malaysia, where so many people live in high-rise apartment blocks, there is a trend towards breeding small orchid plants with colourful flowers. In a flat or apartment where space is limited, a corner may still be found for these small plants and so many more people are able to enjoy the pleasure of growing orchids.

In Frankfurt I visited the very beautiful Palmengarten. To a few people this will be familiar as the venue of the eighth world orchid conference. But I saw it in its more normal condition. Formerly a private garden its 22 ha now belong to the city of Frankfurt. Out-of-doors the garden is designed as a show-piece with plantings which provide as much colour as possible at every season of the year. Under glass there is a wide range of tropical and subtropical species assembled from many countries, including New Zealand. Of all the notable collections of tropical plants at the Palmengarten, orchids are perhaps the most important. The variety grown is sufficient to provide some flowering specimens at all times. These are attractively displayed behind glass, with the pots hidden from view by being sunken into a bank of moss. The display is changed periodically. The non-flowering plants are held in large glasshouses which are not open to the public.

At the time of my visit in October many Paphiopedilum species were in bloom, as well as other species — orchids and a range of hybrids. I was only sorry that I could not stay until November, when not only would many more orchids be in

bloom, but the Palmengarten would be hosting the European orchid show and two symposiums on orchids. The facilities within the garden in the way of exhibition halls, lecture halls and restaurant are ideal for such large gatherings. It was expected that some 5000 flasks of cut flowers would be on display as well as potted plants sent from Europe and other parts of the world.

Berlin botanic garden also has a large collection of orchids under glass. The Cattlyas I thought were particularly striking, even though space for display was limited because of extensive repair work on some of the large glasshouses.

The Royal Botanic Gardens at Kew is now restricting itself to growing botanical species of plants. Consequently the only orchids there are species—orchids; colourful hybrids are noticeably absent. As the condition for successful growth of species—orchids are not always well known, they are in some cases proving difficult to maintain.

In Los Angeles I was able to attend a meeting of the local Orchid Society where there was a large exhibition of flowering plants for both ger eral display and award judging. was impressed by the firm texture and bright, clear colour of the flowers. The quality of the blooms in cultivated orchids has greatly improved in recent years. Cattleyas, Phalaenopsis and Paphiopedilums predominated. Several people mentioned to me that they were looking forward with keen anticipation to their visit to the Orchid Conference in Auckland in October 1980.

ACKNOWLEDGEMENT

The magazine committee is pleased to acknowledge the very generous donation of $100 from Mrs J. Mendoza of Wellington. Mrs Mendoza has indicated that the money go to the magazine fund to be used as needed. With this kind of support we can be assured of keeping quality colour pictures on our cover and in time to extend this feature to the inside pages.

BOOK REVIEW

"New Horizons in Orchid Breeding"

by Hugo Freed

Hugo Freed, writer and lecturer on all facets of orchid growing. Breeder for twenty-eight years for Arthur Freed Orchids Incorporated up to his retirement in 1974. Some of the progeny of his crosses have won many awards from America and England. He was awarded the Orchid Digest Medal for meritorious service to the orchid world in April 1974. This is the Orchid Digest Corporations highest honour and has been awarded only seven times since its inception in 1955.

This informative and easy reading book contains a lot of background information on the breeding of orchids including the reasons behind a number of Mr Freeds own crosses. He deals in depth with the research necessary for successful hybridization and gives examples on how certain characteristics are passed on from generation to generation.

The book will appeal to breeders and be of special interest to potential breeders. It is of value to all orchid growers in that the information contained will assist in evaluating the potential of any orchid crosses purchased. It will prove a valuable addition to your home or orchid society library.

This is a paperback edition printed in USA by the Day Printing Corporation. 148 pages glossy paper — 16 pages in full colour and a number of black and white illustrations. Price $US6.95 plus $1.00 postage. Orders to Hugo Freed, 29500 Heathercliff Road, 277, Malibu, California 90265 USA.

