

ORCHIDS IN NEW ZEALAND



September-October, 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 Road

NEW PLYMOUTH

Phone 34-583

MR. NORM PORTER

443 Te Moana Road

WAIKANAЕ

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.

$\frac{3}{4}$ cut. ft. small pack. 1 $\frac{1}{2}$ 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: 1 $\frac{1}{2}$ cu. ft. and 3 cu. ft.

Also Available—

CHOPPED PINE BARK: Screened and ready for use.

Quarter-inch to $\frac{3}{4}$ 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.

ORCHIDS IN NEW ZEALAND

Official publication of the Orchid Council of New Zealand.

Volume 1. No. 2.

Published bi-monthly.

September-October, 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

- 19 WHAT ARE SLIPPERS, by NICKY ZURCHER.
19 ODONTOGLOSSUMS: THE COOL ONES, by A. H. BLACKMORE.
21 PHALAEOPSIS, by Mrs. BETTY CULLEN
21 CYMBIDIUM ORCHIDS: PEST AND DISEASE CONTROL, by JOY AMOS (PART 2).
22 CYMBIDIUM GROWING IN THE MANAWATU: continued, by G. A. MANEY.
24 QUESTIONS AND ANSWERS, by JOSEPH REDLINGER.
25 PUKEKURA CORNER, by GEORGE FULLER.
27 GROWING COMPETITIONS CREATE ENTHUSIASM.
28 PAPHIOPEDILUM ORCHIDS, by NICKY ZURCHER.
30 COOL GROWING ORCHIDS IN NORTH SHORE AUCKLAND, by JOAN PARKER.
-

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.

Views and opinions expressed by contributors are not necessarily those of the Orchid Council of New Zealand.

The Orchid Council does not assume responsibility for any transaction between advertisers and readers.

EDITORIAL

Not having received any complimentary letters, disease ridden plants or bombs in the letterbox one must assume the first edition of the journal has at least proved readable. Photos have appeared in this edition but the Editor would ask that contributors send sharp black and white prints if available in support of articles as local stocks, although reasonably large, do not cover all genera that are grown in this country. For those who intend forwarding articles for publication, remember, if typed, double space please, freehand writers, single space, as your copy has to be typed prior to printing.

While on the subject of articles, readers and especially contributors will notice that temperatures, heights and general measurements are being given in metrics. Whether we like it or not the metric system is now the "in thing" and the sooner we accept the change the better. Most of us are familiar with temperature readings in Celsius; the T.V. weather forecast and newspapers have been giving metric readings for some time now but it has been noted that only one article received for publication gave the new temperature scale.

The cost of replacing your old glasshouse thermometer with the new type is very little. Some of you will have thermostatically controlled heating in your houses, if recently installed note that the thermostat is in degrees Celsius. The timbers you use in glasshouse construction are now in millimetre sizes although I must confess as one grows older it is easier to read the eighths on a carpenter's ruler rather than millimetres. Generally speaking metrication is coming into our lives in many ways and in all probability the average person knows more about metrics than he or she really thinks. Not only "thinking metric,"

but "writing metric" will save the magazine staff a considerable amount of time, as at present all conversions are being done by one person and these in turn are checked by another.

A number of Government Departments including the Post Office have free handout literature on the subject and some commercial firms have simple give-away circular slide rules for converting the more common metric measurements. Use them, unlike orchids, they are free.



Paphiopedilum.. insigne

Cover Photo: by courtesy of Mr. G. Maney. A lovely modern clone of Balkis "Captain Anderson" (Alexandri x Rosanna) in Mr. Maney's collection.

WHAT ARE SLIPPERS?

They can be members of any one of four genera, namely Paphiopedilum, Phragmipedium, Selenipedium and Cypripedium, which make up the subtribe Cypripedileae in the orchid family. The most widely grown group are the Paphiopedilums which for many years have been mistakenly referred to as Cypripediums. True "Cyps" are in fact, deciduous herbaceous perennials.

In my opinion, the slippers are the most diverse and, needless to say, the most interesting group in the orchid family. Colours range from purple to brown, yellow, green, white and even pink, with countless shades and combinations. One can find any markings between bold dots, as on *P. x Cameo* "Wyld Court," to fine dust like spots on *P. glaucophyllum*, heavy stripes in *P. x Claire de Lune*, to delicate veining on *P. fairieanum*.

Sizes and shapes, too, are running beyond anyone's imagination. The flat egg-shaped petals of *P. niveum*, which are only about one inch in diameter, present quite a contrast to *Phragmipedium caudatum* with pendant corkscrew twisted petals falling to nearly two feet in length.

To date, the majority of us have only been able to see a small number of this vast genus. So far over 50 distinct species of paphiopedilum have been discovered and cultivated. Are there still others hiding in the jungle? We are familiar with the great number of Cymbidium hybrids but the crosses amongst the Paphiopedilums far outnumber those of any other genera. Unfortunately many of these have been lost, as the peak of the hybridising was towards the end of the last century.

by NICKY ZURCHER



Emblem Competition

Due to late distribution of the first journal the Emblem Competition closing date has now been extended to 20 October, 1975.

ODONTOGLOSSUMS

THE COOL ONES

by A. H. BLACKMORE

Although Odontoglossums are the principals in my article we will have to look at some of their allies as, by crossing with them, many fine multi generic hybrids have been produced. I will confine my attention to three genera, although several others are worthy subjects.

It is a well proven fact that if any plant is given the conditions of its natural habitat, it will thrive. Many centuries of development under a given way of life have, in the process of evolution, produced plants that grow well and flower, if they are kept in that environment. I have proved this many times.

Let us examine the natural habitat of the genera *Odontoglossum*, *Miltonia* and *Cochlioda*. They are orchids which, when crossed, produce seeds readily. The hybrids produced by using these three are:

1. *Odontonia* (*Odontoglossum x Miltonia*);
2. *Odontioda* (*Odontoglossum x Cochlioda*);
3. *Miltonioda* (*Miltonia x Cochlioda*);
4. *Vuylstekeara* (*Odontoglossum x Miltonia x Cochlioda*).

