

CYMBIDIUM SEEDLINGS
MINIATURES and STANDARDS



Bred from the best stud plants available including the latest pure coloured varieties.



10 Plants for \$17.50 plus freight \$1
Size 6" - 8" leaf length

Make your selection now and we will deliver in the Spring if desired.



Lists available now.

J. S. HANNAH

R.D. 2, WALTERS ROAD, PAKAKURA. PHONE 84-287 PAKAKURA

ORCHIDS IN NEW ZEALAND



JULY 1975

**BECK'S
ORCHID MIXES**

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

ASQUITH NURSERIES
67 Asquith Avenue, Mt. Albert
AUCKLAND
Phone 86-2826

MR. SYD WRAY
509 Carrington Street
NEW PLYMOUTH
Phone 34-583

MR. NORM PORTER
443 Te Moana Road
WAIKANAE
Phone 6977

MR. BRYAN CLARK
Maraekakaho Road
HASTINGS
Phone 88-734

MR. TOM GRIMSON
162 Stout Street
GISBORNE
Phone 4450

WHY

BOTHER TO MAKE YOUR OWN MIXES ?

SAVE

YOUR TIME TO ENJOY YOUR ORCHIDS

BECKS'

orchid mixes are used with success all over New Zealand.

A balanced selection of long-lasting materials, fertilised with nitrogen, phosphate and potash to give that start to plants.

After three to six months plants should be manured with a proprietary fertiliser at recommended strength.

Mixes are pH adjusted with lime and Dolomite to pH 5.6 to pH 6 which suits most orchids.

No. 1 ORCHID MIX FOR CYMBIDIUMS and other heavy feeding types. In four sizes for your convenience.

¾ cut. ft. small pack. 1½ cu. ft. (sugar bag).

3 cu. ft. large pack. 5 cu. ft. (sack size).

1-1-1 SPECIAL ORCHID MIX FOR CATTLEYS, DENDROBIUMS etc. Balanced for the above orchids and for those who prefer a Dicksonia fibre mix: with the addition of SPHAGNUM MOSS this mix is suitable for PAPHS. and ODONTS.

Two sizes: 1½ cu. ft. and 3 cu. ft.

Also Available—

CHOPPED PINE BARK: Screened and ready for use.

Quarter-inch to ¾ in. dust free. Sack size only.

Growers please note, the mixes are sent out in dry condition and for best results should be watered prior to use, preferably the day before to enable surplus water to drain off.

VALLEY ORCHIDS Flasks of Cymbidium Seedlings

Each flask will contain a minimum of 25 individually positioned, large plants, ready for three-inch pots. Unique crosses by exclusive parent plants to produce flowers of distinction for show bench, commercial and future stud plants. We lead the world in pure-coloured Cymbidiums.

ORDER NOW

PURE-COLOUR WHITES

Pharaoh "Pathfinder" x Pharaoh "Perfection" — 100% pure-colour.
Pharaoh "Pathfinder" is the earliest (May) and the heaviest substance of all our Pharaohs. Pharaoh "Perfection" is our most shapely. Expect quality whites \$50
Sleeping Beauty "First Dawn" x Pharaoh "Pathfinder" — 100% pure-colour.
Expect very early whites and creams \$30

PURE-COLOUR YELLOWS

Sleeping Beauty "Sunflower" x Sleeping Beauty "First Dawn" — 100% pure-colour.
"Sunflower" is a pure-colour intense yellow crossed with "First Dawn," the earliest of the pure-colour yellows. The parents are siblings — much improved on the original Sleeping Beautys. Expect May-June yellows \$30
Sleeping Beauty "Royal Mint" x Sleeping Beauty "Fine Gold" — 100% pure-colour.
Two siblings, intense yellows, August and September \$30
Sleeping Dream "Daffodil" x Sleeping Beauty "Sunflower" — 100% pure-colour.
"Daffodil" is a heavy producer. We expect intense yellows with lots of flowers in August \$30
Sleeping Dream "Daffodil" x Sleeping Beauty "Fine Gold" — 100% pure-colour.
20 plus flowers each spike—semi arching spike habit \$30
Sleeping Beauty "Fine Gold" x Sleeping Dream "Gold Rush" — 100% pure-colour.
A fine combination for quality, intense yellows. Mid-late season \$30

PURE-COLOUR GREENS

Sleeping Dream "Kings Ransom" x (Wyanga x Green Nymph) "Yowie Bay" — 100% pure-colour.
The latter is a large, shapely green. The cross should produce the highest quality pure-colour green in August \$50
Wyanga "Evergreen" x Sleeping Valley "Extravaganza" — 50% pure-colour.
The Wyanga is a dark green (non yellowing) selfing of Wyanga "Condamine." Expect top quality greens for show and future stud plants, flowering in June-July (Sold out) \$50
Sussex Dawn "Dorothy May" x Pharaoh "Winter Mist" — 50% pure-colour.
Expect multi-flowered, shapely green and whites \$30

NEW COLOURS

Sleeping Spring "Pink Beauty" x Sleeping Dream "Amber Glow."
The Sleeping Spring is a very fine orchid from the English FCC winner Claudona "Rajah." The Sleeping Dream is a new colour to Cymbidiums. Expect colours galore (Sold Out) \$30
Sleeping Dream "Violet Glow" x Sleeping Spring "Pink Beauty."
The Sleeping Dream is from the same cross as "Amber Glow" and is an entirely new colour. Expect further new colours \$30

STANDARDS

(Earlyana x California) "May Day" x Self.
These should be ultra early, good shape whites with very heavy substance. April flowering \$30
San Miguel "May Day" x (Earlyana x California) "May Day".
Our winner with the second prize winner at the V.O.C. Autumn Show, 5 May, 1973. Expect ultra early, large whites and greens \$30
Lunagrad "Elanora" x (Earlyana x California) "May Day".
Expect May to June whites and ice greens of top quality \$30
Lunagrad "Elanora" x (Lucy x Earlyana).
Expect May to June greens of quality \$30

Flasks and plants available from New Zealand agents:

BURKE ORCHIDS

F. A. BURKE LTD., P.O. BOX 422, WHAKATANE.
PHONE 8648

FRED & GWYNNE BURKE

Congratulate New Zealand orchid growers on the formation of
THE ORCHID COUNCIL OF NEW ZEALAND
and their first issue of the magazine
ORCHIDS IN NEW ZEALAND



As New Zealand agents for

VALLEY ORCHIDS ADELAIDE SOUTH AUSTRALIA

We carry their 1975 range of 20 seedling crosses and 10 mericlones. Single plants available at 12" minimum leaf length from September on.

