



# monthly bulletin vol. 44 no. 4

## april 08

**President : Murray Aldridge**  
**Secretary : Louise Gannon 02 9524 9072**  
**Treasurer : George Birss 02 9520 3946**

**Correspondence to : The Secretary, 36 Raglan Road, Miranda, NSW 2228.**

**Meetings held at the Uniting Church Hall, cnr. Flora and Merton St., Sutherland on the Second Monday of the Month. All Visitors Welcomed. Visit our Website on [www.ssos.org.au](http://www.ssos.org.au)**

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### Minutes of the Annual General Meeting 2008.

The President, Mr. Murray Aldridge called for a motion that the minutes as presented of the A.G.M. in the Bulletin, were a true and accurate record. Motion moved David Brooks.

### **PRESIDENTS REPORT**

I am happy to report that S.S.O.S. continues to thrive. We have a small but steady influx of new members and, as you will hear, a thriving bank balance.

More importantly, the Society continues to provide it's members with very valuable and interesting services. These include the very popular Beginners Classes run by a wide range of members, sales table (thanks Dennis, Bob and Russell), web site (thanks Daniel and Toni), bulletin (thanks Kevin and Ho), library (thanks Trevor) and a wide range of interesting guest speakers, many from our own Society.

The four highlights of the Year were our two shows, the Southern Orchid Spectacular and the Engadine Fete. We value our sponsorship with Swane's Nursery and they were once again very pleased with both the Spring and Winter shows. There were many superbly grown plants on display enjoyed by many visitors to the Nursery. Thanks to Neville and Paul, and to all those who pitched in and helped.

The Southern Orchid Spectacular is a major orchid event that continues to grow. This year's show really lived up to its name. Our display was the best that has been put on in recent times and was widely praised for its original design. Thank you to Jan, Louise, Wal and their band of helpers. As Sutherland is a major partner in the Spectacular it

was very pleasing to see many members volunteering to help in many different ways. The Fete stall at Engadine is quite a different thing - a good opportunity to publicise the Society and for members to sell plants. Next year we will have our banner and will work even harder on the publicity side.

The New Growers Group continues to thrive and encourage new members. Originally started by Ho it now meets regularly at different members homes. An offshoot of this is the bus trip to Orchids out West - hopefully tonight it will be fully booked. Thanks Jan and George.

A Society is what its members make of it - the more members we have involved the more we all get out of it.

Can I mention three members whose role is not-always so glamorous, Diane Hannah is our Show Secretary, George looks after our money very well and provides comprehensive reports to the Committee and Louise is quietly competent as Secretary and holds the whole thing together.

We have a number of people leaving the Committee this year. Madge Errington is leaving after many years of quietly working away for all of us. I will miss her unique way of bringing people back to earth at Committee meetings. I hope she will still help out as she has in the past - I am sure that she will.

After about 20 years on the Committee Neville Roper has decided it is time to do something other than chores for the Society, and just enjoy the meetings. Only Dennis Wood has been on the Committee for longer. Neville has been Show Marshall for very many years, even stepping-in again this year to help when Paul was unavailable. Neville is a keen thinker, supporter of new members, always ready to do anything for us. It is really wonderful to see someone of his stature in

the orchid world care for and do so much for his local Orchid Society. I certainly appreciate his help and support very much.

After a fairly short stint, this time round, See Ting Ho is also going and will no longer be Judge's Convenor or Auditor. Ho's work for the Society goes far beyond the Committee. He organised and ran for a couple of years the New Growers Group. This year he made calendars for sale at the Christmas party, which just walked out the door. He helps Kevin with the Bulletin. He is making a large Society banner for us and, of course has worked as Auditor and Judges Convenor.

We say thanks to you all - it is difficult to do more as each of them has already received the formal accolades that the Society has to offer.

Finally Mike Hitchcock is also resigning to spend time on one of his other passions - music. Mike has been, and will continue to be a great helper at the Society but we will miss his formal input. I thank everyone for their efforts towards making this Society such a rewarding and enjoyable one.

Murray Aldridge

Motion by Madge Errington, that the President's Report be accepted.

It was then moved by Bob Moar, that the Treasurers Report, as presented in March 2008, Bulletin be accepted as a true and accurate report.

