THE SOUTH COAST ORCHID CLUB GAZETTE

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MONTHLY MEETING

Notice is hereby given that the next Monthly Meeting will be held at the LUTHERAN CHURCH HALL Windsong Court CHRISTIE DOWNS on TUESDAY 12 April at 8

PROGRAMME

Slide programme 'Phalaenopsis for the Amateur',
Monthly Plant competition, Trading Table.

GARDEN WEEK.

The Committee desires to express its appreciation to all members who assisted in this project. It is also desired to place on record assistance given by Peats Soils; Colonnades Merchants Association; Elder Signs; M F Hodge & Son; Adelaide Wallaroo Fertilizers; W A Young & Co; Gadac Pots; Accurate Plastics; Lambert Orchids; Nitrosol.

DENDROBIUM 'BARDO ROSE'

D. 'Bardo Rose' is a famous hybrid bred by Mr. H.J.R. Overall of Newport, NEW SOUTH WALES and registered in 1952. It was a crossing from Dendrobium 'Falcorostrum x Dendrobium 'Kingianum' "Schmidts Var'. It resembles the strong form of Kingianum and is a vigorous grower.

The Dendrobium Kingianum 'Schmidts Var' is of medium growth with a wide open, bright, mid-pink flower carried on an erect stem. This characteristic is carried forward to D. 'Bardo Rose' giving a flower up to two inches across with wide sepals and petals and very flat fully open flowers. The colour is a pastel-pink to a pale cream-pink. Other crosses have been made using different D. 'Kingianum' forms, many of which lack the wide open flowers and shape of the original cross. Most dendrobiums from Australia can be grown in pots in a course mixture, while others may be mounted on slabs etc. Given the right conditions these plants will quickly grow into specimen plants and show a mass of flowers each year.

Much more shade is required than that given for cymbidiums, and they prove a little difficult to handle in the Adelaide area on slabs etc, because of our extremely hot dry summer, unless one has the facilities of a controlled atmosphere which suits them.
That they can be grown and flowered very successfully here has ample proof in the beautiful plants always appearing on display and show benches in SOUTH AUSTRALIA.

SOME UNCOMMON ORCHID AILMENTS (Orchids in New Zealand copy
by I.D. James Sept/Oct 1982)

Not infrequently one comes upon an orchid collection where the plants are not thriving, notwithstanding the apparent absence of any of the common growth limiting factors.
If your plants are growing better than those in most other collections do not let anyone persuade you to change any aspect of your culture - follow the sporting maxim of never changing a winning game. Do not read any further. However if your collection is one of those described in the first paragraph it may be worthwhile considering what follows.
It is mainly a checklist of some toxic substances growers may unwittingly allow to be introduced by air, water or compost. Orchid plants, grown as they usually are in relatively inert composts and inside enclosed structures, are captive subjects. They are more likely to be poisoned by their owner than the plants growing in soil in his garden.
WATER.....Many of the problems here are associated with attempts to store water. Water is best (but not cheaply) stored in plastic tanks or containers with plastic liners. Plain iron tanks are probably safe. Galvanised tanks are bad news. They can be coated inside with bituminous paint but you are taking a risk. Concrete tanks may be safe but can also be given the bituminous treatment. Wooden wine barrels should be safe. Do not use copper containers. All water tanks should be covered. Avoid spraying water on leaves of plants until water quality can be eliminated as a possible cause of health problems.
ZINC.....is a trace element essential for plant growth but is very toxic if present in other than minute amounts. It will be introduced in to the water supply if this is via new galvanised pipes, a galvanised iron roof or a galvanised iron tank. We have seen several cases of zinc toxicity over the years, the most recent one being experienced by a commercial grower who had excessive zinc levels (as shown by leaf analysis) following the installation of a new deep well bore and galvanised piping. In severe cases leaves will be pale or straw coloured even under heavy shade and plants will not grow well. If you have a mild zinc problem you cannot otherwise correct, try and keep the water off theleaves as far as possible. The addition of iron chelate to the water is said to help.
LEAD.....The writer had trouble when he applied (stupidly) a lead paint shading to a glasshouse from which rain water was collected.