Odontoglossums and *Cochlioda* are both natives of Mexico, central and northern South America; mostly from 20 deg. north to 20 deg. south of the equator. At a glance one would expect them to like hot temperatures, but such is not the case, for they are found at their best in forests from 1830 to 3050 metres above sea level.

Temperatures in these regions and at this height do not vary very much being between 10 deg. C. and 15.5 deg. C. for much of the year. They are definitely what are termed "Cool Orchids." It must be clearly understood that the genus *Odontoglossum* and the genus *Cochlioda* are purely alpine, no single species having been found low down in the mountains, or in hot regions.

The plants will not exist long in a healthy condition if kept in hot close houses. They like a cool, moist atmosphere all the year round, and unlike the majority of orchids, do not require a dry season. Indeed many of them

grow freely during the winter months and these must never be allowed to get dry. In bright weather, shading is essential, especially during the summer. Try to keep the temperature in the 10 deg. C. range, but in Auckland this would be hard to obtain and no harm will come to them if a range of 4.5 to 20 deg. C. for winter and summer is kept.

Above all things, a free circulation of air is indispensable to their well being. It is also necessary to keep the air well charged with moisture, by pouring water on the staging and floors. If the plants are kept near the wet ground (not on it) the evaporation provides coolness and humidity, which is so beneficial to the plants.

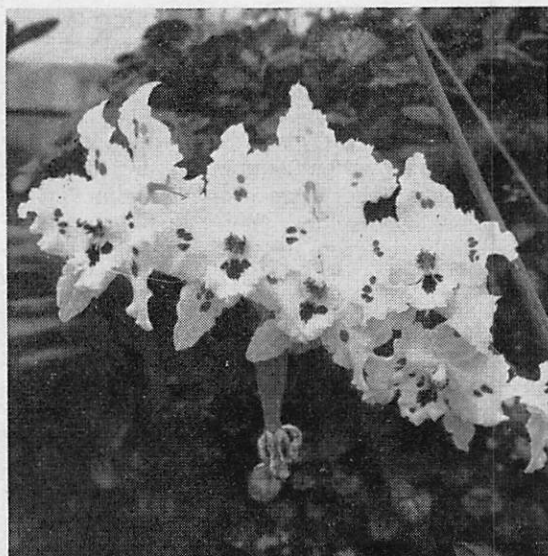
Miltonias, the emblem flower of Colombia, are found in a wider range of altitudes, hence some are cool growing and others are warmer growing. This makes a study of the species necessary and I have found, with the hybrid Miltonias I've grown, that they do better with temperatures from a minimum of 10 deg. C. in winter. They too, must not be allowed to dry out winter or summer and should be shaded from too bright a light. Miltonias are a native to the same areas as *Odontoglossums* and *Cochliodas*.

Growing Medium—

Although the orchids of which I'm writing grow naturally upon the trunks of trees, or in vegetable debris that is lodged at the base of branches, it's not wise to try growing them on blocks, probably because evaporation takes place too rapidly and the roots wither up.

While growing on the trunks of trees they send their roots through and about the various mosses that clothe the forest trees, bringing success because of the very humid conditions in the mountain regions. I suggest that a suitable medium is one which will allow very free draining, but at the same time attract the moisture from the water-laden air that is so important.

With these conditions direct watering can be kept at a moderate level, although for better or worse I water direct from a hose. Sphagnum moss can be encouraged to grow on top of the pots.



56

photo G. Fuller

Odontoglossum pescatorei

It is difficult to achieve the conditions to guarantee success and I cannot say that I am master of the situation although I'm quite proud of some of my flowers. The foregoing gives necessary requirements, but it is entirely up to you to try to simulate them.

Your environment is different from mine, in fact I have found that my present home has a different environment to the one where I started to grow these orchids, although there is less than half a mile between them.

I consider these orchids are worthy of a place in any collection. The flowers are usually of good shape and substance and will last both on the plant and as cut spikes as long as any other orchid. They come in colour from white to dark red and very often the lighter colours are mottled with dark shades, and the darker coloured flowers with white. A very attractive flower indeed, not too large or too small. A three-inch spread is usual.

A feature of these plants is that they do not require large pots, as the rooting system is not dense. Nor are they heavy feeders, probably for the same reason. I have had best results from plants bought from an English firm which specialises in them and the cost is reasonable.

PHALAEENOPSIS

The Queen of the Orchid Flowers

by Mrs. Betty Cullen

The name means "resembling a moth," the supposed likeness of the flower of certain species to some tropical moths.

The natural habitat: An area from Nepal in the west to Taiwan in the East and all the land masses and islands down to Queensland and the Solomon Islands in the south. Approximately 20 deg. south of the equator to 25 deg. north.

These warm growing monopodial orchids are epiphytes of the equatorial rain forest. Steamy dark conditions you think? Well not quite, as most of them are found well up on the large trees in a fair amount of light and plenty of air movement. A number are found on trees at fairly high altitudes.

To copy these conditions in a glasshouse in sub-tropical Kati Kati is a challenge. The summer here is hot and the humidity is high. The glasshouse is lined with black netting, then another layer of clear plastic. A small fan heater is used during the winter months and is set to turn off at 15.5 deg. C. The end walls of the glasshouse and benches are lined with black polythene. The sun and black background soon warm the house in winter.

Growing Medium: I use lumps of old astelia from the bush. This material drops down from old forest trees during storms and gales. It resembles a flax clump and is a very free draining material. Place it on a strip of black plastic bird netting with a second strip cross-ways. Arrange the phalaenopsis plant on top of the astelia, gather up the corners of the netting and tie together and attach a hook. Tipping the plant on its side will lessen the chance of getting crown rot in cold weather.

