



Australian Native Orchid Society - Macarthur Group

JUNE 2017

Edited by Tony Asquith mail: aaasquith@bigpond.com. Phone 4625 9874



President: Mr. W. Southwell (Ph. 46818589)

Postal Address:- 8A Boundary Road,

Secretary: Mr. J. English (Ph.86262934)

PARRAMATTA. 2150

Treasurer: Mrs. C. Asquith (Ph. 46259874)

Next Meeting: THURSDAY , 7th AUGUST, 2017

Life Members: Mr. J. Riley, M. T. Cooke, J. English, and W. & M. Southwell.

Conservation Officer: R. Hanman

ANOS Macathur Group disclaims any responsibility for any

losses which may be attributed to the use or misuse of any materials published in this newsletter

Venue: BIRRAWA HALL

FITZPATRICK ROAD

Mt. ANNAN.

Doors open 7.15pm, benching closes 7.30pm, meeting starts 7.30pm

Hi to All

Thanks to Gerry Walsh for his very good presentation at the last meeting, and the plants for sale, always very good value.

Congratulations to Margaret for plant of the night and popular choice.

Elections were held last month and congratulations to the new committee, this year looks to be bigger and better thanks to the work of the committee and members.

Rosemeadow show next month on the 23rd Sept. The spring show is always a good time of the year for orchids and this is really worth attending and entering your plants.

This month's speaker will be from 'Cutabove' with a whole range of cutting and pruning tools.

FEES ARE NOW OVERDUE for the members who have not already paid.

Wally

Campbelltown Orchid Society will conduct their Mid-Winter Show from Thursday 17th to 20th AUGUST At Narellan Shopping Centre.. Why not drop by and have a look!!!!

Minutes of Meeting 20/7/2017

Meeting opened at 7.35pm.

Apologies John English, Don Roberts.

Minutes from previous meeting accepted

Moved G. Morrison

Second P.Griffiths

Correspondence; Newsletters from other Societies. Sydney ANOS Auction Sale.. Mt. Annan BG

Treasurers Report treasurer's report presented as per AGM report..(some extra costs)

Moved Carol A. Seconded G. Morrison

Delegates report

General Business

August Guest Speaker advised... (See Wally's report)

Phil Griffith –South 32.

Peter Wise advised he was dropping out of the society...

Tony advised newsletter articles concerns and offered apologies for errors...

Raffle not noted.. and Meeting closed about 9.25pm.

The following article is published with the kind permission of the author, Mr. Jim Brydie. It appeared in The Kuringai Orchid Society bulletin this month.

Discussion on Media for Epiphytic Orchids (updated version 2017) – by Jim Brydie

From what I have seen on my travels, very few orchids grow in pots in nature - orchids grow on trees, on rocks, and in the ground. We put orchids in pots purely for our own convenience, which brings us to the need to provide a medium in the pot. It is impossible to reproduce an orchid's natural root environment in a pot or any other way but what we can do, in our artificial growing houses, is to provide a benign root environment with an appropriate balance of air, moisture, and mechanical support. Luckily for us, orchids are very adaptive little devils and most will take to our pot culture without too much fuss.

The balance of air and moisture in the pot seems to be the critical factor. They will all put up with being saturated temporarily when we water them but they need excess water to be shed pretty quickly. As the pot then dries out after watering, the medium needs to provide an airy but moist environment in which the roots can live and thrive. The need for moisture hardly needs explanation but keep in mind that air is an equal necessity. Roots are a living organ of the plant and they have to breathe as they work. In a well functioning medium, fresh air will be drawn into the pot as the medium dries out, and be exchanged evenly throughout the pot. There will be no stale pockets of air.

Different plants require different rates of drying out and it is this that we design into the various mixes we use. Any number of the commonly used potting materials will do the job provided that :

- you get the air/water balance within bounds acceptable to the plant concerned,
- you give the plant regular food and water,
- the mix provides a reasonable pH in which the roots can live and grow.