The older cymbidium leaves turned a bright orange before they died. As a result of the reduction of the use of lead paints this problem should not be encountered. However any shading compound used on a surface from which water is collected should be treated with suspicion until proved or known to be safe.

COPPER.....Damage to cymbidiums believed to be associated with high leaf copper levels has been reported in New Zealand This followed the continuous application of copper sprays.

TREATED TIMBER.....Water dripping from treated timber may retard growth. Plants subjected to thisseem particularly susceptible to subsequent infection by disease organisms. The problem is largely confined to plants in the open and exposed to rainwater. We know of one grower who lost many cymbidiums and who observed that those plants infected were located in the mursery along evenly spaced parallel lines. In fact they were under the drip from newly erected treated radiata pine beams supporting shade cloth. Oddly enough we have seen various orchids growing reasonably well in containers made with treated timber.

Nutrients.....Use only a formula or commercial product recommended by qualified people. Use with caution untried proprietary fertilisers containing unspecified hormones or other organic growth substances.

AIR.....Pollutants in the atmosphere will enter your greenhouse unseen and are often the unsuspected cause of orchid ailments. Here are a few.

ENGINE EXHAUSTS.....The exhaust gases from both two stroke (never use inside a glasshouse) and four stroke engines can be toxic to plants. We once saw, in a large commercial orchid nursery in Hawaii, a long block of plants adjacent to the entrance driveway visibly less healthy than the rest. It had only just been found that the problem came from the exhausts of the many cars using the driveway.

CREOSOTE.....Timber impregnated with this and other tar products should not be used in a glasshouse. they give off volatile substances which can damage even plants not in direc contact with the timber.

GAS....A natural gas heater which is not vented (ie with a flue taking the combustion products outside the glasshouse) may cause damage to flowers with sepals,whole flowers and even buds wilting prematurely. (See Roger Cooper's article in the May/June 1978 issue of "Orchids in New Zealand".

COMPOSTS.....Bear the following in mind if you suspect your trouble originates here.

CHARCOAL....We have had plants damaged from charcoal made from treated timber. It is understood that charcoal sold for use in barbeques is usually made from untreated mill slabs and that you would be unlucky to experience this problem.

SAWDUST.....Do not use sawdust from treated timber. Make a few enquiries before buying - do not rely upon an advertisement offering sawdust as untreated.

FINES.....it has been our experience that orchids (especially epiphytes) will sulk if the compost contains too much very fine material.

It is not necessarily a question of drainage or of air or water retention. The root tips will cease growth immediately they come in contact with some material whether under or on top of the compost. Eliminate fine pumice dust, dust from bark, peat moss and from fern fibre.
MOSS.....be careful where you collect your sphagnum moss. If it and surrounding vegetation is green and growing all will be well. In a dry summer when the moss often looks dead anyway, the fact that a roadside (a popular collectiong spot) has been sprayed with weedkiller could be overlooked.
We would like to metion one further factor not often mentioned in the literature and not related to air, water or compost. It concerns individual clones which just do not have the genetic make-up to grow well.
Anyone who raises orchids from seed or even from flasks will know that the individual seedlings often range in vigour from those that grow rapidly to those that never reach maturity. This can be observed even in mericlones in some circumstances, less so with cymbidiums than with some other genera.
These runts are hard to identify when isolated from their contemporaries. They are usually recognised from what they are in a larger collection, but pity the poor novice who acquires only a few plants and they are all in this category, for no one will be able to tell him why his plants are not growing - except the one who knows their history.