Seedling and mericlone flasks plus community pots (10 plants at approximately 8" leaf length sent bare root) available at short notice ex VALLEY ORCHIDS. Freight extra.

		25 plant flask	12"	com. pot.
SLEEPING VALLEY "EXTRAVAGANZA"	5" June green	\$50	\$10	\$40
SLEEPING BEAUTY "VALLEY QUEEN"	September pure white upright spike	\$100	\$15	\$60
PHARAOH "PATHFINDER"	June white of very heavy substance	\$50	\$10	\$40
PHARAOH "REYNELLA"	July pure white near 5" flowers	\$50	\$10	\$40
PHARAOH "ALMIGHTY"	August pure white \$100 prize winner	\$100	\$15	com.
SLEEPING DREAM "KINGS RANSOM"	August pure white a super orchid	\$100	\$15	pots
SLEEPING DREAM "TERAGOLD" AM/RHS	Tetraploid pure yellow awarded Sept. 1974	\$100	\$20	available
PEARL BALKIS "VALLEY HIGH"	Large crystal clear white	\$50	\$10	later
VALLEY GEM "PICADILLY"	Long lasting yellow flowers good	\$50	\$10	
VALLEY FLOWER "CHERRY RIPE"	Won best pink 1974 Tetraploid	\$100	\$15	

Some flasks could be in short supply.

Catalogue and seedling lists available.

F. A. BURKE LTD.

P.O. BOX 422
Cut flower exporters.

WHAKATANE

PHONE 8648
Plant and flask importers.

ORCHIDS IN NEW ZEALAND

Official publication of the Orchid Council of New Zealand.

Volume 1. No. 1.

Published bi-monthly.

July, 1975.

COUNCIL 1975-76

President: MR. TOM FRENCH, Taranaki Orchid Society.

Vice-Presidents:

Lt. Cdr. F. E. J. Mason, M.B.E., R.N.Z.N., North Shore Orchid Society,
Mr. N. G. Wood, Manawatu Orchid Society.

Committee:

Mr. B. F. Clark, Hawke's Bay Orchid Society; Mr. B. Douglas, Bay of Plenty Orchid Society.

Secretary/Treasurer: Mr. S. Wray, 509 Carrington Road, New Plymouth.

Editor: Mr. G. Boon, 30B Waiwaka Terrace, New Plymouth.

Associate Editors:

Mr. A. Blackmore, Auckland; Mr. P. Mayhead, Taranaki; Mr. R. Maunder, Bay of Plenty;
Mr. G. Maney, Manawatu; Rev. Father B. J. Edwards.

CONTENTS

Page

- PRESIDENT'S REPORT.
- EMBLEM COMPETITION.
- CARE OF ORCHIDS DURING THE WINTER MONTHS by BRUCE DOUGLAS.
- THE WRITTEN WORD AND ITS EFFECT ON ORCHIDS IN NEW ZEALAND by A. H. BLACKMORE.
- PERPETUATING NATIVE SPECIES by ALLAN BURROWS.
- PREPARING CYMBIDIUMS FOR EXHIBITION by I. D. JAMES.
- PUKEKURA CORNER by GEORGE FULLER.
- CYMBIDIUM GROWING IN THE MANAWATU by G. A. MANEY.
- CYMBIDIUM ORCHIDS: PEST AND DISEASE CONTROL by JOY AMOS.

Annual Subscriptions: \$3 New Zealand currency, plus 50 cents postage.

Advertising Rates: Full page \$25, Half-page \$14, Half-column \$8, Quarter column \$5.

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

Articles in "Orchids in New Zealand" may be produced whole or in part only by permission of The Editor.

PRESIDENT'S REPORT

With this issue, the magazine "Orchids in New Zealand" makes its first bow to the orchid growing public, and we trust that its audience will call for an encore.

Many of the orchid societies of which the Orchid Council of New Zealand is comprised, have been in existence for only a short time, and their success is ample testimony of the enthusiasm which exists in regard to the growing of orchidaceous plants in this country.

Those responsible for this magazine hope to make it a compendium of information for all orchid growers throughout New Zealand, and welcome articles to that end.

The magazine's success in the future will depend on the measure of support it merits from members of the contributing societies to the Orchid Council of N.Z., and the interest of members who may from time to time be sufficiently inspired to make contributions to its pages.