The latter point is very important. The recommended pH range for orchids is 6.0 to 6.5 as this optimizes the availability of the nutrient elements in the fertilizer you provide. Orchids will of course tolerate a much wider range of pH than this but some kinds of orchids are touchier than others in this regard. In my experience, the roots of some, like Paphiopedilum and some of the Oncidiinae (eg those that used to be called Odontoglossum), decline rapidly as the mix ages and I think this is because it gets too acid.

As I said above, many different combinations will serve adequately if other factors are right, but to improve on 'adequate' I think you need to focus on the root system. Roots are the key to maximizing growth. The bigger and more vigorous the root system, the bigger and more robust will be the rest of the plant. Fine tuning the potting medium is the way to maximize root growth and to do that you need options with your potting materials.

When you take your car to a garage for repairs you expect the mechanic to have a full set of whatever tools are necessary for the repair. Why then, do we think we can grow orchids to their potential if we only keep two kinds of bark in the potting shed. For any reasonably sized, mixed orchid collection, the range of environmental needs will be far too wide for any medium to suit all. It is my contention that we need more tools in our shed than that.

There are 4 basic potting medium components that I recommend you keep on hand. These are bark, sphagnum moss, perlite (with peat moss or coco-peat), and coconut fibre. Each has different characteristics and its own strengths and weaknesses. There are a range of other materials that are useful, such as styrene foam, pebbles, sand, etc) but I consider these fringe additives as opposed to major components and I am sure you can succeed without them.

The challenge in a mixed collection is that the plants are usually all jammed together. Watering often takes place for all at the same time regardless of the needs of some plants for different moisture requirements and different drying times. Some differences can be accommodated through choice of microclimates in your growing area. eg hanging plants higher, placing them in the bright end versus the shady end, or nearer the fan etc, but beyond that, adjusting the potting medium gives us a mechanism that can have a multiplier effect on microclimate differences.

1 – Bark - Bark is readily available, relatively cheap, and comes conveniently graded by the size of the bark pieces. One brand calls the bark fine, medium, or coarse, another by approximate particle size in millimetres. There are also more specialised mixes such as Miscellaneous Mix (a combination of sizes and components perfect for natives) and Cymbidium Mix (in its various brands and forms) . Some of the bark quality isn't what it was 20 years ago but it is still a very useful medium. I use medium and coarse barks for Laelias, Cattleyas, Vandaceous, and other coarse rooted, dryer growers, and a blended mix of sizes and components for more general miscellaneous orchids. **medium bark (coins are 5,10,20cents) ►**



With bark, the pH in the pot can be a serious factor. It will usually start out around pH6, which is good for most orchids, but can eventually sink down to as low 3.5 to 4. The pH getting lower and lower is associated with the decay of the bark as it composts in the pot and is often exacerbated by watering too heavily. In overly wet conditions the bark can tend to go off fairly quickly, staying wetter and wetter after each watering, and the orchid may need repotting after as little as 1 or 2 years. However, judicious use of a little garden lime or dolomite, sprinkled over the top of the mix once a year, can extend the life of bark in the pot,

and aid in balancing the pH. Just make sure you don't overdo it. A teaspoon of garden lime/dolomite sprinkled onto a 15cm pot is all you need.

When you use bark, make sure you feed the plants regularly and watch the wetness of the pot. If they look too wet they probably are, so either try to water less often or place the plants where they will dry out more quickly.

2 - Sphagnum Moss - Sphagnum Moss is an amazing medium. It has terrific remedial properties for sick plants and there is nothing better for striking backbulbs and divisions. It can be obtained as live moss, or in dried compressed blocks, and both work well. The dried product keeps well and the amount you need can be rehydrated as needed. Every grower should have at least a small supply available. Even for healthy plants it is a very good medium in its own right but like all media, it has its drawbacks. It is expensive and it is getting harder and harder to obtain good quality moss. Good moss lasts about 12 months in the pot but less if it gets regular fertilizer. Once the sphagnum moss has "gone off", you need to get the plant out of it quickly because all of its positive qualities are reversed and roots quickly die.



