

### Vol 31 No 10 March 2020



NEWS

Anne O'Callaghan Award February 2020 Paphiopedilum concolor Chris

## NEXT MEETING TUESDAY 101 March

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## MINUTES OF THE GENERAL MEETING

#### 11 February 2020 7:45pm

Present: 36 members as per register. Apologies: 11 members. Visitors: Nil. New members: Nil Minutes: Minutes January meeting accepted (Ray, Lynn) Business Arising: Nil Financial Report: Tabled by Adrian. Current balance is \$10,087.99 (Ken, Ian).

#### **Correspondence:**

#### Inwards:

- Email Neutrog Bulletin,
- Emails for Orchids WA AGM (Agenda, reports and Info),
- GCA magazine
- The Orchid Digest.

#### Outwards:

• Nil

#### **General Business:**

- 1. Membership renewals are due. This can be done by EFT.
- Members were invited to nominate for the vacancies on the committee to be elected at the May AGM.
- 3. There was reminder that this month's home visit is at Murray & Arni's home at in Leeming. The time is 4pm (rather than the usual 10am.
- Adrian is investigating the purchase of cork bark from Portugal and asked the members for expressions of interest.
- Ken outlined some of the items for the Orchids WA AGM on the 23rd of February. Besides shortening meeting

notifications from 60 days the 30 days and not having the Chair with a casting vote in the case of deadlocks, the Assistant Secretary and the Events Manager can be delegates and thus can retain their right to vote.

#### Anne O'Callaghan Cultural Award:

Chris for a well grown plant of *Paphiopedilum concolor.* **Raffle:** Courtney, Tom, Ian and Helen. **Name Badge:** Charly

## NOTES FROM YOUR COMMITTEE

- We are always looking for large, flowering size raffle plants. If you have spare divisions that you are willing to sell to us, please let a committee member know. Similarly, you might have friends from other societies that might have spare species orchid divisions - again, please let a committee member know.
- As mentioned at the last General Meeting, we are looking for a Secretary. When there were no nominations last year, Graham agreed to continue for another year. However, he has had this responsibility for many years and we need to respect his wish to pass the job onto another member.
- Please see Ken Jones if you are able to grow on species orchid compots for us. We purchased flasks from Ten Shin Gardens and he gave us several flasks that were showing signs of contamination that have been deflasked into compots..

Vice President: Peter Secretary: Graham Bowden 8 Bedelia Way, Hamersley, 6022. Phone: 9447 4528 e-mail: gmbowden@bigpond.com Treasurer: Adrian Editor: Ken Jones

President: Paul

204 Park Street, Henley Brook 6055. Phone: 9296 1765 e-mail: kcjones@tpg.com.au

#### Committee:

Chris	Michele
Maxine r	Tony
Charly	Mavis

#### Life Members

Graham & Margaret Barry (dec'd) Gordon Maxine Ken & Chris Joan (dec'd) & Ted (dec'd) Trevor (dec'd) Neville Noel & Eva Tony & Mavis Barry (dec'd)

#### Quiet Achievers

- 2013 Ian 2014 Chris 2015 Margaret 2016 Tom & Pat 2017 Charly & Gerda
- 2018 Paul

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# NOTICEBOARD

FORTH-COMING EVENTS

#### Home visits:

At 10 am on the Sunday after the fourth Thursday of each month. Please bring chairs and food to share.

- \* 29 March Catarina, Brentwood.
- \* 26 April Lynne, Belmont
- \* 31 May John, Bicton
- \* 28 June Maxine, Parkerville

### MARKETPLACE - FOR SALE/WANTED

Victor is interested in small Angraecoid species. If you have spare plants, please contact Victor on 9243 1843 or e-mail vnquin@gmail.com.

Nahiid is looking for plants of *Phalaenopsis gigantea*, *Phalaenopsis pulchra*, *Phalaenopsis hieroglyphica* and *Phalaenopsis bellina*. If you have any spare plants of these species, please phone Nahiid on 0415 818 850 or e-mail her at N.Stephens@murdoch.edu.au

Harry would like to purchase the following. Brassavola cucculata Cattleya aclandiae Cymbidium canaliculatum Eulophia petersii If you have spare plants/divisions for sale, please contact Harry on 0412 403 696 or by e-mail to harry.ashton@live.com.au

## MONTHLY PLANT

#### Grammatophyllum scriptum

Country of origin: Vietnam, Moluccas and Borneo

**Description:** large-size, hot to warm growing epiphyte



Photo source: Tony

**Difficulty:** requires specialised conditions, but generally not difficult if they can be provided.

#### Cost: \$5.00

*Grammatophyllum scriptum* [Lindley]Blume 1849, common name the Written Grammatophyllum is a large to giant sized, hot growing epiphyte. It can become a huge plant, and is found in Borneo, Lesser Sunda Islands, Moluccas, Philippines, Sulawesi, Solomon Islands, Bismark Archipelago, Papua and New Guinea, Fiji and Santa Cruz Islands.