Phalaenopsis love a weak solution of liquid fertiliser in warm weather. Be careful not to spray the flowers as brown spots will appear and spoil them. During the summer, water plants often, run the hose on the floor of the house to saturate the area; in winter keep watering to a minimum. The ferns growing out of the plant media act as a barometer and when they wilt, the plant needs watering. On mild days a fine spray is given to the leaves.

Pests: Garlic snails and slugs can be kept to a minimum by the use of meta powder. Tip the powder into bottle tops and move about the plants. The plants hanging on a metal frame are usually free of pests while the plants on ponga posts have to be watched. An occasional spray of malathion to treat unseen "visitors" is a good insurance and all spikes are dusted with rose dust.

It is possible to have blooms the year round. Their shape and colour is quite wide and plant breeders are adding more and better hybrids all the while. One should remember that there are also many interesting species available.



CYMBIDIUM ORCHIDS PEST AND DISEASE CONTROL 1975

PART 2

In glasshouses: vapours, smokes, fumigants, avoid the problems of visible residues but they are not usually as efficient as sprays in controlling pests. They can be used to keep infestations to a minimum, with spot-spraying of individual plants on which pests are found.

Examples of pest and disease control:—

- (a) Clean-up sprays to control mites, aphids, mealy bug, scale insects—
dicofol + acephate OR
dicofol + diazinon OR
dicofol + maldison.

Apply two or three times at 7-10 day intervals, before spikes begin to emerge in summer, and after harvesting in spring.

- (b) Spot applications when pests are noticed.

Aphids—orthene; pyrethrum; omethoate; naled.

Mites—Kumitox; naled.

Scale and Mealy bug—acephate.

Thrips—acephate.

N.B.: These chemicals leave no visible deposit and have not caused damage to developing blooms.

Other chemicals can be used when orchids are not in spike. Refer to list.

- (c) Granules of Temik 10G are used overseas as a "soil" application giving long-term pest control. It is not available in New Zealand. Phorate can be used

in the same way. It has a very offensive odour which lingers for some time. Disulfoton has also been used.

All these chemicals are very highly hazardous and are not recommended for this reason.

N.B.:—All chemicals can check growth.

Clean plants, good hygiene and good growing conditions are essential. Apply chemicals only when necessary.

Choose the least toxic material to control the pest.

Take all recommended precautions for your safety.

Keep a record of what you use, how much, when and why.

Avoid handling plants for at least 24 hours after applying chemicals.

Phytotoxicity—

Chemicals which have caused damage to orchids are: Petroleum (oils and wetting agents based on oils). In some circumstances or on some species of orchids: demeton-S-methyl e.g. metasystox (i); maldison; parathion; dieldrin; diazinon; nicotine smokes; dicofol (on young plants).

When using a new chemical, try it on a few plants first, to assess its effect on the plant as well as on pest or disease.

Seedlings and young plants with soft leaves, growing in poor light, are more easily damaged. Buds, blooms and developing spikes are susceptible.

Do not spray when temperatures are high, or when the plant requires watering. Spray under quick-drying conditions, but not in bright sun.

Insecticides are generally more damaging than fungicides; and emulsion more than wettable powders or dust.

Some mixtures cause damage. Check compatibility before mixing. Weigh and measure accurately. Use at recommended rates.

Do not re-spray plants with left over spray. It is equivalent to a double dose and could cause damage.

Read and follow all instructions carefully. They are there to ensure effective use of the chemicals without damage to your plants or yourself.

JOY AMOS,
Ministry of Agriculture and Fisheries,
Auckland.

Cymbidium Growing in the Manawatu

continued—by G. A. MANEY

It is September and getting warm again. If your houses are hot and stuffy your flowers will suffer particularly after watering. The humidity will rise and without fresh air, spotting will occur and buds will yellow and drop off. The main thing to remember when building your houses, is to allow plenty of fresh air, in other words, as much ventilation as possible without cold draughts.

From the first of September start your feeding programme. Atlas Fish Emulsion or any good liquid spray once a week and for a dry fertiliser, approximately one tablespoon of four parts superphosphate, four parts dried blood and one part potash, sprinkled round a ten-inch pot once a month. Less of course for smaller pots. Remember to water well in the early morning the day before feeding. This programme should be carried out right through to the end of November. Regular spraying of a fungicide is also advisable.

From December to the end of April the feeding programme changes to six parts superphosphate and two parts potash once a month in the same quantities, with a weekly liquid fertiliser such as Maxicrop. You will notice that this feeding programme is using little or no nitrogen, after all you want flower spikes not growths, and December, January and February is the time for the initiating of the spikes. A word of warning about dry fertilisers, make sure you don't over do it and be sure you carefully put the fertiliser round the plant, not over it, many good cymbidiums have been ruined this way.

This is how I grow my plants, giving them as much sun in the summer months as they will take with 30 per cent. shade to stop burning, and of course all the fresh air that it is possible to give them.

— ★ —

The Orchid Council held a meeting at Hamilton on 26 July, the same date as the Waikato Show. Business with pleasure.



Think Greenhouses

THINK AUTOMATION SERVICES

We have a wide range of greenhouses and exclusive accessories
in stock

Styles Available—

CONSERVATORY LEAN-TO 5 ft. 2 in. WIDE

AUTOGROW No. 2, 7 ft. 2 in. WIDE

PROFESSIONAL 10, 10 ft. WIDE

"AUTOMATION SERVICES"

Aluminium Greenhouses are engineered by Greenhouse specialists. No other Greenhouse available can offer all the features of an "Automation" Aluminium Greenhouse.

Unique Features Include . . .