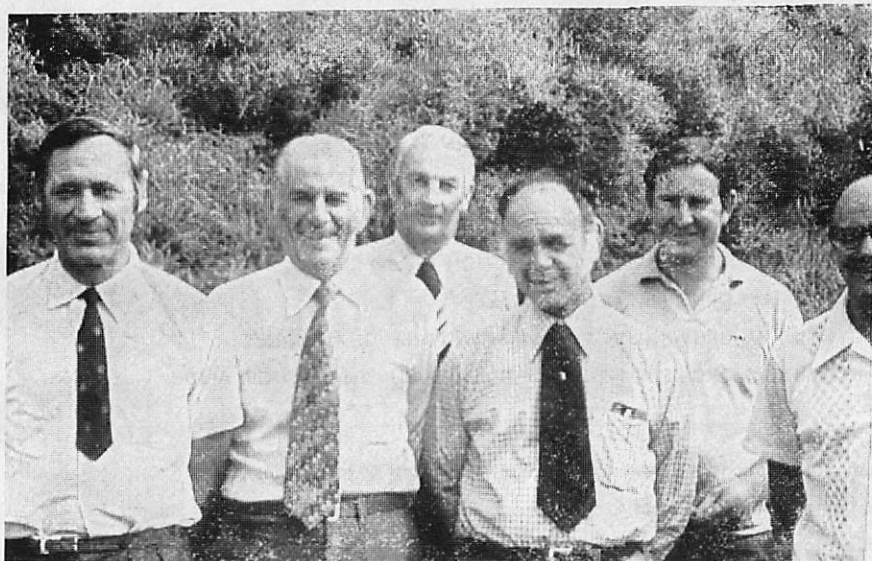
We would ask our readers to remember that Rome was not built in a day, and that this first effort is put forward for their helpful criticism, and if willing, their appreciation.

Phenomenal advances in the cultivation of orchids have been made in this country over a comparatively short number of years, yet there is still scope for improvement. This magazine, will, we trust, provide a medium for the exchange of orchid knowledge and experience, to the benefit of all with an interest in the orchid family.

Cicero wrote "Principum hoc: exitum evolant alii"—the beginning is this: the end will unfold differently—which we venture to prophesy will be found to apply to this enterprise, the sequence of which may well be a revelation, but can only add to our enjoyment of a common interest—the family Orchidaceae.

TOM FRENCH, President, Orchid Council of New Zealand.

EXECUTIVE COMMITTEE 1975-76



Left to Right: Lt. Cdr. F. E. J. Mason, M.B.E., R.N.Z.N.; Mr. Tom French; Mr. B. Douglas; Mr. N. Wood; Mr. S. Wray, and Mr. B. Clark.

CYMBIDIUM ORCHIDS: PEST AND DISEASE CONTROL 1975

PART 1

Good hygiene is essential to eliminate sources of infection. Grow in a clean glass-house with paths, walls, benches and under bench area, scrupulously clean.

Keep the area around the orchid house clean, mowing or spraying as necessary. Spray or dust garden plants around the house, to control aphids, mites, thrips, leaf-rollers, slaters. Use baits to control slugs, snails, ants, crickets.

Do not overcrowd plants. Overcrowding reduces air circulation and makes observation and efficient spraying more difficult.

Control temperature and humidity and provide for good air circulation. Design and siting of the house are very important. Fans, heating and cooling systems assist.

If the atmosphere is too hot and dry, watch for mites and thrips. If too wet and cold, with poor air circulation and water condensing on leaves, watch for disease—glomerella, gloeosporium, botrytis, bacterial rot. Correct these conditions or the trouble will recur. If the rooting medium is too compact and does not drain freely, root rotting diseases may develop.

Isolate newly purchased plants and give them a clean-up spray or dip e.g. maldison, diazinon or acephate. They could introduce pest or disease.

Re-pot newly purchased plants into your own mix and new containers. Examine roots and dip in fungicide if required e.g. Natriphene or 8-hydroxyquinolin sulphate, one in 2000, i.e. three-quarters of a level teaspoon in 4.5 litres or in captan or in Terrazole e.c.

Before re-using pots or planter bags, clean thoroughly and soak in disinfectant e.g. Sodium hypochlorite (clorox, Jannola—142 ml per 4.5 litres water) for 12 hours, or in two per cent. formalin. Use an open mix and water carefully to minimise disease.

If conditions are good and there are not many plants, there is no need for routine sprays throughout the year.

Watch for symptoms (use a X10 hand lens) and spot treat affected plants, repeating treatment two or three times.

If disease, pest or symptoms appear which you do not recognise, isolate the plant and find out the cause. A diagnostic service is available through the local Horticultural Advisory Officer of the Ministry of Agriculture and Fisheries.

Wrong treatment is useless and may be damaging to the plants. Orchids are susceptible to injury from chemicals applied when spikes are developing.

Clean up all pests and diseases before spikes emerge, then use a systemic and long-residue chemical to give control throughout the flowering season.

Systemic materials (acephate, benomyl, dimethoate, kumitox, phorate, metasystox, etc.) can be applied to the roots. They travel upwards in the sap-stream and give effective control when plants are growing fast. Less reliable when sap-stream is slow moving. They can also be used as sprays.

Repeat the clean-up sprays when flowering is finished. For the rest of the year, if pests or diseases are seen or expected e.g. aphids in spring, mites and thrips in summer, leaf spots in winter, apply two or three sprays as a spot application to affected plants and those immediately surrounding them.

by JOY AMOS,
Ministry of Agriculture and Fisheries,
Auckland.

CLASSIFIED ADVERTISEMENTS

This section is for the use of amateur growers only. Trade your surplus back bulbs and divisions for profit and pleasure. Please reply direct to the addresses given as no correspondence will be entered into by the Editor or magazine staff. Fifty cents for each advertisement, limited to 18 words.

LETTERS TO THE EDITOR

Pleased to hear of your successes or failures or suggestions about our journal.