3 - Peat and Perlite ("P&P") - Perlite is an expanded volcanic glass that is completely inert & pH neutral. The perlite most growers use comes from Chillagoe in Queensland and comes graded in particle sizes called "coarse", "super coarse", and "jumbo", where jumbo is the largest (particles up to at about pea size). Perlite on its own doesn't provide any organic interchange buffer for fertilizer and once it starts to dry out, perlite by itself goes from moist to dry very quickly. It is usually used in combination with medium Lithuanian peat moss, to provide the organic ion interchange. The basic formula most people use is 1 part peat to about 5 or 6 parts jumbo perlite. I have experimented with ratios of 12, 16, and then 20:1 but I concluded that it doesn't work properly with less and less peat.



different grades of peat ►

P & P mixes are very stable. The perlite is inert and the peat has already reached a point of almost nil decay over thousands of years in the ground. The combination has a slightly acid pH around 6.0 (perfect for most orchids) and lasts virtually forever. However, you still need to repot relatively regularly because plants outgrow pots and because dead roots eventually accumulate in the pot and need to be cleaned out.



Be Aware – peat and perlite mixes are generally wetter than fresh bark mixes. Some growers have tried it and rejected it because it works differently to other media and growers can have a problem if they use a wide range of media for different orchids and water everything together. Reduce your overall watering for best results. Varying the P : P ratio, choosing the grade of perlite you use, adding styrene foam, and/or mixing perlite grades together, can also give you some control over how quickly the mix dries. I use P&P mainly for Pleurothallids, Dendrochilums, some Dendrobiums, and a few others.

4 - Coconut Fibre - Although commercial nurseries here and overseas have been using it for quite a few years, coconut fibre is a relatively new medium to most of us. It obviously has great potential. As a medium it is long lasting, slow to bio-degrade, and depending on the brand and the washing process, has a pH of about 6.0 – 6.5. The material comprises two natural materials which form the husk of the coconut. A coarse, stiff, woody, thread like material we call coir, which is the same fibre used to make coir doormats etc, and a peat like material that fills the spaces between the coir fibres. Sort of like an insulator and moisture absorber.



The commercial orchid potting material, is basically the chopped up fibrous husk off coconuts, a byproduct of the copra production plantations in India and Sri Lanka among other places. It comes in dried, compressed blocks of more or less cubed chunks, pre-cut into specific sizes to different grades of fineness. There are various brands available - one used to be available from Bunnings hardware stores but I am not sure that source is still available. I believe that Ray Clement's 'Tinonee Orchids' still markets another type.

The material needs to be soaked and rinsed before you use it. Stories are told that some supplies are contaminated with sea salt from the discarded coconut husks being stored too close to the ocean before they are processed and compressed for horticultural use. I don't know if this is true, but I heed the need to wash and rinse.

To prepare the material for use, I soak a **half a dried compressed block** in a garbage bin for 3 or 4 days to let it stew, then tip it out into foam boxes fitted with a couple of layers of shade cloth in the bottom. A half a block fills 2 foam boxes after soaking. I then give the boxes a thorough rinse with a hose to wash out any salts released by the soak. Be careful when you rinse it however. All these coconut fibre products include a significant proportion of the fine peaty material and you need to retain a decent proportion of these fines as an integral part of the mix. If you remove too much of the fines by washing or sieving, the mix dries faster

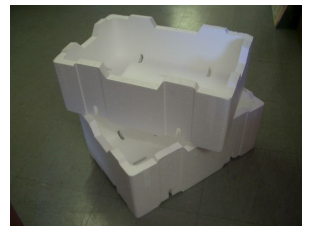
than is practical for most orchids and doesn't retain sufficient water. A dry mix can be a useful trick for one or two oddball orchids, but it isn't suitable for most.

As with bark and perlite mediums, you can adjust the moisture content of your coconut fibre potting medium by choosing the coarse or fine grades, reducing the peaty component, or by adding other components like styrene foam. I experimented with various mixes of fine, medium, and coarse coco-fibre, added perlite, and added styrene foam. I was very impressed with results in the first 6 months or so but after that I began to experience rots killing off some plants and others just suddenly stopping their forward progress. I am not sure why, but I think part of the problem was that the finer, peaty materials may have wash out from between the coir strands and accumulated in the bottom of the pot, creating a bog zone, which would have resulted in root decline.