LYCASTE 'BREVESPATHA' : President's Flower of the Month
8.3.83 summary by J. CUMINGS

Among the showiest of orchids are the Lycastes. There are 35 known species. Epiphytic and semi-terrestrial Lycastes grow wild throughout tropical America from sea level to the high mountains of Mexico, Peru, Brazil and Guatemala. The hard, oval pseudo bulbs of Lycastes have from one to three soft, thin spear shaped leaves, which remain on the plant for about a year. The flower stems develop from the base of the last pseudo bulb. Many are long lasting and scented.
Try growing them at first with the plain leafed Paphiopedilums. If these conditions do not prove suitable change them to suit the plants.
Lycastes need an abundance of fresh air. Light is an important aspect of their culture, like Paphiopedilums they must be shaded from too much direct sunlight. If there is too much heat or sunlight, plants drop their leaves to conserve water. Humidity should be moderate. When watering take care to prevent water from lodging in the young growths.

that eventually appear from the larger bulbs seem to be the hardest ones for us growers to decide upon, as many turn out to be growths rather than spikes.
A continuation of the fertilizing programme without nitrogen for the next two months will bebeneficial, but of course this will apply only to plants large enough to be capable of producing flowering racemes.
Phosphate and potash are recognised as bud producing fertilizers, where nitrogen is essentially a growth producer. There still remains the need for active growth to continue even though spikes are in evidence and the plant uses much energy and life in producing blooms.
Much of the final result of this effort is provided by the careful attention of the orchidist. Don't just sit back and think that because the spike is there you can relax.

Continue all your care right up to the time you have the best possible showing of your blooms. Those people in orchid clubs, world wide just don't produce award winning flowers without a great deal of time and hard work, but enjoyable because of their love of orchids.
Remember we are all potential award and prize winners and we need to lavish time and attention on all our plants.

SUMMARY - LIGHT ON ORCHIDS AND LEAF BURN

Some years ago a gun like thermometer was demonstrated at a Field Day held at the University of California. The interesting feature of this is the result given to the cause of leaf burn in orchids.
"The gun when activated gave a heat reading of the object at which it is pointed. Short mown grass gave a reading of 67 degrees, grass cut at 2" height gave a reading of 79 degrees, dry soil 85 degrees and artificial grass 125 degrees. It was explained that the taller grass gave a lower reading because transpiration of the plant gave a cooling effect.
"We know that in our orchid houses it isn't the light intensity that burns a leaf, but the leaf temperature".
Our Adelaide orchids should be able to withstand our summer sun without suffering from leaf burn if we have sufficient circulation of cool air blowing across the leaves.
"The most practical method of determining whether or not a leaf is apt to be burned is to feel the leaf by hand, or watch the house over a period of days to see if the leaves are getting too yellow"
"Sudden subjection to high light after rains is a common cause of burn"
A very simple but profound finding. Don't water the foliage of any orchid while the sun is shining upon it.
Again can we stress the importance of cooling the plants of cymbidiums down during the summer and hot autumn months. This night time duty causes the transpiration spoken of above and is a must for spike initiation.

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"On Recognising Deficiency Symptoms in Cymbidiums"

With all of the expert (and often conflicting) advice which one can follow in growing one's Cymbidiums, there is little wonder that the grower can become confused. But the *Cymbidium* plant is never confused by the opinion of experts as to how it should be grown. It just sits there on your bench waiting to be read, much like an open book. If the grower is able to recognise and correct certain deficiency symptoms that his plants might exhibit, much confusion is eliminated.

Suppose your Cymbidium foliage is very yellow, and growth is less vigorous than the growth of a plant that you gave to a friend last year. Your plant just looks stunted. A **nitrogen deficiency** accounts for these symptoms. Growers who grow their Cymbidiums mostly in fir bark must add more Nitrogen than the grower who uses something else, for the micro-organisms of your mix, with their use of nitrogen in breaking down fir bark, will rob your plant of available nitrogen. This explains why nitrogen is often recommended for application to your garden after spreading a bark mulch.

Or, suppose you buy a plant that has proved itself as a consistent bloomer, but you find that you can't bloom this plant. Assuming that you have provided enough light, and that you have established a root system, your problem might be a **phosphorous deficiency.** The lack of this element causes a delay in reaching maturity.

The grower might observe that the leaves of his Cymbidium's older growth tend to turn yellow, starting from the tip and working towards the pseudobulb. A **potassium deficiency** causes this symptom. Potassium is found in high concentration in buds and young leaves, and contributes to flower colour. It is used extensively by Poinsettia growers for getting colour into bracts.