READERS' ENQUIRIES

It is envisaged that this section will prove very popular and to enable as many enquiries as possible to be published, please keep your letters as brief as you can. All letters must contain the writer's name and address (nom de plume if desired) and forwarded to the Editor. No private correspondence will be entered into.


~~~~~

WE WISH TO CONGRATULATE THE ORCHID SOCIETIES OF NEW ZEALAND ON  
THE FORMATION OF THE ORCHID COUNCIL OF NEW ZEALAND AND THE  
PUBLICATION OF THIS MAGAZINE

If you would like to receive our list of warm growing orchid  
seedlings, please write to us.

## **TOM and PAT FRENCH**

### **Blue Bird Floriste**

69 DEVON ST. EAST, NEW PLYMOUTH

Phone 83-795

Nursery and Res. BBK 812

~~~~~

~~~~~

### **ORCHIDS with a DIFFERENCE!**

Our new list will be produced shortly. It includes—

ODONTOGLOSSUMS  
ONCIDIUM ALLIANCE INTERGENERICS  
MILTONIAS  
LYCASTES  
MASDEVALLIAS  
EPIDENDRUMS

The supply of lists (and plants) is limited.

Send for your copy NOW to—

## **MILLER'S NURSERIES**

C/o 8A AUDREY ROAD, AUCKLAND

~~~~~

EDITORIAL

The first publication of any magazine or periodical, normally sets the standard for future issues. In this respect articles, stories, even advertisements have to be looked at very closely as to suitability, and most important, to whom they appeal. A bi-monthly magazine such as this has only two classes of reader, those who are stricken with the disease orchiditis and those who would wish it upon others. To this end we must cater for readers who are suffering from all phases of the disease.

However, it will be difficult to please all and as wide a range of articles as is possible will be published. It is hoped that associate editors will be appointed from each province or major orchid club area and that these people forward news items such as meetings and show dates and articles of general interest. Pen pictures of orchid personalities in your locality will be welcome.

Some readers may complain as to the size of the magazine, too big, too small, articles too long, not enough information on the particular orchids that you collect etc. Sensible criticisms will be published under "Letters to the Editor" and improvements will be made when possible. Remember, this is your journal and it appeals to a limited number of the reading public only, therefore its success depends on your support and forwarding of articles for publication. For some, a lengthy article is a written impossibility, but a short paragraph, perhaps some handy hint, is not beyond the capabilities of most. From this type of short paragraph or "fill in" many a horticulturist has learnt to grow, flower or fruit plants that had otherwise proved difficult to master, so please keep written contributions rolling in.

This magazine has evolved as an answer to a quest for New Zealand orchid enthusiasts who up to now have had to rely for information

on overseas publications and local news sheets for orchid culture and advice. Overseas or local productions of limited appeal or circulation are not always suitable for our conditions, and news sheets are somewhat brief and generally relevant to one particular area only. After all, we lie between the latitudes of 35 deg. south and 47 deg. south and there is quite a range of climates suitable for the growing of many genera.

The newly formed Orchid Council of New Zealand has realised the need for not only making people aware of what is grown and how it is grown, but also for bringing orchid lovers together through the pages of a journal such as this.

— ☆ —

Emblem Competition

Win orchids to the value of \$50 for designing a suitable emblem for the New Zealand Orchid Council's letterheads, etc.

There is no entry fee but each design must be original and have entrant's name and address clearly printed.

Competition is open to anybody and any number of entries may be submitted.

The Editor and Executive Committee and members of their families are excluded. The judges decision is final and no correspondence can be entered into. All entries submitted would become the property of the Council.

Closing date 20 August, 1975.

All entries to—

THE SECRETARY,
509 Carrington Road,
R.D. 1,
New Plymouth.

COVER PHOTO: by courtesy of Mr. G. Fuller. *Dendrobium cunninghamii* (Lindl.). The only representative of *Dendrobium* found in New Zealand flora. Named after Mr. Allen Cunningham, Government Botanist and Superintendent of the Sydney Botanical Gardens who visited New Zealand in 1826 and again in 1838 on plant hunting expeditions. An unusual characteristic of this orchid is that it has branching pseudobulbs.

CARE OF ORCHIDS DURING THE WINTER MONTHS

by BRUCE DOUGLAS

Most of the orchids in our collections grow naturally in areas where there are only two seasons—wet and dry. I mention this to draw your attention to the fact that orchids need more water at one period during the year and less water at another time. This period of less water coincides with our winter months. So far as I know and for all practical purposes, there is nothing specific to indicate the exact time any particular orchid should have its watering either increased or decreased. Rather it is a gradual happening depending on the particular night temperatures in our individual districts. The cooler the nights, the drier we must have the moisture within each pot. Only experience can tell you just how dry or moist each pot must be for it depends on many factors. If you have any doubts about watering—don't. If we don't keep them drier, the cold wet conditions that occur in the pots rot the roots as we too often have found out in the past.

Autumn sees a change towards cooler nights and as this season progresses our orchid growths should be maturing. In this manner, they prepare themselves for flowering and the more rigorous conditions ahead when they "rest." Therefore, we should try to approximate natural conditions for our orchids as nearly as possible in our glasshouses. You can usually notice an orchid growth maturing, for at this stage, the young leaves which up until this point, have been quite compact, seem to open out and show the top of the pseudobulb. But probably the question uppermost in your minds is not one of maturing growth, but just how much water should you give during those cold winter nights. All I can advise is that you form your own conclusions from what I have already said, what I still have to say and a commonsense approach to the problem. Remember, the colder the nights, the drier your potting mixture must be. This point will assume greater importance the further south you are growing and it may only be necessary to give sufficient water to prevent shrivelling of the pseudobulbs.

Humidity

This is a point to be watched. As the autumn weather cools, it will be necessary to lower the percentage of moisture in the atmosphere of your glasshouse. During winter it will be at its lowest point and then be slowly increased as the weather warms up. But do not dry your atmosphere out completely. To do so will leave your plants with a dull and somewhat shrivelled look as well as a probable attack of red spider.

Where possible use that commonsense approach—damp down in the morning, and on a rising temperature. This gives the plants a chance to dry before the cold night temperatures fall. It may be that on some days you will only need to moisten the staging and floor to keep the required humidity and freshness. If you have some heating arrangement, watch that it does not create dry areas.

If it shows that tendency, take any one of the many methods to overcome this fault.