—G.B.

FIRST NEW ZEALAND INTERNATIONAL ORCHID CONFERENCE

15th—19th October, 1980

Registration forms are now being prepared.

Make sure you are on our mailing list by contacting The Conference Secretary, P.O. Box 33-493, Takapuna.

The registration fee will be $27.50 a head.

This will include a copy of the Conference papers, a Conference badge, admittance to the Show and to the Conference Cocktail party.

Commercial selling areas are also available on application to The Conference Secretary.

What is a Sibling

by Bruce J. Bowen, Auckland

So often terms, botanical or otherwise, creep into common usage until their precise meaning becomes lost and their wider use leads to inaccuracies . . . therefore I thought the following article recently printed in the Orchid Species Society Bulletin (Brisbane) was of interest . . .

'How often do you see the word sibling whilst reading through price lists and descriptions from various orchid nurseries? I'd venture to say that it appears at least once in nearly every list put out today. How often is it used correctly? I think I would be kind in saying about 5% of the total number of times used. Today, if two plants of the same name are cross pollinated the resultant cross is almost always called a 'sibling.'

What is a sibling? To be concise a sibling is a blood relative.

To demonstrate how this applies to orchids, suppose we had three clones of Paphiopedilum niveum; Paph. niveum 'A', Paph niveum 'B' and Paph. niveum 'C'. We cross pollinate clones 'A' and 'B' and raise 500 or so seedlings to flower. From these we select the three best and call them Paph. niveum '1' '2' and '3'. Now if we cross pollinate clones '1' or '2' with clones 'A' or 'B', we have a sibling cross. In other words, they would be blood relatives. But if we were to cross '1' '2' or '3' back to Clone 'C', it would be an ordinary cross and in no way could it be called a sibling cross.

Then why do it? Why do nurserymen call these ordinary crosses siblings? Simple sibling crossing is supposed to produce superior clones as they are quick to point out, so naturally sales would be expected to be higher than if it was an ordinary mating of two unrelated clones. However, as in all forms of line breeding (and this is what it was called 20 years ago) the incidents of abnormalities are also increased. Unfortunately this point is not mentioned as much or in most cases not at all.

I am not trying to put anyone off buying siblings by saying this, as I go along with the theory that inbreeding does produce some outstanding clones but I would suggest that instead of buying say one clone of a sibling cross, buy a minimum of three.

I hope this makes the sibling picture a bit clearer and if any nurseryman reads this, hopefully he will correct his catalogue, if it is required.'

PINE BARK & ORCHIDS

by George Fuller

The bark of Pinus radiata has become widely used in mixes for potting orchids. It has the virtues of being readily available throughout the country, is light, easy to handle, fairly durable and is compatible with the growth requirements of most orchids since by varying the degree of crushing and sieving it can be graded from fine particles with dust removed to coarse chunks. It can be used in its raw form but better results may be expected if the acidity is reduced and the initial low nutritional value boosted. The procedure to be described achieves this by means of saturating the bark in water to which has been added lime and liquid feed, plus seaweed preparation if desired. The quantities and procedures do not have to be adhered to rigidly but form guidelines for personal experimentation. Suffice to say that they have proven satisfactory. Treefern fibre can also be treated.

To each 10 litres of water add: 2 tablespoons Dolomite Lime; 2 tablespoons Garden Lime; 1 dessertspoon of High Nitrogen Liquid feed concentrate or compound.

Hot water may be used if available and seaweed concentrates added if desired.

The bark is placed in a container and the above poured over until covered, whereupon it is left in this saturated condition for at least two days. Once drained, it is ready for use or may be stored when dried.