With a **calcium deficiency,** one might find reduced spiking, as with phosphorous deficiency, but visual effects of a deficiency of calcium are not easy to detect. If you use Dolomite lime, and if your soluble fertiliser contains calcium, you should have no problem. Calcium does contribute to grainage of the medium in which you grow, because it contains particles to flocculate, or come together; and, in the presence of organic matter, aggregates are formed and drainage is thereby achieved.

Considerable discussion in the Cymbidium world has occurred about the use of Epsom Salts (Magnesium sulfate) to contribute to spiking. **Deficiency of magnesium** causes a yellowing of plants, so if you are supplying nitrogen and your plants still look too yellow, add magnesium sulfate (Epsom salts) to your fertiliser programme. This application may also contribute to spiking.

The above discussion of macronutrient (nutrients used in greatest amount by plants) deficiency symptoms is by no means complete; in fact, the all-important influence of soil pH on nutrient availability has not even been mentioned. But the general idea of the importance of using a balanced fertiliser regularly should be understood.

One need not worry so much about the micronutrients (trace elements), those elements used by plants in very small amounts. It would be advisable to check the label of the liquid fertiliser that you use to be sure that trace elements are included. A complete, balanced fertiliser contains all of the macro and micronutrients in proper balance. Determining the proper balance is the grower's problem. Elements used in trace amounts are iron, manganese, zinc, copper, boron, molybdenum and chlorine. An example of what trace amount means is found by the recommendation to farmers of adding molybdenum to their soil at rates as little as one-half to one ounce per acre, while applications of three or four pounds of available molybdenum per acre may be toxic to most plants."

(Author unknown but these interesting notes first appeared in the Bulletin of the Orchid Society of Northeastern Oklahoma Inc.)

MONTHLY COMPETITION **MARCH MEETING**

OPEN DIVISION

Aus. Native	Den. Compactum	W J Nicholls	3
Aus. Native Terres.	Malaxis latifolia	W J Nicholls	3
Cattleyas	Blc. Holiday Gem x Albert Heinecke	W J Nicholls	3
Species	Vanda Roeblingiana	W J Nicholls	3
	Epi. cochleatum	W J Nicholls	3
	Leudemannium hieroglyfica	W J Nicholls	3

Division Flower of Month:- Vanda Roedlingiana W J Nicholls

1ST DIVISION

Mini Cyms.	Minuet	L & R Moore	3
Cattleyas	C. Minerva 'Highercombe'	J Leeder	3
	C. forbessi x C. bowringiana	Mr & Mrs Pollitt	2
	Bc Langquedoc 'Singapore Welcome'	J Leeder	1
Dendrobiums	Den. Kultana	P T Barnes	3
Miscellaneous	Miltassia Charles Fitch	P Barnes	3
Novelty Paphiopedilum	Ianum	P T Barnes	3
Species Paphiopedilum	charlesworthii	P T Barnes	3
	glaucophyllum	Ron Parish	2
Species	Lycaste brevespatha	P T Barnes	3
	Zygo, crinitum	L & R Moore	2

Division Flower of Month:- Lycaste brevespatha P T Barnes.

2ND DIVISION

Mini Cyms.	Minuet	V J Rodgers	3
Cattleyas	C forbessi x Lc Chine Bouton	T Howard	3
	C forbessi x C aurantiaca	C C Burfield	2
	C Minerva 'Highercombe'	C C Burfield	1

Division Flower of Month:- Mini Cym:- Minuet V J Rodgers.

Presidents Flower of Month:- Lycaste brevespatha P T Barnes.

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NEW MEMBERS.

Mr. & Mrs. E. Harling, 7 Lutana Court, Morphett Vale
Mrs. A. Brewer, 430 South Road, Marleston.

SALE of 20, Paphiopedilum seedlings at Cultural Meeting 12/4/83.
The committee have purchased a number of small plants of the crossing Paphiopedilum WORLD CUP 'Elizabeth' x BETTY BELL 'The Giant'.
20 plants are now large enough for sale at $6.00. each. Members can purchase one plant each while they last.