Gary Hart was then nominated to act as the Returning Officer for this meeting. Moved by Murray Aldridge, seconded by Louise Gannon. Mr. Hart then declared all the positions vacant, and as there was no need of a ballot, declared the following positions for the ensuing year.

President - Murray Aldridge, Moved Ian Chalmers, Sec. Neville Roper

Vice President - Bob Moar, Moved John Moss  
Sec. O. Howard.

Committee - Russell Ettrick Jan. Robinson  
Paul Wheeler Dennis Wood  
Moved Bob Moar Sec. Bruce Smith.

Secretary - Louise Gannon, Moved Spiros Vavayis Sec. John Moss.

Treasurer - George Birss, Moved John Costa  
Sec. Sandra Crosby.

Auditor - Trevor Costa (Berger Piepers) Moved John Costa Sec. K. Wilson

The Annual Statement for the Financial Year ending 2007 as presented, is hereby accepted for submission to the Dept. of Fair Trading, and the Public Officer, Louise Gannon, and the Treasurer, George Birss, be allowed to sign this statement. Motion by P. Mills, seconded by R. Moar.

Mr. Aldridge then took back the meeting, thanking the incoming members.

He then closed the 2008 AGM meeting

### Minutes of the March 08 Meeting

The President welcomed all present and called for a motion that the minutes of the March meeting were a true and accurate record. Moved by Sandra Crosby.

Murray then reminded members that anybody wishing to join the committee, forms are available from the Hon, Secretary to-night.

### Correspondence.

Flyer – International Orchid Fair – Castle Hill 4 – 6 th. April.

Flyer – Orchids Out West 2 – 4 th. May.

Orchid Auction List, Manly Warringah Orchid Soc.. 30 th. March.

Price List Dendi Orchids.

NEUTROG Fertilizers, availability of Strike Back.

A.O.C. Minutes of the 17<sup>th</sup>. Conference & Show 2006 Report.

Price List from Smokey Cape Orchids.

Murray then thanked Neville Roper for taking the Beginners class to-night, and Madge Errington who will be your hostess for this evening. Dennis Wood will be the host for the April Meeting. He also thanked Tony Costa for volunteering to do the supper for our April meeting, as "Auntie Madge" will be away.

Our yearly Auction is at the May meeting, and we are enclosing a plant listing form. If you have plants for sale, please return to the Secretary by the April Meeting to enable us to list the plants in the Bulletin. If you get the Bulletin by E-mail please see Louise for a form, as we will be sending a flyer out to other Societies advertising the Auction.

Don't forget the Bus Trip to the Orchids Out West on the 2<sup>nd</sup>. May. See Jan. Robinson for details.

**New Member.** Welcome to Mary Toparis, we hope that your stay will be enjoyable in every way.

Supper was taken, followed by an enlightening talk by Murray and See Ting Ho, on some aspects in the growing of the orchids. Tonight we enjoyed a talk on Pests and Diseases.

Both growers agreed that if you grow your plants well you have less problems. Healthy plants are resistant to problems.

Here are some of theirs and members tips-

\* pick your plant up, occasionally and turn it around as pests can be lurking on the side which you don't normally see.

\* air movement is important if you have a glass house, it needs a fan, to fan over the plants.

- use sulphur powder on cut surfaces.
- make sure your plants are dry by night time.
- Fongarid and Anti-Rot are recommended as fungicide for rotting.

• aphids and mealy-bugs are visible on plants. Use pyrethran and eco-oil.

• grasshoppers are nocturnal and very destructive; so grab your torch and check your orchids at night.

\* use your boot for snails. For a surface spray, NOT on plants use Snail - stop (contains copper). An upturned damp terracotta pot with a slice of apple etc, attracts snails to it. Also mentioned was a spray using instant coffee.

- sprinkle slugs with salt.
- for a systemic insecticide spray it was recommended to use Confidor combined with a wetting agent eg. Spray wet 600, which helps the solution to stick to the leaves.

\* ants bring scales. A cymbidium brought along for the evening talk showed white scale deep in the leaves of the waning bulb. Try to spray this because if left untreated it will sap the goodness from the leaves.