- ★ Extruded aluminium frame using the latest alloys
- ★ Joints secured by rigid plastic mouldings, unaffected by sunlight, ultra-violet rays or humidity
- ★ Door on nylon rollers—finger-light to operate
- ★ Lift-up full length ventilating ridge
- ★ 24-ounce glass for strength and safety
- ★ No glass cutting—no putty
- ★ Can be extended to front or rear at any time
- ★ No painting—this frame will neither rust nor rot
- ★ No white-washing
- ★ Aluminium shelf or bench brackets can be supplied
- ★ Louvre windows.

AUTOMATION SERVICES LTD.

HENDERSON

Ph. Hend. 67-861, P.O. Box 21-241, Henderson, 8.

QUESTIONS AND ANSWERS

by JOSEPH R. REDLINGER—a well known American hybridist specialising in the growing of seedlings and mericlones.

1. QUESTION: Realising that it is a more difficult procedure to put orchids into the flask just what is the procedure to remove plantlets when grown and ready for potting?

Answer: Simply fill the flask half full with luke warm water, shake slightly and empty into a bucket. Fill the bucket with more water and with gentle agitation the agar will settle and the plantlets float for removal. Some flasks are so overgrown that it is necessary to wrap the flask in paper and smash with a hammer. There is always the risk here of cut fingers—be very careful.

2. QUESTION: Is it necessary to treat the plantlets first with a fungicide before potting?

Answer: No, but it may be a good idea to treat the potting material, certainly, if it has been stored damp.

3. QUESTION: Speaking of potting material, which is best recommended?

Answer: Probably the material you have best success with on matured plants and under your own growing conditions. However, a slightly finer material is recommended because it dries out slower with the smaller pots used.

4. QUESTION: What size pots are used for plantlets taken from flasks?

Answer: Three-inch pots planted with 15 to 30 plants are ideal. These are generally referred to as community pots.

5. QUESTION: Why not plant them in single pots?

Answer: It may be best to plant the few largest ones individually in perhaps 2" pots. Smaller plantlets seem to do much better grouped together for the first year. But watch out, some of the smaller plantlets may be larger after a year than the ones initially potted individually. Planting protocols and very tiny plantlets seem to be a waste of time as seldom do they survive the first month.

6. QUESTION: Now that we have potted the little plants, how best to take care of them?

Answer: Roughly like you would matured plants but with reduced light, only enough to keep them from yellowing. Never over-water. While water is absolutely essential it is nevertheless the single greatest promoter of disease and death to young plantlets. A good weekly rule for watering is to thoroughly flush pots the first day and then fog the leaves and bare surface of pots the third and fourth day. By the seventh day the potting material should be thoroughly dry, repeat the watering cycle again. Apply liquid fertiliser one week and fungicide the second week as a preventative measure. Do this just after flushing with water on the first day. As usual, watch out for slugs, snails and insect pests. Then there is no reason why you cannot grow healthy vigorous young orchid plantlets whether meristems or seedlings.

7. QUESTION: How strong to use liquid fertiliser and fungicides?

Answer: About half to quarter recommended strength for very young plantlets.

8. QUESTION: Would all orchid genera be treated the same?

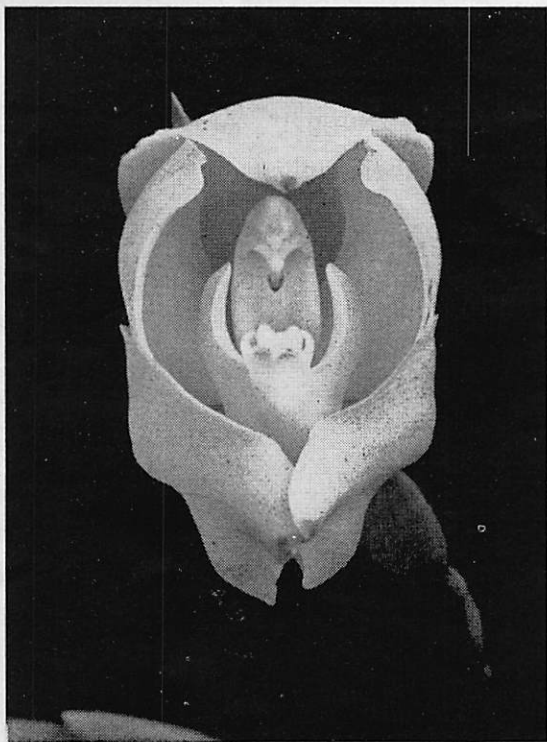
Answer: Yes, except that you would perhaps consider different potting material with epiphytic over terrestrials and temperature differences with the warm, intermediate and cool growers.

9. QUESTION: We plan a one-month vacation with no-one to water the orchids. How critical would this be with young orchid seedlings?

Answer: Don't worry. Enjoy your vacation. There is hardly a species of orchid in nature that does not or cannot go one month per year without rain or moisture. Mother nature knows best. In fact, occasional drying out like this promotes new root growth for better absorption of water when available.

Pukekura Corner

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

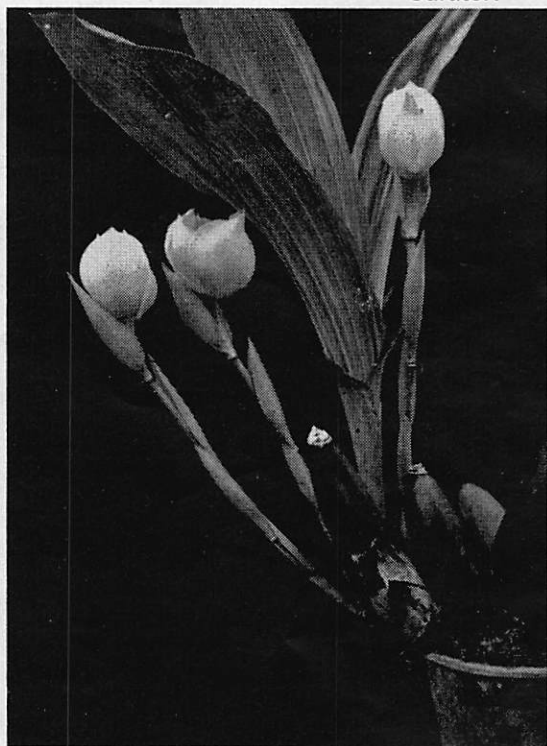


Anguloa clowesii (Ldl)

Popularly known as "the tulip orchid," or if you can really let your imagination run wild, "the baby in the cradle orchid!"