Air

Always give orchids as much air as possible. Most orchids are what botanists call epiphytes. This means that they grow upon trees or at least somewhat raised from the soil level. This being so, it is easy to imagine they are used to having a good air circulation—not a draught, in and through the foliage. Do all you can to keep the atmosphere buoyant. Close the house down early on cold days in order to build up a reserve of warmth. In growing orchids it is that minimum temperature you need to watch rather than a maximum one.

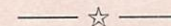
Shading

As autumn progresses and the winter comes, shading should be gradually reduced to a minimum. The aim in doing this is to give the plants more light and so help them "ripen" those maturing growths. We seem to use 101 different mixes for shading in this country and many I believe could well be forgotten. A good mixture should be wearing thin now and with little effort could be removed leaving the glass quite clean. For Auckland and Bay of Plenty I believe it is necessary to have a

SHOW JUDGING

Sub-committee Appointed

The Orchid Council has appointed a sub-committee to formulate rules and standards and means of facilitating judging in all areas. The committee, under the chairmanship of Mr. A. H. Blackmore is as follows: Messrs. K. A. Blackman, F. A. Burke, F. L. Brljevic, J. T. Dixon, I. D. James and Mrs. H. C. Hanson.



CYMBIDIUM GROWING IN THE MANAWATU

Winter Through To Summer

by G. A. MANEY

There have been many articles written on this subject, all of which have, without doubt a lot to offer, but seldom that which is relative to our own growing area.

The Manawatu has a climate that will produce flowers of long lasting quality and strong healthy plants. New Zealand, perhaps more than any other country in the world, has many different climates, sometimes in less than a 50-mile radius and this in itself is more important than many people realise.

Too often we are inclined to be swayed into changing our mix because a certain grower in Auckland or Hawke's Bay is having great success using a different compost. In the Manawatu our winters can be very cold and for this reason we must use a very open mix, one that will dry out reasonably quickly and not stay in a soggy state. Cymbidiums will withstand temperatures down to 32 deg. F. without any harm.

From the end of April it is important to spray with a fungicide such as Benlate, Dithane Z78 or Captan. A miticide such as Kelthane is also a good idea to protect against red spiders.

I personally stop feeding from April through to 1 September and spray with the above preventatives once a fortnight until the flowers are out. Slug bait is thrown around the plants once a week and this is a necessity; the slugs and snails will find those juicy spikes before you do. Staking the spikes is also important from April on, and I find wire stakes are the best for this and use twistems to train the growing spikes.

(To be continued)

NORTH SHORE ORCHID SOCIETY

At the second annual meeting of the Society on 6 April, when 103 members attended, Mrs. Alice Blackmore, President, reported on the many activities undertaken during the year. The necessity of forming the Society was amply proved by the resulting 216 members. In her 50 years of public life, Mrs. Blackmore said she had never seen such co-operation and enthusiasm, resulting in help to orchid growers and friendships. On announcing her retirement from presidency, she said she was sure that the organisation would be in capable hands. Mr. J. Hart, treasurer, presented a healthy statement of accounts, which were able to cope with the society's needs and in addition pay to the Orchid Council of New Zealand its affiliation fee and a year's subscription for every member to receive the Council's bi-monthly official journal.

Officers Elected

Patron: Mr. A. H. BLACKMORE

President: Mr. F. E. J. MASON

Vice-Presidents: Miss K. M. Clark, Mr. G. R. Newport.

Hon. Secretary: Mrs. Beverly Godwin.

At the conclusion of the meeting Mrs. Blackmore was presented with Life Membership and a beautiful bouquet.



TARANAKI ORCHID SOCIETY

Hello there, and warm greetings from our members to you all. Our meetings continue to be very well attended. A feature is the varied range of orchids generally shown, with a strong representation of species. At the last meeting, April, 55 plants were tabled, including a number of rare and unusual ones. Perhaps it is because these showings are strictly non-competitive that it results in everyone being encouraged to bring their plants. Whatever the reasons, we are extremely proud and privileged to have Mr. George Fuller give the plant commentaries, usually with one other member.

If any of you reading this find yourselves in New Plymouth on the second Tuesday of the month (except January) you will be most welcome to come and join us at our meetings. See you there!

President: Mr. P. MAYHEAD

Secretary: Mrs. D. Whittaker.

The Taranaki Orchid Society regrets to report the recent death of Denis Coe of Hawera. He had been a most valued friend to the Society since its inception, as a committee member and past vice-president. His special interest was in orchid species, particularly in Paphiopedilums.

We have to report the passing of Mr. Ted Gibbs, immediate past President of the Wanganui Orchid Club. He was an ardent collector of cymbidiums and New Zealand species and has donated these to the Wanganui Parks and Reserves. Also a photographic enthusiast, he has passed his many orchid colour slides into the hands of the Wanganui museum.

CYMBIDIUM DISPERSAL CLEARING SALE

At
4 LOMOND STREET, TAKAPUNA
on
SATURDAY 6 SEPTEMBER
STARTING AT 10.30 a.m.

Because I have decided to confine my orchid collection to miscellaneous genera, the sale, by auction, will include every Cymbidium that I own, that is carrying flower spikes. These have been specially collected to produce flowers for export. Absolutely no plants will be sold prior to the auction. Included for sale will be miniatures and novelties from my wife's collection.

For further particulars apply to—

A. H. BLACKMORE
34A EVELYN PLACE, NORTHCOTE,
AUCKLAND 10.
Phone 488-114

BLACK'S ORCHIDS LTD.

Oldest established Orchid nurseries in New Zealand.

CUT FLOWER SPECIALISTS
CYMBIDIUM AND PAPHIOPEDILUM
N.Z. Agent for Alvin Bryant Australia

Write to—

BLACK'S ORCHIDS LTD.
FAIRFIELD ROAD, LEVIN
PHONE 5709

little shading on right through the winter, just enough to say the glass is not clean. Further south such as down in Otago, it probably is advisable to have clear glass. Plenty of light during this period helps reduce such troubles as bacterial rots and such like when the temperatures are low.