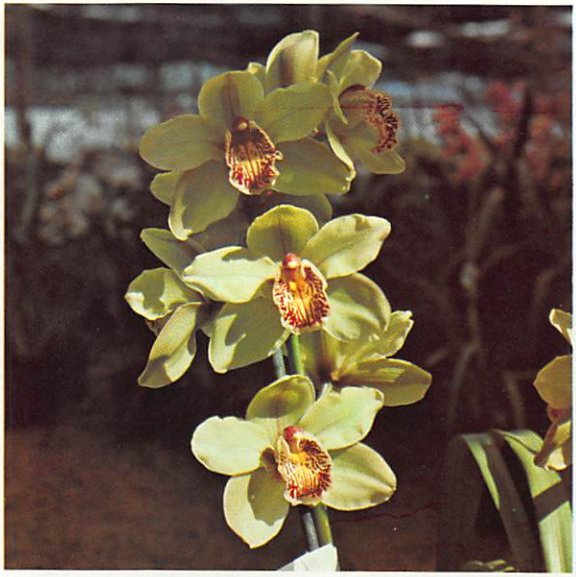
Footnote: When bark is used as a major constituent in mixes, whether it has received the above treatment or not, there is likely to be a greater need for supplementary feeding, since it is very low in nitrates and may even result in these being "robbed" from other materials in the mix and thus render them unavailable to the plants. A similar reaction occurs when sawdust is used. This effect will of course be reduced if the above treatment has been employed.

INTRODUCING

(Western Rose X Baltic) var 'Jubilee King' HCC/NZOS, OCNZ

First flowered for us on first bulb seedling in '77. 3rd flowering pictured. Still a small plant, 2 stems 8 & 7 flowers on one bulb. Flower measured by us as 13cm across, sepal 4.7cm. Higher award inevitable on mature plant.

A massive green
Single plants 15cm leaf $12 each
Flasks approx 28—30 plants $125



(WR X B) 'JK' together with GUADALAJARA 'SIESTA' BM/CSA and SLEEPING DREAM 'TETRAGOLD' AM/RHS, AOS won us the display section of Three Plants at the 1979 Waikato Show.

GUADALAJARA 'SIESTA' BM/CSA. A large full orange yellow that can carry 15 flowers per stem 2 stems per bulb. Single plants 15cm leaf $12 ea. Flasks approximately 28—30 plants $150.

SLEEPING DREAM 'TETRAGOLD' AM/RH, AOS. The highest awarded pure colour. Capable of 18 large light yellow flowers per stem. Single plants 15cm leaf $16 each. Flasks min. 25 plants $A150

LEVIS DUKE 'BELLA VISTA' SM/CSA, AM/NZOS. Champion Cymbidium Auckland & Waikato 1978, and Waikato 1979. All plants from stock imported by us. Probably the top commercial green available. We flowered it 20 flowers per stem, 2 stems per bulb. We are re-flasking the same stock. Single plants 15cm leaf $12 each. Flasks 28—30 plants $80.

OWING TO PRIOR ORDERS WE REGRET THAT THERE WILL BE A LITTLE DELAY IN SUPPLYING PLANTS AND FLASKS.

Of course we are VALLEY ORCHIDS N.Z. Agents also

F.A. BURKE LTD

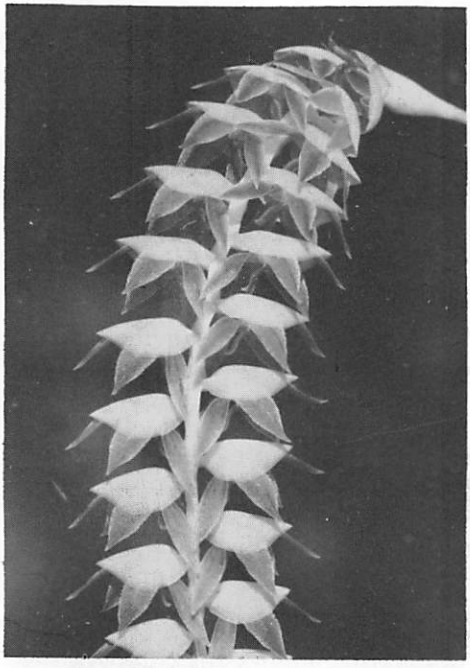
Cut Flower Exporters — Plant & Flask Importers

246 King Street, Whakatane

Nursery 31 Arawa Road — **Phones: 8648 & 6060**

PUKEKURA CORNER

By George Fuller, N.D.H. [N.Z.],
Curator Pukekura Park, New Plymouth.