**SAFETY EQUIPMENT** For spraying

- try to prevent any sprays from touching your skin, being breathed in and entering your eyes.
- use a mask for dust/mist/fumes. Make sure it fits snugly.
- wear long-sleeve clothing, rubber gloves preferably up to elbows, rubber boots.
- stand up-wind. Ho finds that using a manageable 4 litre bottle spray it gives you a reasonable distance from yourself to plant.

- immediately after spraying, wash clothes and shower.

Thankyou Murray and Ho for an informative and at times humorous talk tonight.

**Lucky Plants.** R.Moar, J. Moss, E. & A. Marks.

**Plant Raffle.** B.Pethybridge, G. Kay, D.Wood, & Visitor.

**Dates to Remember.**

4<sup>th</sup> – 6<sup>th</sup>. April - Sydney International Orchid Fair, Castle Hill Showgrounds.

14<sup>th</sup>. April – SSOS Monthly Meeting, Point Score, Beginners Class 7:30 p.m.T.B.A.

2<sup>nd</sup>. – 4<sup>th</sup>. May – Orchids out West Show, Clarendon. – Bus Trip.

12<sup>th</sup>. May – SSOS Monthly Meeting. Point Score, Auction.

21<sup>st</sup>. – 22<sup>nd</sup>. June – Royale Orchids Fair.

28<sup>th</sup>. – 29<sup>th</sup>. June – Mingara

**Editors Corner.**

If any member would like to receive the Bulletin by Email, rather than post mail please see Louise. For those members who have ordered a copy of the Papers of the Awareness Campaign A.O.F., are able to get copies from the Sect. for a cost of \$10. The order for the Book “Wonderful World of Sarcophilus Orchids” has been placed and we are awaiting on delivery.

To clear up any misunderstanding, a minute has been on the books for a considerable time, that to place a “FOR SALE” advert. in the Bulletin, there shall be a charge of \$5.00. It is not my decision.

You may notice that at times I seem to be running a lot of articles on the one subject. I do this with a purpose. The more variation I can show in growing advice, gives you the chance of trying a different opinion of growing technique, embracing and trying in a small way in case it doesn't work for you. I am not saying you should try everything, but check your own conditions.

**JUDGING/ RECORDING Roster for April 08**

	TEAM 1	TEAM 2	TEAM 3
LEAD JUDGE	E BEEHAG	I CHALMER	N ROPER
JUDGE	G HART	D BROOKS	W CHAPMAN
JUDGE	J HART	K WILSON	I WARE
ASSOC.	J MOSS		
WRITER	J ROBINSON	M HITCHCOCK	D COULTON

**MONTHLY JUDGING RESULTS**

For : Mar-08

**OPEN JUDGES CHOICE**

Winner Paph. Fuerte Gold S.T. Ho

**INTERMEDIATE JUDGES CHOICE**

Winner Dendrochilum magnum T. Costa

**NOVICE & JUNIOR JUDGES CHOICE**

Winner Miltonia spectabilis var. moreliana 'Big Ben' J. Robinson

**CLASS # 1 AUSTRALIAN NATIVES**

1st Den. schneiderae T. Thorburn  
 2nd Den. bigibbum var. bigibbum K. Wilson  
 3rd Liparis reflexa J.W. Moss  
 4th Liparis reflexa J & M Moss

**CLASS # 2 SPECIES PAPHIOPEDILUM**

1st Paph. primulinum G. Hart  
 2nd Paph. sukhakulii S.T. Ho  
 3rd Paph. vejvarutianum G. Hart  
 4th Paph. primulinum K. Wilson

**CLASS # 3 CATTLEYA OVER 110mm**

1st Bc. Murray Spencer 'Armroy's Dark Star' J. Hart  
 2nd Bc. Esmeralda 'Heritage' J. Hart  
 3rd Bc. Mt. Anderson x Lc. Quadroon Aida Costa/Crosby  
 4th C. schrodesiae x forbesii T. Thorburn

**CLASS # 4 NOVELTY PAPHIOPEDILUM**

1st Paph. Maudiae 'Colouratum' W&J Chapman  
 2nd Paph. Jacqueline Hopkins S.T. Ho  
 3rd Paph. Supersuk x California Raisin S.T. Ho  
 4th Paph. moquettianum x philippinense K. Wilson