We are looking down into the golden yellow bloom of this very handsome Colombian-Venezuelan species which was introduced into cultivation in 1843. Possession is no doubt the ultimate dream of all *Lycaste* enthusiasts for it is an ally of that group, can be inter-bred with it, and requires similar cultural treatment. A study of the natural habitat at about 1800 to 2450 metres in the Andes suggests that it will tolerate temperature drops to just above freezing, along with *Odontoglossums* *Masdevallias* etc., but I have normally seen it growing in intermediate to warm houses.

With a reputation of being difficult to flower, perhaps the severe winter temperature drop, concurrent with a drying-out during this dor-



Showing growth habit.

mant period may be the answer. When growth **does** start, it is dramatic and associated with flower production if this is to be. Few orchids are more spectacular than these richly coloured three-inch globes set on erect stems over a foot tall.

While growth proceeds, watering should be copious and feeding is advantageous but know when to stop! Leaves are giant-sized *Lycaste* type—"plicate."

The flowers (produced in summer) have an upright lip which is hinged and "motile" with the result that as the bloom swings to and fro over the vertical lip sways backwards and forwards. This instability of the lip is an important factor in ensuring pollination by large bees emerging from the bloom, since they off-set the centre of balance.

McBEAN'S ORCHIDS

**First New Zealand release of Wallara "Gold Nugget" AM/VOC
AM/AOC Seedlings — limited numbers only.**

Also Yammamoto Nobile-type Dendrobiums, Cymbidium mericlones,
Miniature mericlones and seedlings.

Write to our New Zealand agents—

Paradise Orchid Nurseries

BOX 2107, TAURANGA SOUTH

Phone Te Puna 570

BLACK'S ORCHIDS LTD.

FAIRFIELD ROAD

LEVIN

☆☆EXPORTERS

IMPORTERS☆☆

New Zealand agents for Vacherot & Lecoufle of France

New Zealand distributors Alvin Bryant of Australia

**Write for our list of plants available for immediate sale, many of these already
showing flower spikes.**

WE CAN SUPPLY LISTS SHOWING PLANTS AVAILABLE FOR IMPORT

Watch this space for new Mericlone releases, available shortly.

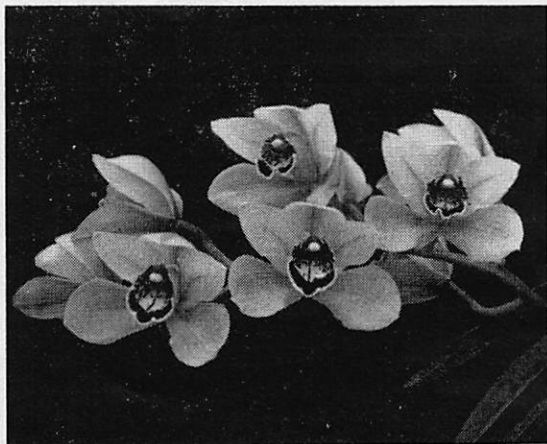
Growing Competitions Create Enthusiasm

Is your local society helping new growers to learn more about growing cymbidiums—especially those small seedlings and expensive mericlones? Here's a way which keeps everyone in the society happy—older growers and new ones alike. Run a mericlone competition! See how your plant and your culture is going compared with the orchid sages. Over a period of two or three years you will learn how to get the best out of your collection.

How does it work? Find the number interested, appoint an organiser and approach an orchid nursery for 20, 30 or 50 mericlones of the same clone. It doesn't matter how many per member. The more you get, the more methods of growing you can try. The nursery will usually give a good discount, so you can still add a couple of dollars on to the price for a prize or club funds. The nursery supplies plants of similar size—a couple of inches of leaf won't matter over three years. The name of the clone remains unknown to everyone except the orchid supplier or organiser. This saves any question of corruption later, as the orchid nursery may have already sold larger plants to fellow competitors.

When everyone has been invited to take part—by newsletter, and then there are no grumbles—the plants arrive. Each one is coded and numbered. The competitor buys a number and is given a plant. The best time to start a competition is in early Spring when the weather is warming up and growth is accelerating again. Competitors take their plants home and re-pot to their own potting mixture and containers and bring them back to the club when notified in the newsletter. About four times a year is often enough to table the plants. Anything goes culture-wise. Under GroLux lights and spraying with Giberellic acid and even hydroponics have been tried.

Back at the club meeting the organiser has a special table labelled Mericlone Competition set up and all plants on it are numbered. Some time during the meeting 10 minutes or so is devoted to discussing the mericlones. The organiser or an experienced grower picks out a few plants and indicates their differing



609

photo G. Fuller

Cymbidium Charmant

growth, asks a few questions about unusual composts, containers, etc., and asks for questions from the floor. New growers can learn a lot from these discussions, and even the sages can too!

After the discussion a number is drawn from the tabled plants and the owner of the plant with that number gets a seedling prize. Even the novice has a chance to win a new seedling for his collection. This may not seem necessary for the first few times, or even for the first competition, but eventually you will find the owners of slower growing plants leaving them at home. The seedling prize is an incentive for them to table their plant and hear what is wrong with their culture.

The rest is obvious, a prize—usually of \$20 or \$30 worth of orchids is given to the winner. The winner can either be the best flowering plant of the season or the first to flower. Make sure that this is understood before the competition is too far underway. These competitions are fun for all and are already operating in several societies in New Zealand and in many overseas. Some societies are so keen they have three going at once, and table a different year's competition each month! Try one this season. Start now, and have it underway by Spring!