Dendrochilum cobbianum Rchb.f.

Accept commendation if you first thought this was the prototype of Dr. Seuss's game of 'Yertles' but sorry, it's an orchid.

Individually the flowers of the Dendrochilums are insignificant and somewhat colourless but are very noteworthy in their collective two-ranked arrangement on a nodding filamentous stem. There is something delightfully graceful and dainty in the way the long slender spike is thrust upwards, reminiscent of a miniature fishing rod and the tightly-ranked floral portion almost floats down like a streamer.

D. glumaceum, is the more commonly cultivated species and has earned itself the popular name of 'Herringbone orchid' since the two symmetrical ranks of flowers appear similar to the backbone of a fish.

Both species are native to the Philippine Islands and growth habits are very similar. Thimble-sized pseudobulbs are densely clustered and each is topped by an elongated plicate-type leaf approximately 25cm long and 3cm wide. New growths appear in profusion in winter and from their centres a rat-tail-like inflorescence emerges. As it elongates the tip bends over and assumes the characteristic graceful pendulous form.

Floral colour is pale cream. The blooms are only about 1.5cm across but have tremendous impact by virtue first of flowers per spike then spikes per plant. Our best specimen

of D. glumaceum is in a 30cm pot and is mot impressive with flower spikes recorded in dozens. As extra bonus comes in the form of a very sweet fragrance, common it seems to several species.

Pot culture is most common but these plants can be adapted for treefern slabs or baskets. We have also had success with plants inserted into the sides of a 15cm diameter tube of netlon filled with Cymbidium mix and suspended vertically.

Although from the Philippines D. glumaceum is surprisingly hardy and can be grown cool to intermediate, making it an excellent subject for the not-so-experienced. Some shading is desirable and though watering can be reduced in late summer and autumn when growths are mature, the plants should never experience extended periods of dryness. Repot after flowering when root action is vigorous.

Our D. glumaceum flowers in July, Aug., Sept. and D. cobbianum which is larger in growth and flower comes in May, June July. A third species sometimes seen here is D. filiforme which true to name is smaller and even more elegant than the above pair.

The Dendrochilums are good examples of plants with tiny flowers still being able to have a strong impact and I commend them to those with limited facilities wishing to grow striking specimen plants.

If you are searching through older books for more information, think of 'platypus' and then look under 'Platyclinis' a generic name formally used.

NORTH SHORE ORCHID SOCIETY SPRING SHOW

The North Shore Orchid Society's SPRING Show was held during last Labour Weekend — later than usual due to the absence of a large contingent of members at the 6th Australian Orchid Conference in the first half of October.

However, it proved a popular weekend, and the Show gained much from the attendance of Eion Scarrow who conducted hourly tuition sessions. These caused a great deal of interest among the public attending, and members assisted him by potting and dividing plants of various genera.

It was interesting that the winner of the Cymbidium Open section was a plant of Wallara 'Gold Nugget,' and that another plant of this name gained second place in the Novice Cymbidium Section. Wallara 'Gold Nugget' was in evidence in Australia and is obviously still very highly regarded.

Ivy Fung 'Radiance' gained second placing in the Cymbidium Open, and San Francisco 'St. Treva' won the Novice section.

The same plant of Ivy Fung 'Radiance' also won the Society's award for culture.

Other genera awards were: Open, First: Odontoglossum Queen Charlotte Straits.

Second: Odontioda Red Rum.