Pests

This is a good time to go over your house and check everything for pests and diseases. Probably in your check you will find such things as scale, red spider, slugs and garlic snails. A bad attack of red spider could easily be caused by faulty damping down, combined with bad ventilation.

Roots

The roots of all orchids will not tolerate wet conditions. Therefore, the finer your orchid mixture is, the less water you will have to give. Furthermore a great deal more care is needed when watering, for such a mix may take a long time to dry out. The more open you have your mixture, the quicker it will dry—a decided advantage in cold, wet weather.

Potting

It is probably wisest for me in this talk to say that no potting should be attempted until the spring growth starts again. Certainly adult plants will hold over and the only exception is young cymbidium seedlings which should not receive any check in their growth. If you were not wise enough to pot these plants a month or so earlier to enable them to establish themselves before winter, you had better leave them alone unless you know what you are doing and have the conditions which allow you to do it.

General

Check your glasshouse as soon as possible for drips. There is nothing more disappointing than to find some growth rotted just because it had water lodged there when the atmosphere was damp and cold. If you cannot reglaze the area, the next best scheme is to paint the affected area and fill up the cracks in this manner. Make up your "special" potting mixtures now and have them ready for use when potting starts. If you do this later, it is often too late, for roots can and do grow very fast.

THE WRITTEN WORD AND ITS EFFECT ON ORCHIDS IN NEW ZEALAND

by A. H. BLACKMORE

The future of the official publication of the Orchid Council of New Zealand will depend on its value to orchid growers. Firstly it must be read and for this to happen it will have to enter the homes of at least every member of every orchid society in New Zealand, with added circulation through book retailers and through libraries. Being published by the national orchid organisation for New Zealand, it will have as its object, information of national importance and cultural help for orchid growers in their various districts.

Organised Growing

Let us examine the history of organised orchid growing in New Zealand and from it create a policy, which will further promote a branch of horticulture, which has become dominant in later years.

So little was known of orchids and so few, other than the native species, were growing in New Zealand 26 years ago, that only 18 persons attended a meeting in Auckland called at that time to form The New Zealand Orchid Society.

Wisely, its founders kept the members abreast of current activities of the society and gave cultural help through a bulletin posted to them each month until 17 years ago, when a newsletter was sent out monthly with a quarterly journal on culture in addition. The presence of these publications has undoubtedly given orchid growing the prominence it now enjoys.

Orchid Society Membership

Membership of the New Zealand Orchid Society quickly grows and those living at distances from its headquarters in Auckland have formed their own societies to promote local activities and provide cultural help. It is a council of these societies that is publishing this journal to serve fast growing memberships, the object being to place it in the hands of every orchid society member in New Zealand. If advantage of its help is taken the future of orchids in New Zealand will be bright indeed.

McBEAN'S ORCHIDS

Congratulations to the Orchid Council of New Zealand upon its formation and best wishes for this new publication.

Available now in New Zealand—

World famous—Yammamoto Nobile-type Dendrobiums

Seedlings—\$3. Flowering size seedlings—\$10, \$12.50, \$15.

Propagations of outstanding varieties available on request.



McBeans Cymbidiums—seedlings, miniature-mericlones and mericlones.



Write now for listings from our New Zealand agents—

PARADISE ORCHID NURSERIES

BOX 2107, TAURANGA SOUTH



Paphiopedilum glaucophyllum
J.J.Sm.

I like to think of this as a "slipper for all seasons" since our flowering records reveal that it has been in bloom every month of the year. This is due to a very interesting characteristic not common to many paphs, in that when a flower drops, another takes its place on the same stem. Consequently, one stem has persisted for 17 months and has been succeeded by another so that both are flowering continuously. The upper part of the flower stem has a zig-zag form from the succession of flowers produced (10 in the case of the first stem).

The flower combined most of the fascinating features typical of the genus; hairs, spots, twists, stripes, bumps and bulges, plus the benefit of colours ranging from the delicate rose pink of the rather golosh-shaped pouch to rich green in the dorsal sepal and is long lasting. Despite the naming, the foliage is not

notably glaucous with us. It has not presented any difficulty in cultivation, being grown in the warm house and is without doubt the most rewarding of our slippers. Despite the frequency of its flowering we never tire of seeing a new bud open and can only speculate on how long the stems can keep blooming. Java is the native habitat of this gem amongst orchids.

GEORGE FULLER, N.D.H. (N.Z),
Curator.



It would seem that the first known reference to orchids was Confucius (551-479 B.C.) "Acquaintance with good men is like entering a room full of lan (fragrant orchids).

RESPECTS

Personal acquaintance has prompted me to write a few words about two internationally famous orchid authorities who have recently passed away. Though neither of them had visited New Zealand to my knowledge, their contributions to the study and cultivation of orchids will surely have had an influence here.

I was particularly saddened to learn of the death, early this year, of David Fearnley Sander, a third generation member of the family who established the famous orchid firm of Sanders (St. Albans) Ltd.

It was David Sander who answered my query about employment just after the war to the effect that despite the fact that England was not the best place to be living in at the time and the staff was returning from the services, if I was prepared to make the journey, he would be prepared to employ and train me. From the time of my arrival he took the utmost interest in my welfare, provided opportunities for advanced training and study and above all, made me very welcome in his very active yet homely family circle.

His enthusiasm for orchids was infectious and though his ardour for hybridising was great, it was his love of species which was probably his hallmark and a feature of his interests which has always inspired me.

In latter years, with the dissolution of the great Sander orchid empire, David allowed his literary talents full sway, writing books and becoming editor of The Orchid Review and it would be in this capacity that he would be most widely known to enthusiasts in New Zealand.