At present, I have cut back my use of coco-fibre to using it as an additive to some of my specialist mixes to purposely retain a little more moisture – such as for Paphs. However, I know that many nurseries and other growers are still getting excellent results in coco-fibre dominant mixes so the problem may just be the way in which I was using it.

Fringe Materials - As I mentioned earlier, there are dozens of side components that experienced growers use as additives or even as major components. For example: shellgrit, charcoal, fly-ash, pebbles or stones, wine corks, crumbled cork. Over the years, I have tried just about all of them as each wave of “new discovery” swept the orchid grower world. I probably still have half bags of some of the stuff stashed away in the shed somewhere.

Many are useful, and have their place, but none are the new magic potting material that they were once thought to be. However, there is one ‘side material’ I do use in nearly every blend, and that is crumbled styrene foam. I use it in quantities from 10% to 25% in nearly every combination and I am convinced it provides a substantial positive benefit - mainly in improving drainage and air content in the pot.



However, before you rush off to smash up one of those white foam boxes you carry your plants in, or to buy a bag of bean bag balls, let me stress that there are many types of styrene foam. The boxes we all use are very dense, strong foam and unsuitable for this purpose, nor do I like bean bag balls. Their perfect roundness makes them too hard to blend with other components and they seem to have a hardened surface that repels water.



The foam I use is the softer more easily crumbled type that is often used as packing material in glassware, or electrical equipment. However, even this more easily crumbled type of foam can vary a lot. I search out the types made from ‘larger’ rather than ‘finer’ bubbles of styrene, and that can be fairly easily broken up by hand, or shredded on something like a cheese grater etc. **Sheets of soft, coarse foam**

Electrostatic attraction is somewhat of a problem when handling styrene foam, or when smashing up blocks or sheets of styrene, but this can be managed reasonably if you do it directly into a tub of whatever bark or potting mix you are adding it to. The mix needs to be moist and you need to keep mixing the foam into the moist mix as you shred or crumble the styrene. Just take your time.

***Editor's Note: The text in this article is the copyright of Jim Brydie. Many of the pictures are borrowed from the internet. No text or images can be reproduced in any form without permission from Jim Brydie (jimbrydie@bigpond.com).*

Benching Results July Meeting 2017.

Dendrobium Species	Den. Monophyllum	R. Morrison
Dendrobium Hybrid	Den. Autumn 'Super B'	M. Warner
	Den. Graham Hewitt x Rutherford Starburst	W. & M. Southwell
Sarcanthinae Species	nil	
Sarcanthinae Hybrid	Sarc. Confetti	R. Morrison
Bulbophyllum	B. Shepherdii	R. Morrison
Rhizobium	nil	
Aust. Species Other	nil	
Aust. Hybrid Other	Nil	
Terrestrial Pterostylis	Pt. Nana	W. & M. Southwell
	Pt. Nutans	W. & M. Southwell

Terrestrial Evergreen	nil	
Dockrillia	nil	
Terrestrial Hybrid	Pt. Erecta x curta	C. Long
Terrestrial Other	nil	
Caladenia Species	nil	
Australasian Species	Diplodium repandum	G. Steenbeeke
Australasian Hybrid	Dock. Australian Freckles	W. & M. Southwell
	Den. Elenor Chan	N. Bates
Seedling First Flowering	Den. Scheiderae x gracillicaula	G. Steenbeeke
	Den. Botanic Fireworks	W. & M. Southwell
Growing Competition 1	Carol Asquith	R. Morrison
Growing Competition 2	Terry Cooke	Tony Asquith

Plant of the night was Den. Australian Freckles grown by Wal and Margaret Southwell and the Popular Choice was Den. Graham Hewitt x Rutherford Starburst also grown by Wal and Margaret Southwell.

Congratulations

Annual General Meeting July, 2017.

Minutes.

Apologies: Kim Hines, Margaret Southwell, Gordon Bush, John English

Wal read the minutes of previous AGM

Moved T. Cooke Seconded Greg Steenbeeke Carried

No Presidents or Secretary's report.

Wal provided an update on John English.