Novice: First: Dend. Yodomine 'No. 1'

Second: Dend. Yukadarama 'The King'

WAIKATO ORCHID SOCIETY SPRING SHOW

The annual show in Hamilton was held on the 12, 13 and 14th of October. Attendance figures were a record and the exhibits were of high quality.

The Premier Trophy, the Martin Clark Cup for the Grand Champion Orchid of the Show went to Cliff and Shona Brindle for their SLC Hazel Boyd 'Flamenco.' It is a very impressive flower with its flatness, heavy substance and glorious colour — a glowing orange with red overtones.

The Nairn Cup for the best Cymbidium was awarded to Levis Duke "Bella Vista" exhibited by Youngs Orchids. This magnificent pale green-yellow late flowering Cymbidium of classical shape must certainly be one of the great Cymbidiums of all time. The Youngs plant is a division of the original clone. Mention must be made of another Bella Vista exhibited by M. Bycroft which won trophies in the novice section. This plant was also well grown.

No Cymbidium in the show generated more interest and discussion than the cut spike of Panama red 'Victoria McDowell' exhibit by Mr W. McDowell of Auckland. It was certainly the best Red Cymbidium seen by this scribe at any time anywhere and would probably have received even higher honours had it been displayed on the plant. As it was the spike won the Ton Henry Trophy for the best coloured Cymbidium and was awarded the AM by the NZOS. For those interested, the breeding is Sensation 'Melita' cross Khyber Pass 'Rotunda Red.'

One further award was granted by the OCNZ at this show. This was a HCC to a seedling of an unnamed cross to Western Rose cross Baltic. The flowers were well displayed and had that overall look of quality one expects in an award plant. The owners, Burke Orchids, have given this clone the varietal name 'Jubilee King.'

In the show one was some of the best nobile type Dendrobiums so far exhibited in this area. The mericlones from Yamamoto strain hybrids were impressive with the shape, size and colour of the flowers. Most were large plants owned by Frank Brljevich who won the Shepler Cup for the best Dendrobium with one of his exhibits.

SHOWS

I regret to say that I have lost the notes taken during the recent shows that the Editor and I attended and am therefore unable to give you the names of the orchids that caught our fancy. Palmerston North had a very good display of Cymbidiums in spite of the fact that the members were disappointed with the lateness of the flowering season. One corner was entirely used for miniature Cymbidiums and to see one group displayed in this fashion was pleasing. This society is slowly increasing the range of orchids and many other genera were on display, though in limited numbers. Noticeable at the show was the excellent naming of most of

the plants, trim white card with bold printing, so convenient for enthusiasts to copy the names of their favourite blooms into their notebooks.

The South Taranaki Show was held on the same weekend and Graeme and I attended on their last day. This was a true display. An oriental theme was carried out over the entire floor space including a very elegant floral display as you came in the foyer. Stepping stones and lattice fence with the unobtrusive use of two pools complete with gold fish and a manikin dressed in oriental clothes finished with a sunshade helped to carry the theme from entrance to exit.

Taranaki Orchid Society had a change in venue. Parking at the show building was easy, the weather extremely poor all weekend and the attendance excellent. The hall was filled with orchids of many genera tucked away among the Cymbidiums and a number of commercial displays were mounted.

Wellington Orchid Society put on their display at the end of the Show calendar, this was Labour weekend. This society is making a name for well grown and good quality orchids that do not require too large a pot i.e. Dendrobiums, Oncidiums, Paphiopedilums, Miltonias and Odontoglossums etc. All these were well in evidence at the show and I must add that there was a large display of Phalaenopsis and a colourful corner of Cattleyas. I enjoyed all the shows, met old friends and made the aquaintance of new enthusiasts and with the wealth of orchid plants flowering at this time of year I am confident that New Zealand can put on a display of merit at Ellerslie next year.

Should any of the above Society Secretaries wish to have published a more comprehensive description of their shows please forward material to the Editor and space will be made available in the next issue of the magazine.