**CLASS # 5 CATTLEYA OVER 80 TO 110mm**

1st Sc. Lana Coryell x Bc. Dals Girl J. Hart  
 2nd Bc. Island Charm x C. Hawaiian Wedding Song Costa/Crosby  
 3rd C. Summer Stars x C. Hight Costa/Crosby  
 4th Slc. Dal's Buddy x C. walkeriana J. Hart

**CLASS # 7 CATTLEYA INTERGENERICS (Up to 70mm)**

1st Ctna. Tina Costa/Crosby  
 2nd Ctna. Capri 'Leah' J. Hart  
 3rd Ctna. Brandi 'Oc' J. Hart  
 4th Ctna. Capri 'Leah' x Sc. Batemann 'Ana Belle' J. Hart

**CLASS # 8 CATTLEYA UP TO 80mm**

1st Slc. Dal's Halo E. Beehag  
 2nd C. Choc. Drop x C. bowringiana var harrisonae Costa/Crosby  
 3rd C. Minerva J.W. Moss

**CLASS # 9 AUSTRALIAN NATIVE HYBRID**

1st Den. Annes Rainbow 'Surprise 131' J.W. Moss  
 2nd Den. Elegant Autumn x Den. Amber Banks Costa/Crosby  
 3rd Den. Hera D. Wood  
 4th Den. Aussie Angel x Amber Banks P. Wheeler

**CLASS # 10 SPECIES ASIAN**

1st Dendrochilum magnum S.T. Ho  
 2nd Dendrochilum filliforme J. Costa  
 3rd Vanda coerulea R. Moar  
 4th Trichoglottis brachiata W&J Chapman

**CLASS # 11 PHALAENOPSIS**

1st Phal. Happy Lady Costa/Crosby

**CLASS # 12 SEEDLING**

1st Paph. Fuerte Gold S.T. Ho  
 2nd Paph. delenatii x M.L. Heuer G. Hart  
 3rd Paph. Bengal Lancers Costa/Crosby  
 4th Paph. Michael Koopowicz G. Hart

**CLASS # 13 ONCIDIUM**

1st Onc. edwallii x aurisasinorum D. Wood

**CLASS # 14 NOVELTY PHALAENOPSIS UNDER 75mm**

1st Phal. Fortune Buddha x Brother Supersonic Bird T. Thorburn  
 2nd Dtps. Leopard Prince x Phal. Leopard Prince Costa/Crosby  
 3rd Phal. violacea x Taseys Evergreen Costa/Crosby

**CLASS # 15 ONCIDIUM INTERGENERIC ALLIANCE**

1st How. Lava Burst 'Puanami' N. Roper  
 2nd Alcera Dorothy Oka E&A Marks  
 3rd Colm. Wildcat G. Hart  
 4th Tolu. Sizzler x Rod. Rhapsody E. Beehag

**CLASS # 16 MISCELLANEOUS**

1st Miltonia Bluntii x Odn. Santos J&M Moss  
 2nd Phrag. longifolium x pearcei J.W. Moss  
 3rd Bulb. lobbii x echinolabium G. Hart  
 4th Miltassia Aztec 'Toni' Costa/Crosby

**CLASS # 17 DENDROBIUM HYBRIDS**

1st Den. Dal's Pixie x Dal's Wonder Costa/Crosby  
 2nd Den. Carron Deb x Floral Labis M. Errington  
 3rd Den. Pauline Costa/Crosby  
 4th Den. gonzalenii x victoria-regina Costa/Crosby

**CLASS # 18 VANDACEOUS NOT VANDA**

1st Neostylis Lou Sneary 'Kultana' M. Errington  
 2nd Sartylis (S.hartmanii x Rhy.coelesis) Costa/Crosby

**CLASS # 19 MASDEVALLIA & DRACULA SPECIES**

1st Drac. vestropilo G. Hart  
 2nd Drac. cordobae G. Hart  
 3rd Drac. cordobae G. Hart