Treasurers Report: Verbal report provided.... Closing Balance \$4511.52

Moved Carol Asquith Seconded Phil Griffith

Motion Moved "Submit Public Officer Return" Moved Greg Steenbeeke Seconded Phil Griffith

Election Followed conducted by Ross Morrison:

		Nominated	Seconded
President	Wal Southwell	Graeme Morrison	Tony Asquith
Vice-President	Ross Morrison	Graeme Morrison	Terry Cooke
Secretary	John English	Terry Cooke	Wal Southwell
Treasurer	Carol Asquith	Tony Asquith	Terry Cooke
Editor	Tony Asquith	Mary-Anne Warner	Graeme Morrison
Conservation Officer	Greg Steenbeeke	Tony Asquith	Terry Cooke
Show Marshalls	Greg Steenbeeke	Wal Southwell	Mary-Anne Warner
	Carol Asquith	Wal Southwell	Mary-Anne Warner
Librarian	Margaret Southwell	Tony Asquith	Wal Southwell
General Committee	Terry Cooke	Tony Asquith	Graeme Morrison
	Mary-Anne Warner	Graeme Morrison	Tony Asquith
	Graeme Morrison	Wal Southwell	Terry Cooke
	Phil Griffith	Graeme Morrison	Terry Cooke

All elected members declared elected and monthly meeting continued.

Aspirin and Growing Orchids – By Dot Henley

Besides the fun, the good thing about teaching biology for years was learning more. The bad thing is now explaining everything to adults as pitifully explicitly as though they were 16 to 18 year-olds. When I taught, I started the school year with a lab where students diluted aspirin (325mg adult dose) in water and then poured the solution on radishes, oats or other quick-growing vegetables.

The lab never failed. The strong (1 part aspirin to 1,000 parts water) stunted the seedlings; the medium (1/10,000 dilution) groups grew remarkably better than the water control group; and the weak (1/100,000 dilution) grew no better than the water control group.

Students learned that aspirin contains salicin, which is found in the bark of willow trees. Native Americans chewed on willow twigs to relieve headaches, and later botanists found that duck weed and other aquatic plants that grew in willow-edged streams grew better and matured faster due to the salicin. Turn salicin into salicylic acid and voila! aspirin is made. Recent literature indicates that aspirin is also an effective agent in treating some human fungal infections

About a year ago, armed with all this information, I began treating our orchid collection to a weekly dose of aspirin. I found that I could approximately duplicate the good 1/10,000 dilution by adding three quarters of one aspirin (325 milligrams) to 4. litres of water. We have about 2,000 orchids and I used 15 aspirin in a 75 litre hose-end sprayer. In the growing season, I added 6 tablespoons of solid fertilizer and a squirt of Whisk or Dawn. In winter, I used 3 tablespoons of fertilizer.

(Forgive the teacher repetition, but one whole aspirin per 4 litres of water will stunt growth and you may not want to use this system if you have acid water. Our water has a normal pH of 9.0 and the aspirin lowered the pH to 8.6).

Of course, the orchids receive rainwater or tap water as needed during the week

To make 45 litres of fertiliser solution, combine 9 aspirin with 45 litres of water; for 15 litres, add three aspirin to 15 litres of water; and for only 4 litres, dilute one aspirin in a cup of water, discard 1/4 cup of this, and then add enough water to make 4 litres.

Our plants have more flowers, bigger growths and fewer fungal problems since aspirin became part of our culture. The only changes in culture have been the addition of aspirin once a week. Maybe it is the lower pH, or perhaps the magic that thins our blood and stops our aches and pains can also help us grow better orchids.

The other thing I learned that I have used for several years came from a science project done by one of my students. It was not applied to orchids, but the six or so varieties of garden plants tried showed that the highest metabolic rate occurred at 11 am by the sun and that fertiliser and weed killer were best applied at that time. Even half-strength worked as well as full-strength. Fewer chemicals can't be all bad.

Two additional comments from the author: 1. Do NOT exceed the amount given. 2. Do not skip adding aspirin to your fertiliser for more than a couple of weeks. The orchids seem to become addicted to aspirin and pop up with fungal and bacterial spots without their fix. (Found that out after I didn't fertilise or add aspirin after my knee surgery.)

=====