If David Sander had a fault, it was that he was too enthusiastic about too many aspects of the world of orchids, but from his great involvement we have all benefited in some measure and to his wife and family we all offer our sympathies, together with a gesture of appreciation for the part they have played in allowing his life to be so full of orchids.

With David Sander's help and encouragement I was able to pursue studies at Kew Gardens and soon made the acquaintance of Mr. Victor S. Summerhayes who was in charge of the unrivalled orchid collection in the Kew Herbarium. It seems a strange coincidence

that he passed away only a few days before David Sander.

One of the treasured books in my library is an autographed copy of "Wild Orchids of Britain" written by Mr. Summerhayes which gives a good example of the extent of his researches into the mysteries of the orchid family on which he was a world authority.

It is of incidental interest that many of the findings in this book would probably be relevant to some of our native terrestrial orchids and it would constitute an excellent basis of guide lines for research. We know so little about their life histories.

Mr. Summerhayes, after retirement, continued with his devotion to orchids by serving on the Orchid Committee of the Royal Horticulture Society and so his knowledge, though mostly academic during his working life, was being put to practical advantage to the last. From afar, we salute his endeavours and express sympathy to his relatives.

GEORGE FULLER,
New Plymouth,
July, 1975.

Pukekura Corner

This is the first in a series of photographs of orchid species in the collection at Pukekura Park, New Plymouth.

The purpose of the series is not simply for gaining publicity but aims at two objectives, the first of which is to ensure that each copy has an orchid species well represented and the second is that it should be of a plant that is under cultivation in New Zealand. This latter fact is important since as a nation we are blessed with a climate in which most orchid species could be cultivated. When this journal reaches its full potential, it will develop an overseas demand and enthusiasts will want to know what is grown in New Zealand, in which case the full range of orchids cultivated here should be fully represented.

The appearance of a particular species does not imply that it is readily available in New Zealand, but if a person is intent on obtaining a plant, or indeed with plants to spare, the obvious first move would be to take advantage of the advertising facilities made available in this journal.

PERPETUATING NATIVE SPECIES

by ALLAN BURROWS of Southport, Australia

It was with great pleasure that I heard that the New Zealand Orchid Societies have formed an Orchid Council for the mutual benefit of all growers.

The responsibilities of this Council will be great. Not only will they be responsible for uniform judging standards, the promotion of orchid growing, public relations, but also conservation.

The preservation of native orchids is a must, irrespective of whether they produce large showy flowers or those which are generally treated with contempt, the botanicals. We of the present generation have had the privilege of seeing a large range of plants, but will our grandchildren be given the same opportunity? To assure this, we only have two alternatives. The first contradicts the word conservation. That is, we can strip plants from their native forests and try to acclimatise them to our environment. The other alternative is to grow these plants from seed.

Now let us look at the pros and cons of each.

1. Importing native plants is not conservation in the strict sense.
2. The Governments of various countries throughout the world are gradually getting the message that before very long they won't have certain native plants left.
3. Generally, a fair proportion of these imported plants do not acclimatise well and there is a general deterioration in growth which makes them more prone to disease.

On the other hand, plants which are raised from seed fulfil all aspects of conservation. They can be produced in large numbers at a reasonable price. They are acclimatised right from germination, they grow with great vigour and are more resistant to disease.

As it is quite obvious that we must grow from seed, the next question is how do you go about it?

The procedure itself is quite simple and for those who have not read any articles on the subject I will attempt to give them a brief step by step description of how it is done.

Firstly, the agar mixture on which the seeds will germinate and grow. The beginner will find that "Knudson's C" mixture (which is listed at the end of this article) with the addition of one banana and half a teaspoon of liquified fish fertiliser is still a good mixture to use. It can be used full strength for replanting the seedlings or at half strength for seed sowing.

The pH of the mixture should be 5 to 5.5. Narrow range litmus paper can be used to check the pH. If the solution is too alkaline you can correct it by using a weak hydrochloric acid solution. If it is too acid, then use potassium hydroxide to correct it.

For those who do not have time to make their own mixture, they could use a proprietary brand put out by the Difco Co. of America which goes under the trade name "Bacto Orchid Agar" and most chemical firms would handle it.

With this mixture all you have to do is weigh out a given amount of powder and add the required amount of distilled water. Bring it to the boil and pour some of it into each flask and sterilise.

The flasks can be of the Ehrlenmeyer type or you can use milk bottles, medicine bottles or any other clear bottle which has a wide opening. The necks of all bottles have to be sealed with a large cotton wool plug or a rubber stopper which has at least one hole in it. This hole then has to be filled with cotton wool.

Pour sufficient agar into your bottles to give a depth of $\frac{1}{2}$ in. of mixture then lightly plug the bottles and sterilise them at 15 pounds per square inch of steam pressure. Most household pressure cookers work at this pressure. Place the bottles inside the cooker with some water and heat. When steam comes out of the safety valve the pressure is right, hold it at this pressure for 15 minutes then

slowly release the steam, remove the cover, push the plug or stoppers in tightly, then stand the bottles on several thicknesses of newspaper and leave till the agar has set.

If you don't own a pressure cooker place the bottles in a large saucepan with sufficient water to reach up one quarter of the height of the bottles, bring to the boil and hold at this temperature for one hour, then remove and allow to cool.

The next item needed is a work cabinet in which you will create a sterile atmosphere so that you may transfer the sterilised seed to the agar in the flask. The cheapest way to make this cabinet is to use a timber fruit box, remove the top and bottom and securely seal a piece of clear plastic over the top. In one side of the box cut two holes large enough to place your hands through so that you can work in it. When this is completed paint the inside with several coats of good gloss paint. This makes it easier to clean.