Paphiopedilum Orchids

by NICKY ZURCHER

September should be the end of winter but spring temperatures are changeable, and with light intensity, go up and down from one extreme to the other. In order to control these rapid changes we have to consider the extremes rather than the average. The average winter temperature may be around 10 deg. C. which means that our heaters have to produce a lift of an extra 5.5 deg. C. to get our minimum to 15.5 deg. C., but this is only the average. We will only need 2.2 deg. C. when it is 12.5 deg. C. outside, but an extra 11 deg. C. when it drops to 4.5 deg. C. Therefore it is necessary to install a heater which is capable of increasing the inside temperature by at least 11 deg. C. It is the 11 deg. C. which, in this example is the extreme limit that we have in mind, and forget the 5.5 deg. C. average. I expect this is clear to everybody, but not so, as I have observed, when it comes to shading.

Light intensity can be very high at times. Consequently we have to consider the extreme limits again, as we did with our heating. To be able to see the true effect, I paint the glass on a good sunny day when there is maximum light. First I paint a small section and check how thick it appears from the inside, then I may add more water to the mix or, more often, add extra concentrate to thicken it. I check again how bright or dull the inside looks after a larger section, or half the roof is painted. The light, still falling on the plants is tested with a flat hand held approximately one foot above the foliage. This should throw only a very light shadow, hardly noticeable on the leaves when the shading is correct.

There are some especially prepared paints for glasshouse shading on the market. These are usually very heavy liquid concentrates in tins and take a lot of stirring when water is added. It is most important to keep stirring during application to ensure an even coverage. These paints are fairly durable but are easily removed when necessary with a stiff brush. Painting a big glass roof with a hand brush can be dangerous and hard work. However, this can be easily overcome by taking a long

wooden stick or batten and screwing the hand-brush in at least two places (to stop it from swivelling) on the end. I place the paint in a shallow basin on the roof, which makes the job much easier. Going by my own experience I would strongly recommend clothing which does not show white splashes, such as painter's overalls, an old white shirt, or bathers.

Early October, when we get longer days and the roots start to grow again, is the best time to re-pot slippers. I like to have everything ready early and it is now time to decide which mixture to use and get the ingredients in, some of which may not always be readily available later in the season.

After using the standard English ingredients of osmunda fibre (two-thirds) and live sphagnum moss (one-third) for many years, I am still looking for the most suitable mixture for this climate. Among the materials I have seen used with success are different barks, fine charcoal, shellgrit, wood shavings, osmunda, peat, spongerock and fine polystyrene granules. Slippers like a fine mixture, and the individual particles of your selected mix should be as small as possible but free of dust.

I am not recommending any set proportion of ingredients at this stage, but am rather hoping that everybody will make up their own lucky brew.



A GLOSSARY OF ORCHIDACEOUS TERMS

compiled by The Reverend B. J. EDWARDS

Afficienado: A very rare specimen: someone who actually does know what he is talking about. Should not be confused with an expert (q.v.) Shows a keen interest in plants and species which you grow but he doesn't.

Aphid: A type of beastie (q.v.).

Banter: A symptom of comaraderie to be found in the better Orchid Societies in which you can poke the borax at someone else's weeds (q.v.) without getting a poke in the eye.

Bark: The noise a Show-Marshal makes.

Beastie: A creepy crawly thing which takes great interest in your plants and when you are not looking decides that he wants to eat them. Control: various, mostly ineffective as they always seem to be able to overcome whatever nasty medicine you prescribe.

TARANAKI ORCHID SOCIETY NEWS

The Annual General Meeting was held at St. Aiden's Hall, cnr. Glenpark Ave. and Brois Street, on 8 July, 1975.

1975-76 Officers elected:

President: Mr. T. Reynolds.

Vice-President: Mr. R. Clearwater.

Secretary: Mrs. D. Whittaker, 2 Nelson Street, Waitara.

Meetings are held every second Tuesday of the month in the above hall. Time: 8 p.m. All visitors welcome.



BAY OF PLENTY ORCHID SOCIETY NEWS

President: Ernest E. Bush.

Secretary: Bruce Douglas, 46 Grey Street, Kawerau.

The May meeting was well attended. Our guest speaker was Mrs. Kathleen Black, who spoke on glasshouses she visited in California and Great Britain en route to Frankfurt in April/May. Her talk and film and slides was well received, and showed Mrs. Black's extensive knowledge of her subject.

At the July meeting 43 members were present. Mr. G. Robinson of the Manawatu Society was a visitor, and told of orchid growing in the Manawatu.

Annual General Meeting: 3 August, Lyceum Club Rooms, Te Puke.



HAWKE'S BAY ORCHID SOCIETY

Even though Taranaki and North Shore have stolen a march on us, news from the Bay is always worth hearing. The Society is now five years old and at the last count membership was figuring about the 200 mark. The monthly meetings are held in the Pakowhai Hall half-way between Napier and Hastings on the back road through Stortford Lodge if you're coming from the south.

The meetings are entertaining, informative and even downright instructive at times and are held on the first Monday in each month. Our next exhibition is to be staged in Hastings at the end of September. You will be welcome if only to buy a raffle ticket.

President: Mr. A. Dawson.

Secretary: Mrs. E. Allen.

HOW TIMES HAVE CHANGED

From the earliest days of orchid growing the boffins have been stirring brews of this and that and coming up with the "latest" for the control of this and that—in fact the range of pesticides and fungicides is now so bewildering that I have the greatest admiration for anyone who can remember more than a few. Funny how some folk stumble over botanical names and yet can quote a score of "remedy" names with ease. Every time I hear a new one I ponder on its future—many of the names of 20 years ago which were going to revolutionise our lives are no longer with us, but the pests they were going to control are.