Cultural notes for Nobile type Dendrobiums

by Gordon Sylvester, 22 Pencarrow Crescent, Wainuiomata

Recently I was re-reading back issues of "Orchids in New Zealand" and noted Bruce Douglas's article on this genus. Living in the Southern North Island has led me to write on my observations.

In late April I placed several species and hybrids namely D. nobile var. pendulam D. nobile, D. nobile var. Harefield Hall, D. crepidatum var. assimicum and others into my workshop which joins my orchid house. Once a month they were taken outside and watered with the hose and left to dry. Bud swell occurred in early August. They were shifted into the orchid house mid August when the buds were 2—3mm long and normal cultural methods were carried out.

Result, an excellent display of flowers and no keikeis have formed.

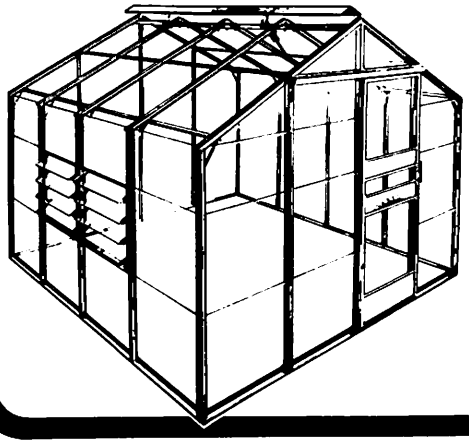
Temperature range outside was + 12 to 2 deg C., inside shed + 14 to 2 deg C. and inside orchid house 17 to 12 deg C.

New growth is proceeding at a good pace.

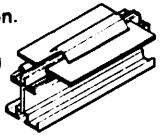
8 reasons why you should buy a

Leisurgro

Aluminium Glasshouse



1. Unique Aluminium Construction.



2. No clips, no putty, long lasting PVC weatherseal.
3. Simple assembly with only a spanner and screwdriver.
4. Modular construction gives an endless range of sizes inc. a conservatory lean-to.
5. Louvres and ventilation ridge exceeds minimum ventilation requirements.
6. Sliding door on nylon rollers, finger light operation.
7. Awarded designmark for good design. designmark
8. There are so many more reasons but we've run out of room so send the coupon below and find out more.

Return to Patterson & Viskovich Ltd., P.O. Box 938, Napier.
Please send me more information about Leisurgro.

Name .....

Address .....

Any purchase can be charged to your Diners Club.

LINWOOD ORCHIDS

(LIL & RON CROUCH)

SEEDLING FLASKS — CYMBIDIUM NOVELTIES

KURUN 'TENDRESSE' X SYLVIA MILLER 'GOLDEN ROD'
KURUN 'MAGIE' X PENDRAGON 'BROADMOOR'
KURUN 'MAGIE' X CLARIANCE 'DES LANGDALE' AM/NZOS (78)
GARETH 'HAMSEY' X FLARE 'DELL PARK'
MIMI 'SANDLEWOOD' X FLARE 'DELL PARK'
MIMI 'SANDLEWOOD' X VOODOO 'GYPSY RED'
PELLEAS 'MONTEREY' X VOODOO 'GYPSY RED'

CYMBIDIUM STANDARDS

KURUN 'MAGIE' X VOODOO 'GYPSY RED'
VOODOO 'GYPSY RED' X TETHYS 'BLACK MAGIC'
BOROUGH GREEN 'CONFERENCE' X VOODOO 'GYPSY RED'

Orders now being taken for the above flasks at $32.50 each plus $1.50 flask charge also P & P. Flasks should be ready approximately June/July 1980.

A variety of Cymbidium mericlones and seedlings available at all times.

Agents for Beck's mix and Tru-Bloom fertiliser.