**CLASS # 21A PLEUROTHALLIDINAE HYBRIDS**

1st Drac. cordobae x Bella G. Hart  
 2nd Rest. pelyx x elegans D. Wood  
 3rd Rest. pelyx x elegans D. Wood  
 4th Rest. antinifera x escobariana N. Roper

**CLASS # 21B LAELINAE SPECIES**

1st Epi. diffusum M. Errington  
 2nd Epi. imatophyllum G. Hart

**CLASS # 22 MINITURE CYMBIDIUM UNDER 60mm**

1st Cym. Zig Zag 'Kiwi' J. Costa

**CLASS # 23 SPECIES OTHER THAN ASIAN OR PAPHIOPEDILUM**

1st Stanhopea inodora R. Moar  
 2nd Miltonia spectabilis var. moreliana Costa/Crosby  
 3rd Phrag. schlimii K. Wilson  
 4th Lockartia lunifera N. Roper

**CLASS # 23A OTHER PLEUROTHALLIDINAE SPECIES**

1st Rest. guttulata 'Hoffman' D. Wood  
 2nd Rest. cuprea N. Roper  
 3rd Pleurothallis sp. G. Hart  
 4th Rest. antenniferia var. maculata N. Roper

**CLASS # 24A NATIVE SARCANTHINAE HYBRID**

1st Sarco. Jill D. Wood  
 2nd Sarco. Bobby Dazzler 'Dark Pink' N. Roper  
 3rd Sarco. Jill 'Patterned' N. Roper

**CLASS # 27 - NOVICE - NATIVE & NATIVE HYBRID**

1st Liparis reflexa D. Coulton

**CLASS # 28 NOVICE - CATTLEYA**

1st Bc. Cynthia Rehfield M. Luk

**CLASS # 29 NOVICE - MISCELLANEOUS**

1st Phal. unknown M. Luk  
 2nd Prom. ovatiloba x rollisonii D. Coulton

**CLASS # 30 NOVICE -SPECIES**

1st Miltonia spectabilis var. moreliana 'Big Ben' J. Robinson  
 2nd Rest. wagnerii D. Coulton

**CLASS # 31 INTERMEDIATE - PAPHIOPEDILUM**

1st Paph. Papa Rohl T. Costa  
 2nd Paph. Somers Isles x Holdenii G. Birss  
 3rd Paph. Gold Dollar G. Birss

**CLASS # 33 INTERMEDIATE - NATIVE SPECIES & NATIVE HYBRID**

1st Sarco. Starstruck x Burgundy on Ice G. Birss  
 2nd Den. Sofala G. Birss

**CLASS # 34 INTERMEDIATE - CATTLEYA**

1st C. forbesii x aurantiaca S. Vavayis

**CLASS # 35 INTERMEDIATE - MISCELLANEOUS**

1st Miltonia Honolulu 'Warne's Best' G. Birss

**CLASS # 36 INTERMEDIATE - SPECIES**

1st Dendrochilum magnum T. Costa  
 2nd Encyclia alata G. Birss  
 3rd Eria convallicides G. Birss  
 4th Dendrochilum magnum G. Birss

## **Pest and Diseases** – presentation by Murray & Ho

Due to the long hours of last months meeting mainly due to the AGM, we had to hurry along so as not to finish too late. It generated much interest and questions that the meeting was prolong somewhat.

After the meeting, there was still lots of questions and misunderstanding of what was discussed. Some has forgotten things which was said and needed confirmation. That is a very healthy outlook, this is written to address the above, not about the whole presentation

Here are some clarifications :

**Contact/Surface Chemicals** - How these chemicals works it that when you spray it on to the plant for insects or fungus problems, it kills them on contact or over a short period of time. It leaves a residual on the plant, so if some insects or fungus returns and ingest the residual, it will continue to kill them. In time, when the rain comes or you water your plants and also through exposure to climatic condition like sunlight and air, the residual breakdown , is washed off or diluted, so much so in time they become ineffective. A repeat spray will be required.

Often you will read on the chemical's instruction – “Withholding Period of 10 days” What this generally means is the chemical will breakdown after 10 days and will then be safe to handle.