The interior of the cabinet and the exterior of the flasks must then be sterilised by using a chlorine solution. Most household bleaches contain four per cent. sodium hypochlorite; use this in the proportion of six parts of water to one part of bleach. Swab the interior of the cabinet, the table top and all other items to be used with this solution. Any instruments which you want to use can be left to soak in this solution also. Then spray the space inside the cabinet with the same solution to sterilise the air inside it.

The next step is to sterilise the seed, to do this, prepare a solution of 10 grams calcium hypochlorite and 104 ml of distilled water (rain water will do), shake vigorously then let stand for a few minutes to allow the heavy particles of the calcium to settle to the bottom. Place the orchid seed in a small bottle and cover with the clear portion of the above solution. Shake vigorously for 15 minutes then allow it to stand for a few minutes. If the seed settles to the bottom of the bottle then carefully pour off the bulk of the fluid, the remaining fluid and seed can then be tipped into one or more flasks.

On the other hand, if the seed rises to the top, then use a thin length of plastic or

stainless steel and scoop up some of the seed and spread them over the agar in the flask.

When all flasks are seeded transfer them to a warm, heavily shaded and dry position in your glasshouse. Viable seed should start to swell and turn green in two or three weeks.

The plants can remain in these flasks till they are large enough to be placed in community pots or, if you are ambitious you can replant them into other flasks when the seedlings start to make their first roots.

The main secret in flasking is to keep everything sterile. While you are working make sure that everything is well coated with the chlorine solution.

KNUDSON'S C FORMULA

Calcium nitrate	1.00	gram
Monobasic potassium phosphate	0.25	grams
Ammonium sulphate	0.50	grams
Sucrose (cane sugar)	20.00	grams
Ferrous sulphate	0.025	grams
Manganese sulphate	0.0075	grams
Commercial agar	12.00	grams
Distilled water	1.00	litre
Magnesium sulphate	0.25	grams

PREPARING CYMBIDIUMS FOR EXHIBITION

by I. D. JAMES

A well-known grower in California who always seemed to carry off more than his share of prizes and awards from the shows was asked to disclose the secret of his success. He said that he grew his plants "365 days of the year."

By the time the buds are emerging the quality of the flowers the plant is capable of producing has already been determined by your culture over the previous 12 months. These notes will cover some of the things which can be done from that time onward to ensure the plant you intend to exhibit reaches the show with its full potential realised.

If staking is necessary it is important to understand the spike habit of the particular plant, and to appreciate that with cymbidiums there are two basic spike development patterns. Plant type A has an upright spike. The buds,

after the spike has fully elongated, move outwards and rotate through an angle of 180 degrees to display themselves. This spike will display its flowers to best advantage if staked in an upright position. If it is inclined to bend, the spike can be trained, while still elongating, by strapping it to a vertical stake. Many ties will be necessary. They will have to be adjusted frequently and care is necessary as the spikes are very brittle at this stage.

Plant type B has a pendulous spike and because this is inherited from green flowered species, the flowers are usually green. The buds do not have to rotate before opening. The spike will attain its greatest length when allowed to remain pendulous. In extreme cases the spike will refuse to elongate at all while held in an upright position. A good example of this is Cym. Baltic A. M. (synonymous with Baltic "Bexley" and at one time known as Miretta "Matchless") which produces a pathetically small spike unless the spike is allowed to grow down below the top of the pot. Such plants are difficult to stage but there is nothing you can do about it other than put them on a stand high enough to keep the buds off the staging.

Some hybrids tend to inherit incompatible characteristics from type A and type B spikes. They produce short upright spikes with crowded flowers which do not position themselves correctly and open inwards towards the spike. These spikes can be made to grow longer by placing a paper cylinder over them when a few inches high. The cylinder height is continually adjusted to keep the top an inch or so above the top of the spike. Occasional manual rotation of the buds in the correct direction and the placement of wedges to encourage the buds to face outwards will result in some improvement.

Never change the orientation of a plant, especially after flower spikes appear. Many plants produce strong spikes which will display their flowers to best advantage with little or no staking if the spike is allowed to develop naturally without interference. Never stake a type B plant in a vertical position even if you have obtained a long spike as the odd set of the flowers will create an unnatural effect which many judges find objectionable.

Aphids, thrips, spider mites and other insects, not to mention slugs and snails can attack flowers before and after they open resulting in unsightly spots and blemishes. Every effort must be made to eliminate these pests before the flower opens otherwise you will be faced with the almost impossible task of finding effective safe insecticides which will not damage the open flowers. Bees of course must be kept from the growing area.

Many cymbidium flowers are damaged by fungal spotting. The fungal spores are carried in the air on to the flowers. They do no harm while the flowers are dry. However the spores of the usual culprit, *Botrytis cinerea*, will germinate if exposed to moisture for two hours, infecting the flower parts and causing typical black or brown spots. The moisture is usually the dew which appears (although it may not be readily visible) after sunset in an unheated structure. A humidistat to measure relative humidity will give valuable warning when dewpoint is approached i.e. 100 per cent. relative humidity. At this stage under glasshouse conditions some artificial heat must be provided. Very little is required, especially if a fan is used to distribute it, as raising the air temperature only slightly must lower the relative humidity below 100 per cent. and prevent dew forming on the flowers.

Having produced perfect flowers, there remains the problem of transporting them so that they reach the show or exhibition in that condition. The only certain way of doing so is to lie the pot on its side in your vehicle so that the whole plant is in the horizontal position with the flower spike immobilised. Use pieces of tissue paper to support any flowers or flower parts that can move, and to cover the flowers for protection against swaying leaves.

On reaching the show you may have no control over where or how the plant is staged. If you have, try to ensure that the best flower is facing and level with the eye of the viewer. If this is not possible it is better to stage the plant lower rather than higher. An FCC plant can be made to look like a weed if viewed from below as from this position all the worst features of any flower tend to be emphasised.