Call — Write — or Phone

10 Seaview Road, Milford, Auckland 9 Phone: 466-429

CYMBIDIUM COMPANIONS

Ros Bickerstaff, 12 Enfield Road, Napier

CATTLEYA, Lindley

This genus is named after William Cattley, an Englishman from Hertfordshire, who was an eminent horticulturist of the early 19th Century. Its home is in Central America from Mexico to Brazil, with most species being found in the Andean Mountains and the coastal regions of Brazil. Most of these species are warm growing, but a few can be grown cool. C. labiata is an easy plant to grow but not so easy to flower. It likes to spill its roots over the edge of a pot, especially a clay pot, and grow like an epiphyte with good aeration around its roots. Better still is to attach it to a block of ponga fern fibre and hang it in a sheltered corner of a shadehouse, in bright light. If it is grown in a pot, give it a coarse, open mix of bark, ponga and a little coarse pumice or charcoal. Wet the compost thoroughly and then allow it to dry out before its next watering; and if on a fern block in a shadehouse, I seldom water as dew and rain seems to provide enough moisture to let them get all they need, even in summer.

Another easy Cattleya to grow in cool conditions, is C. claesiana, a dainty white. This plant grows, multiplies, and flowers with a minimum of care. For me, it seems to grow best in a plastic pot using a similar mix to C. labiata.

COCHLIODA, Lindley. This genus has a curiously shaped callus causing it to be named after the Greek word for "a little snail" — cochlion. Plants of this genera grow in the Andes of Peru, Ecuador and Colombia at high levels. The most commonly cultivated species is C.neozliana. This species was named after its discoverer, Jean Noezli- (not with a "t"). The name is pronounced as Noetzliana, but spelt noezliana. This species grows easily in cool, moist conditions, but is a reluctant flowerer. Compost should be open but able to retain moisture. I use fibre, small bark chips, and sphagnum moss in almost equal quantities.

CIRRHOPETALUM, Lindley. This name is derived from two Greek words — Kirrhos-russet; petalon-petal, because the "type" plant from which the genus was first described had russet-red petals (C.thouarsii). These plants come from the Himalayas, Indonesia, and Tropical Asia. This genus is often listed as a sub-genera of Bulbophyllum which is strongly resembles. Culture is as for Bulbophyllums.

COOL HOUSE TOPICS

SUMMER GROWING

by P.S. Mayhead, 360 Carrington Street, New Plymouth

With the hot months of February and March, many cool house orchids will be in full growth.

However, Odontoglossums from the cool mist forests of the high Andes are at stress, especially Odm. Crispum, and most odm. and odontioda hybrids which have a high percentage of crispum in their make-up.

Every effort has to be made to keep these as cool as possible, remember that the maximum temperature these stand is 27°C day and 16°C night. Above these the plants stop growing at best — at worst they die.

Shading must be increased, and "damping down" i.e. hosing the paths, staging, etc. should be done two or three times a day, as it follows the higher the temperature, the higher the humidity. Keep the air fresh and moving.

I am growing many outside at present. These are under low Ponga Tree Fern, with mini cymbids in front. A few were put out in early November and showed such improvement that I put another 30 out, and will compare these with those left in the glasshouse.

Watch the foliage, the leaves should be slightly bronzed — red means too much light. Outside, watering is required almost daily, certainly spray over the leaves every sunny day.

The newer odont hybrids using rossii and bictonense are much more tolerant towards high Summer temps, also anything that has Miltonia or Oncidium blood mixed with the odonts, like Wilsonaras or Vuylestekeara. Many other cool house plants will enjoy their Summer Vacation outside, such as most Masdevallias, Laelia anceps, Coelogyne cristata and Mexican odonts like rossii, grande and insleayi.

BOOK REVIEW

"Orchid Genera Illustrated" by Tom and Marion Sheehan. Sixty one exquisite colour pages showing 61 of the more commonly grown orchid genera highlight this unique book on orchids. The same flower parts in the same views are illustrated for each orchid, making it easy to compare genera to see how they vary — a comparison possible with no other orchid book.