**Systemic chemicals** – Systemic chemicals are chemicals which are made so plants can take it up or absorb it either through the leaves or roots. It remains circulating in the inside of the plant so that when an insect or fungus attacks it, it will ingest these chemicals (possibly via the plant sap) and its history. Some insects have very waxy coating on them, and surface spray often just drips off them and are ineffective (Eg scales and mealy bugs) So these insects when they suck on the plant will ingest the chemical and becomes history! Unfortunately history often repeats itself and these pest do constantly returns.

The chemicals what was discussed are as follows : There are lots of chemicals available, the products discussed are generally of the low toxicity type.

**Contact/Surface Fungicide** : Hysan, Mancozeb (or Mancozeb Plus), sulphur powder.

**Contact/Surface Insecticide** : White Oil (Very Similar –Pest Oil), Eco-oil, Natrasoap, pyrethrium

**Systemic Fungicide** : Anti – Rot (Phos-acid), Fongarid

**Systemic Insecticide** : Confidor

Always read instruction carefully before mixing two different chemicals together as they may not be compatible and can cause great harm on the plants. If you have to, test it on one plant first to see the result.

**Wetting Agent – Spray Wet 600.** This chemical is neither a fungicide nor a insecticide. It is a chemical that when added will assist in the actual insecticide or fungicide stick to the leave. Often, leaves are waxy, and the spray you apply simply run off and you tend to then keep spraying because you notice that the leave surface are not covered. Wetting agent acts like a glue or sticker and results in efficient use of chemicals.

**Remember, grow your plant healthy will greatly reduce the incident of diseases and pest attacks. How to – that is another presentation!!!**

If there are more areas you want something written about, contact the Editor with your issues and we will try to publish it. Only questions on specific issues please.

## **What does the 4N in brackets after a plant's name means?**

The 4n indicates the number of sets of chromosomes in the nucleus of this plant otherwise termed as the plant's Ploidy. A normal orchid has two sets of each chromosomes, one set from each parent and is known as *diploid* abbreviated as 2n. If during the process of mitosis (multiplication of cells in the body) a separate membrane fails to form we then have twice the number of chromosomes in a cell, which becomes a 4n cell (2 sets of chromosomes from each parent). If these 4n cells then multiply out the plant becomes known as a *tetraploid*.

If a tetraploid plant is mated with a diploid plant, then  $2n+n = 3n$  and a *triploid* results. Triploids usually grow well and often produce a large number of flowers hence are popular with growers of cut flowers. They are however not fertile or only slight so, producing a few viable

seeds instead of thousands. On the other hand a tetraploid crossed with a tetraploid ( $2n+2n = 4n$ ) will produce a plant that has the same larger and more numerous flowers but also has viable seeds. So when an orchid is anything other than a diploid the chromosome count is appended to the orchid name. So a plant with  $4n$  shown in brackets on the label is a tetraploid plant which will be expected to have more flowers and larger flowers.

A very dangerous chemical called colchicine has been used for many years to induce the formation of multiple sets of chromosomes in orchid plants, particularly cymbidiums. If a plant has  $n$  chromosomes then application of colchicine may induce a plant to have  $2n$  or more chromosomes.

## Pests and Diseases

(From Maitland and Coalfields District Orchid Society Bulletin)

By far the most damaging of orchid diseases are those caused by virus infections. Although much work has been done, no cure has been discovered. Most growers burn all affected plants, a safe precaution considering the ease with which viruses spread through a plant collection. When an orchid is infected with virus, the disease affects all parts of the plant, and cannot be eliminated by tissue culturing and meristematic tissue, as is done with some other types of plants. However seed is not affected and can be used for propagation providing the pod is allowed to dry and split, ejecting the seed onto a sterile surface.

More than fifty different viruses have been identified in orchids but only two are easily detected by growers are our concern: Cymbidium Mosaic Virus (CMV and Tobacco Strain 'O' Virus (often called Odontoglossum Ring Spot Virus). Plants may be infected with either of these viruses, or with any of the viruses, without showing any signs of the disease. It is only when some abnormality occurs that a virus is detected, unless tests are carried out in a laboratory or an indicator plant. Tests on healthy plants are undertaken when a plant is to be mericlone or used as a seed-carrying parent.

### How to Detect a Virus

Cymbidium Mosaic Virus infects any genera of orchid, but as the name suggests, it is found mostly in cymbidiums. It is usually detected by the leaves becoming streaked with broken lines of a paler

colour; the leaves are the main clue to detecting this disease.