Let's go back even further and study the techniques of the dim and distant days of the dawning of orchid cultivation. After reading the following you may wonder how ever any pests have survived—and orchid growers too for that matter.

The year is 1845 and "The Cult of the Orchid" is the latest craze amongst those with an embarrassingly large bank account. Enthusiasts are clammering for information and one John Henshall has been moved to put pen to paper—sorry! quill to parchment—to record his experiences in a book with the imposing title "A Practical Treatise on the Cultivation of Orchidaceous Plants."

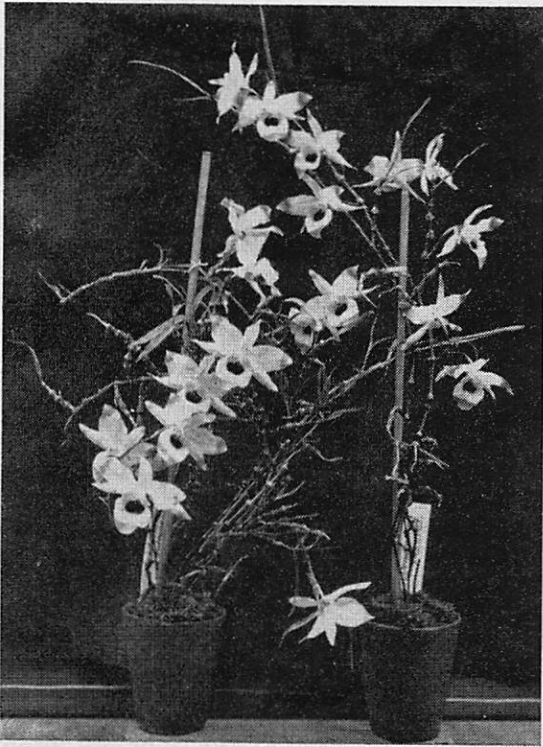
In the chapter dealing with the destruction of injurious insects we read:

"The method I generally practise for destroying the mealy bug is, first washing the plant that is infested, with soap and water, having a very little tobacco soaked in it; afterwards, again washing in clear water, and finally, dusting the parts affected, with the following mixture: half a pound of camphor, dissolved in one pint of spirits of wine, the former will dry the latter up, and become a powder: then mix it with one pound of black sulphur, one pound of black pepper and one pound of Scotch snuff, and place it in a bottle, keeping it corked close when not wanted."

Could anyone put me onto a reliable source of Scotch snuff?

"REFLEXION"

COOL GROWING ORCHIDS IN NORTH SHORE



342

photo G. Fuller

Dendrobium falconeri

I live in Devonport, which is on the North Shore of Auckland. My house is on the lower slope, southern side of Mt. Victoria, on top of which is the Signal Station for shipping. Almost in a direct line west, is Stanley Point where Wally Aldridge lives. In winter, about 3 p.m., the sun goes behind Mt. Victoria and I lose it, Wally gets it.

The orchids I write about are situated in my greenhouse which has overall approximate dimensions of 7.92 metres long, three metres wide and 2.4 metres high, having a central divider one metre high from the ground. This gives me what I call my first and second house. Outer walls are of fibrolite from the ground up to one metre. Above that, the east side is covered with Sarlon and over that, heavy duty 0.002 polythene sheeting which I bought from W. Wiggins in Auckland. West side is Sarlon

covered, the same for the north end and partly covered south end. Door, north end and west side of second house.

Roof: Permanent Novarroof.

Floors: Scoria.

Temperature: Winter—down to three deg. C. or more. Summer—up to 26 deg. C. or 32 deg. C.

Watering: Winter—about once a week depending on the weather. Summer—every day over the leaves and floors.

Now to get on to what grows in these houses:

DENDROBIUMS—

Indian: *moschatum*, *chrysotoxum*, *densiflorum*, *gibsoni*, *aureum* or *heterocarpum*, *parishii*, *primulinum*, *chrysanthum*, *fimbriatum*, *jamesianum*, *infundibulum*, *pierardii*, *longicornu*, *falconeri*, *nobile* and hybrids.

I stop watering *nobile* about Anzac day and start again when the nodes swell.

Australian: *falcorostrum*, *linguaeforme*, *tetragonum*, *speciosum*, *kingianum* and hybrids. *Sarcophilus hartmannii* and *fitzgeraldii*, *Oncidium Nona* and *sphacelatum*, *Epiphronitis Vietchii*, *Maxillaria tenuifolia* and *variabilis*, *Brassia brachiata*, *Vanda teres*, *Bifrenaria harrisoniae*, *Zygopetalum crinitum* and *mackayi*, *Coelogyne*, *Paphiopedilum insigne* and of course, the *Odontoglossums*, which grow on the southern side of the central division and only get a bit of morning sunshine, but plenty of air circulation, under and over the plants.

Hanging in a basket from the roof is *Nepenthes mastersiana*, called the Pitcher plant, also hanging on coat-hangers is Spanish moss which grows on air and water. My mother saw it growing in Lismore, N.S.W. on a tree stump. In Auckland it hangs in the tropical house in the Domain and in Florida it hangs on trees in the Everglades.

That will give some idea of the variability of temperatures where cool and warm growing plants can grow in the same conditions. The plants mentioned are just what I have, but as we all have different houses and conditions there is a large variety of others that could be grown in this area. by JOAN PARKER

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.

Question: Would you find out for me why some Cymbidium bulbs are larger than others. I have one variety in my collection that has very large bulbs and I'm curious to know why this one should be so much bigger than any of the others.

GRACE, Auckland.

Answer: This is basically a matter of breeding. Species such as madidum and canaliculatum have very large bulbs, while those like pumilum and latifolium have virtually none at all. In your case it is likely that the gene for large size bulbs has become dominant in both parents and has produced a plant with larger than normal sized bulbs. This will be very evident with good culture.