The authors provide detailed descriptions of each of the 61 genera, using a minimum of technical terms. Accompanying each description is a list of the more popular species within the genus and their flowering seasons, and a map showing where the genus is found in the wild.

For the amateur orchid enthusiast this book provides a comprehensive description of orchid characteristics, an explanation of orchid classification and an outline of the orchidaceae family of plants as well as an extensive, illustrated glossary of more than 200 terms.

Orchid House Controls

by Keith Goodwin, Rotorua

A lot of people cringe when the introduction of electricity to the orchid house is mentioned. Of course once it is there you would never be without it. Few of us are fortunate enough to have a climate that does not require modifying a little to be better suited to orchid culture. Our problem is that the winters are too cold and the summers too hot.

Electrical installations do not have to be expensive or complicated, and can be done in stages. On the market are various devices that plug into a wall socket, for example, thermostats and time switches. This type of equipment can be used to advantage in conjunction with permanent wiring. What I am suggesting is to install the minimum of permanent wiring, ie, have an underground cable run from the house to a couple of waterproof power outlets in the orchid house and perhaps instal a light or two at the same time. These fittings are best provided with some additional shielding to prevent water being applied directly. Electrical equipment is plugged into an interrupting plug, which has the appropriate control wired to it, and in turn is plugged into the power outlet.

Thermostats. The most commonly available ones are designed for a household power outlet, but these do not fit onto a waterproof power point. In any case this may not be in a suitable location. The type required has the thermostat on one end of a length of flex with an interrupting plug on the other. An electrician will wire a thermostat for you with a flex of any length — cost, about $25. I find a 4m flex suited to allow sufficient flexibility in thermostat location. The most obvious use is for heating and we use a relatively cheap plastic fan heater with medium or high heat options, costing about $46. Electrical heating has many advantages in that it is readily controllable, clean, and requires virtually no attention. Another use is to obtain a reverse thermostat to activate a fan or extractor system when the temperatures become too high. Some growers have a fan operating continuously but often additional ventilation is required in summer.

Time switches. For watering in your absence a time switch can be connected to a solonoid valve, although these items are a little more costly. The better time switches will have a mechanical backup clock in the event of power failure. Solenoid valves cost somewhere between $85 and $100 and require some plumbing work to instal.

Daylight switches. These are photo-electric cells designed for turning lights on at dusk and off at daybreak. They are readily available and inexpensive. Obvious uses are for controlling artificial lighting in conjunction with a time switch to provide longer growing hours.

These are just some of the uses for the more commonly available switching devices on the market that have a use in the orchid house. No doubt there are other ways they could be used, but these are ones I have tried.

South Pacific Orchids Ltd

P.O. Box 4150

NAPIER, NEW ZEALAND

We now have available mericlone flasks for the hobbyist planted in 5's and 10's.

We are producing only cymbidiums in:

1 **Standards**
2 **Miniatures/novelties**
3 **Seedlings**

Our list will be available in mid-September although our distributors do have some flasks on hand.

Commercial orders can be arranged planted in flasks of 25's.

Distributors:

Mr John Cole
69 Arawa Street, New Lynn, AUCKLAND — Phone 871-510

Mrs L. Ferretti
32 Mabey Road, LOWER HUTT — Phone 677-729

Mrs M. Jacobs
6 Buchanan Street, GISBORNE — Phone 89-531

Mr G. Maney
7 Harrow Place, PALMERSTON NORTH — Phone 79-439

Mr K. Nicholson
32A Oakland Avenue, PAPATOETOE — Phone 83-872

Mrs W.E. Reardon
Omata Gardens, R.D. 4, NEW PLYMOUTH — Phone 84-681

Flasks can be purchased directly from the nursery although this would be of no advantage to the purchaser.

Registered at P.O.H.Q. Wellington as a magazine. Printed by W. J. Deed Printing Ltd., Waiuku, N.Z.