Tobacco Strain "O" Virus is detected in a wider range of genera, but particularly in *Odontoglossum*, *Cattleya* and *Dendrobium*. One symptom is a distinct ring-spot that is an outer ring of necrotic black tissue with some green tissue inside and then a necrotic black spot in the centre. Several such spots may occur on a single leaf. It is often called "colour break virus" because the flowers are marked with irregular colour patterns. A third sign is the appearance of shallow dimples on the leaves. These signs and any other abnormality should be regarded as suspect and plants should be destroyed, if not destroyed the plants should be isolated completely from the rest of a collection.

As viruses are seldom detected early, all plants must be regarded as possible carriers of the disease. As the disease is spread by inoculating one plant with the sap of another, we can reduce the spreading by simply using sterile tools and by using sterile pots. Likewise, do not re-use potting material and thoroughly wash hands after working on each plant. Practising these simple procedures will not eliminate the spread of the disease, but it will certainly help keep your collection healthy.

### Fungal and Bacterial Diseases

Other diseases affecting orchids are usually of fungal or bacterial origin, and they too can be reduced by good housekeeping practices. Keep the growing area clean and free from unnecessary debris and allow for plenty of fresh air to circulate around the plants. However, *sometimes* problems occur in the cleanest of house. For practical purposes it is best to regard fungi problems in two categories: (a) Those that effect the plant above the potting mix and (b) those that effect the root area. If the problem is in the pseudobulb or leaf area then it is best to use a contact fungicide. Some growers use these fungicides regularly as a preventative measure. Mancozeb has been found to be very good in this respect. If the disease is in the root area, it will usually be found when the new leads appear, they will suddenly die leaving a soft squashy mess called damp-off. This can be controlled with a systemic fungicide. Benomyi or Furalaxyl are good but check to see if its use is prohibited.

### Pests

Pests in orchids are numerous and destructive, but can be controlled to acceptable levels with proper treatment. Of the insect pests which cause ugly disfiguration of both plants and flowers, the red spider mite is the most difficult to eradicate. Their favour host is the cymbidium where they feed on

the underside of the leaves, so regular inspection of your cymbidiums should be undertaken. The mite is just visible to the naked eye and a build-up can be rapid. With a heavy infestation the leaves turn yellow, and a network of fine webs will be seen on the underside of the leaves. Control can be effected by the use of Azobenzene fumigation, followed by an alternate treatment using a Malathion aerosol spray. These chemicals do not kill eggs, so a follow up of three or four applications about seven days apart will be necessary. As a note of caution, remember that chemicals affect humans as well as insects. Read and follow instructions carefully.

False mite is red and attacks many plants, but seems to prefer Phalaenopsis. It causes pitting on the upper surface of the leaves. If treatment is neglected, a fungal infection will quickly develop, defoliating the plant. Here, again, fumigation followed by a Malathion aerosol spray should give complete control.

Brown or soft scales are protected by a dome-shaped hard shell that resists chemical sprays. Likewise the mealy bug is protected from sprays by a white waxy substance. Since both are sap sucking pests, a systemic insecticide makes the plant toxic, thus the pests can be controlled with three applications, each about seven days apart. Should only several plants be affected, then paint the infection with methylated spirits using a small paintbrush.

Aphids attack young buds and tender new growth. These are several commercial sprays available for the treatment of aphids. (NB Eco-oil, available through ESOS, is very effective to spray on plants to keep insects off in the first instance.) Liquid derris spray is usually most effective. Using common garden snail baits can control slugs and snails. Most of the other pests such as thrips, caterpillars etc. can be controlled by using well known and recommended garden insecticides such as Pyrethrum sprays. As with fungal diseases, insect pests and other problems can be reduced considerably with good housekeeping. Close your house as much as possible against insect entry. Keep overgrown grass and weeds away from the outside and, above all, check newly acquired plants carefully so you don't introduce new problems; treat new plants properly before introducing them to your collection.

MiriamAnn Orchids Newsletter- September 2007.