Question: I would like to know how many bulbs to a flowering-size Cymbidium division?
Mrs. J. LANDER, Ohangai.

Answer: It was considered that three to four good size bulbs constituted a flowering size-Cymbidium division, but vigour is being bred into some of the new varieties and it is now possible to get a spike from one bulb, particularly in the new miniatures. However, three to four good green leaf bulbs still make a desirable division and of course any leafless back-bulbs can be started into growth if further plants are required but will take about four years to reach flowering size.

Question: I would like to know why my Cymbidium back-bulb propagations don't send out many roots. Am I using the wrong medium to start them?

MATCHBOX, Wanganui.

Answer: Your question is vague but the following may help. A simple method is to place a small amount of damp (not wet) sphagnum moss into a plastic bag and nestle your labelled back-bulbs into the moss. Inflate and seal the bag and hang it in your hot water cupboard or a shaded part of your glasshouse.

If you have a hot-bed, pumice 3-5 mm size is ideal, allowing plenty of aeration and room for root movement. When well started, pot in the usual manner. Don't expect your back-bulb propagation to develop a mass of roots, two or three healthy roots are usual, being sufficient to sustain new shoot growth at this stage.

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.

WANTED

A division of Odontoglossum Grande, write to "Orchid," C/o 30B Waiwaka Terrace, New Plymouth.

TOM and PAT FRENCH

Blue Bird Floriste

Due to the overwhelming response we have no further offerings this year. Write to us early 1976 for March releases.

69 DEVON ST. EAST

NEW PLYMOUTH

Phone 83-795

NURSERY AND RESIDENCE BBK 812

JOTTINGS ABOUT ORCHIDS

by ONCIDIUM

I am hopeful that this feature will appear regularly and be entertaining, probably controversial, hopefully accurate and maybe even informative.

This time I would like to discuss one of the most attractive orchids of all, *Pleione formosana*. The common name for this group of deciduous plants is the "Crocus Orchids," as most *Pleione* species bloom when the leaves are shed. They are generally spring flowering, although some flower in autumn, notably *P. maculata* and *P. praecox*.

Our subject, *P. formosana*, as the name suggests is a native of Formosa, and ranges from white to quite dark pink in colour. Some growers call them *P. pricei*, but evidence is against this. We find them easy to grow here in New Plymouth in unheated glasshouses. I have also grown them in the rockery, but in my experiment they didn't flower.

Here is how I grow them. The bare purplish-green bulbs (looking like shallots) are planted in shallow pots or pans in *Cymbidium* mix. According to my diary in the last three years this planting date has been around 20 August. This is just before the new shoots break into growth and they do well when planted fairly close together. The large cattleya-like flower comes up in the new growth, and my best has been seven flowers on one bulb.

Feeding can begin when the new roots are well established (*Maxicrop*, *Hakaphos*, etc.), and watering is carried on until the late autumn when the new growths have matured into good bulbs, and the leaves go brown and drop off. The old bulb, which feeds the new growths at first, withers and dies. Small bulblets form on top of the old bulbs at times, these are flowering size in about three years.

A very good reference article on *Pleione* is in the Jan. 1975 issue of "The Orchid Review."



LETTERS TO THE EDITOR

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

SALE OF ORCHID PLANTS

A selection of plants surplus to display requirements is offered for sale.

Miniature *Cymbidiums* predominate but 15 other genera are included. Most plants are of flowering size, many in flower. Lists available on request and enquiries are invited on the basis of minimum purchases of 20 plants.

This offer closes Wednesday, 1 October, 1975.

PARKS AND RESERVES DEPARTMENT

New Plymouth City Council

Private Bag, New Plymouth.

Valley Orchids

Further seedling flasks 25 plants

Sussex Dawn "Dorothy May" x Wiena "Cindy."
Expect quality green of very good shape. \$30

Zumma Boyd "Reynella" x Sleeping Queen "Valley High" S.O. "Valley High" is a hue shapely yellow. Crossed with our intense green Zumma Boyd it should produce greens and yellows of quality in August. \$30

Coraki x Valley Gem "Picadilly." Expect bright coloured yellows, greens and polychromes in August. Valley Gem "Picadilly" will be released as a mericlone during 1975. \$30

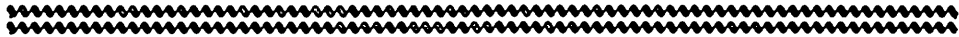
Valley Flower "Candy" x Valley Flower "Cherry Ripe." Two fine pinks. Cherry Ripe won seedling prize at the Third Australian Orchid Conference. Expect quality pinks in July-August-September. \$30

Sylvania "Ballerina" x Vieux Rose "Dell Park."
Tetraploid pinks of quality from May. \$30

Available from

F. A. BURKE LTD.

P.O. Box 422 WHAKATANE Phone 8648



VALLEY ORCHIDS

1975-76 Catalogue Announcement

Available shortly, 16 pages (eight colour, eight black and white) of their top pure colour and normal coloured seedling and mericlones.

Price—50 cents



NEW MERICLONE FLASK RELEASES

SAN MIGUEL "MAY DAY"

V.O.C. show winner 5-5-75, ultra early, prolific green \$50

SLEEPING BEAUTY "SARAH JEAN"

Shapely pure white, parent of the Pharaohs, Sleeping Dreams and Sleeping Beauty "Valley Queen" \$50

KATYDID "VERIDIAN"

Autumn show winner. Miniature green with yellow lip. \$50

Freight Extra

Available through New Zealand agents

F. A. BURKE LTD.

P.O. BOX 422


WHAKATANE

Phone 8648

Cut flower exporters.

Plant and flask importers.





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, PAPA KURA. PHONE 84-287 PAPA KURA



Registered at P.O.H.Q. Wellington as a magazine.

Printed by Taranaki Newspapers Limited, Currie Street, New Plymouth, N.Z.—14100