## Growing Phalaenopsis

**(Courtesy of Dendi Orchids- The author disclaims all Liability for any losses, which may be attributed to the use of any materials or techniques mentioned in these notes)**

The phalaenopsis (moth orchid) , originating mainly in the hot climates of the South Pacific get their name from "phalaina - moth" and "opsis - appearance" . They can either be grown in a glasshouse or in your home, so you too can enjoy the beauty of the phalaenopsis flowers and some orchid growers, increase the variety of orchids that they grow.

In most areas indirect sunlight is required, grow the plant on the shady side of the house September to May. Then move to the sunny side for winter months. Warning - Light and water go together. Less light - less water, More light = more water.

Warning Signals. - Dark leaves - requires more light.

The plant will show these signs over a very short time, be careful of too much light , or direct light as leaves may sunburn.

### Watering

In nature Phalaenopsis grow on trees and therefore will be all right with the occasional drying out., but will not handle too much water over a long period. Do Not OVER WATER. The best time of day is early in the morning, giving the longest time of warmth whilst the plant is wet.

Soak/watering.- This can be done by placing the plant in a bowl of water and leaving for fifteen minutes, by this time the mix should have taken up enough water.

The best way to tell if your plant requires water, is when the top one third of the mix is almost dry. If in doubt, leave until the next day. If your plants are drying out too quickly, add a small amount of sphagnum moss and pebbles to the surface of the pot This will slow down the evaporation of the mix.

### Misting

Its a cup of tea time.! So, why not include a misting in your morning tea ritual? Just use a trigger pump atomiser, and fill it with water and fertilizer. Any good brand name can be used but don't use the same brand all the time, use only 10% of the recommended rate by the manufacturer.

Why put fertilizer in the misting water? Under the leaves of Phalaenopsis ( and many other plants) there are pores.. These pores open and close to regulate the plants absorption of moisture. In

suitable conditions the pores are open most of the time, so misting is the most convenient way to apply moistures and nutrient. When there is excess leaf temperature the pores will close to protect the plant from dehydration, and the silver coloured roots growing out of the mix will absorb the solution.

#### Potting Mix.

I use treated pine bark with coconut fibre mixed through, this is a very coarse mix, 60% bark 10-15 mm. and 40% coconut chips, OR 100% bark chips 10-15 mm.

#### When to not or repot.

- 1 - The plant is too big for the pot
- 2 - The mix has decomposed.
- 3 - the roots are dead.
- 4 - You don't like the container.
- 5 - You just want to.
- 6 - Every two years if above doesn't apply.

#### After Flowering.

When the plant has finished flowering, if the stem is cut off just under the first flower, the stem may branch and produce more flower buds.

#### Pests and diseases.

Snails and slugs love Phalaenopsis. They will crawl 100 Klms. just to feed, so use plenty of bait if your plants are in a shade or glasshouse.

Mealy bug is probably one of the biggest nuisances for Phalaenopsis. A recommended pesticide should be used. A visit to your local chemical distributor should point you in the right direction. Water it well in an make sure the spray gets into the mix. It must be done three times in 10 day intervals, so that the breeding cycle of the mealy bug is disturbed. You must always assume that if one plant has mealy bug, that others will have it.

#### Red Spider Mite.

The underside of the Phalaenopsis leaf needs careful inspection for this damage. The small mites are not visible to the naked eye and are only detected by a silvery look and a damaged appearance. The treatment is usually the same as for mealy bug.

#### Scale.

Little brown lumps on the leaves can be scrapped off with your fingernail. or methylated spirits is a nontoxic way of ridding your plant of this pest.

#### Botrytis.

The flower becomes infected with small brown spots. It is best to remove the flower and quickly

increase the airflow or cut down on the night humidity. A fungicide can be used.

#### Brown Rot.

This occurs as a brown spot on the leaf and quickly turn the whole leaf to mush., and can also strike the axil of the plant. It can be caused by temperatures, that are too low, and humidity, that is too high, or a snail has started to graze. This can be fatal unless caught in time with sulphur powder and a blade to remove the infected area.. Another treatment ,is to pour methylated spirits over the rot and wound. This will not harm the plant with occasional use. Finally, if your plant is infected or in a state of stress , remove the flower spike, as this will help the plat t recover.

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