This month's plant has been provided by Tony and the photograph of the flower is his plant. Tony made a selfing of this plant which was flasked and then grown on. This species has laterally compressed pseudobulbs carrying 5 to 8 broad, dull green, basally clasping leaves. It flowers on basal, 120 cm erect to arching, many flowered inflorescences on mature pseudobulbs. This species often has imperfect flowers at the bottom few rows and as many as 100, waxy, colourful, heavy textured flowers in late spring or early summer. It is a low elevation orchid, often growing at sea level to 100m and always close to the coast, overhanging beaches, lagoons, and in coconut plantations on tree trunks and branches in bright light.

This is a robust and large orchid, however it is susceptible to soft/water rots that can spread rapidly through the plant, so good air movement, and care when watering is important. As a hot-growing species, *Grammatophyllum scriptum* requires protection during our cold and wet winters., and humidity during dry, hot summers.

#### DEFLASKING ORCHIDS © Kevin Western

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P.O. Box 276, Blackwood, S.A. 5051

Mob 04120 642 215. Email kevin@westernorchids.com.au

Kevin was invited to come to the Spring Orchid Fair, September 2019 and conduct workshops on deflasking. Unfortunately, at the last minute, he was unable to attend

#### PREAMBLE

Deflasking is the name given to the process where seedlings or clones that have been growing in a tissue culture flask are removed from the flask and transferred to grow on in pots of suitable growing medium and cared for under suitable conditions, or where they are taken from the flask and fastened on to suitable mounts and cared for under suitable conditions.

While in the flask, the small orchid seedlings or clones experience sterile growing conditions and quite high humidity, and there is a popular and absolute misconception that these sterile and humid conditions must be maintained upon their removal from the flask. This is NOT the case and this misconception generally results in the death of those plants.

The flasks of medium and orchids must be sterile because, if they weren't, bacteria and fungi, so commonly found absolutely everywhere on this planet, would take over the medium, poison the medium and take over and destroy all the orchids in the flask.

In nature, orchid seeds are actually germinated by special, naturally occurring fungi and actually depend on them to survive at first. There is no need, repeat; no need to attempt to raise your seedlings in an imaginary microbe free state brought about by applying fungicides or anti-bacterials to them after deflasking. I suspect a lot of failures are at least partly due to the use of such treatments.

It is obvious to anyone examining a flask that the environment within is very humid. There are recondensed water droplets on the inside of the flask. True it is humid but that just happens because the medium is about 90 - 97% water and some evaporates and then condenses on the glass, runs back down to the medium and evaporates over again and so on. The humidity is unavoidable and is not brought about by any contrived process other than the laws of nature. The seedlings don't need to have near 100% humidity after deflasking. The rubbish that some people will advocate that after deflasking, those seedlings continue to need to be kept in near 100% humid environment. Not so at all in most cases. Most will be fine in your regular growing area unless it's particularly inhospitable. Conversely some of the known difficult genera such

as *Phragmipedium*, multifloral *Paphiopedilum*, and *Dendrobium cuthbertsonii* may initially benefit from a mini greenhouse or cover over the pot.

Another problem of significant concern is that a great many orchid tissue culture laboratories can't or don't bother to grow their seedlings or clones to a decent size or stature for deflasking and this is a particular problem where, even if you have ideal conditions and practices for deflasking and growing them, they are almost certainly doomed to failure because they are so puny. We see lots of flasks from other labs where the seedlings are just 'elongated pieces of green spaghetti with the occasional leaves on them'. Avoid purchasing such rubbish. Those laboratories don't know how to do their work properly. Avoid those also who produce flasks with many tens to 100's of cramped, tiny seedlings per flask as they will all die – expect 100% death. Better to pay the same or more for flasks containing less but sturdy, well-formed seedlings where near 100% survival after deflasking is probable.

It is possible to grow 30-40 Cymbidium seedlings or clones to a good size and stature in a 750mL flask containing about 160-180mL of medium with most plants doing very well and OK for deflasking. Conversely only 12-15 Sarcochilus seedlings will grow to ideal deflask size and stature in exactly the same flask. Cattleya and Phalaenopsis fall somewhere in between, while the Oncidium alliance tend to be like the Cymbidiums.

#### TIME TO DEFLASK

Most epiphytes can be deflasked just about any time of year in a fairly high proportion of cases but there are more ideal times of year than others and it is best to deflask if possible when the plants would be coming into active growth. All orchids have distinctive seasons in nature, these should be observed for optimal results. "Google it". It's not always intuitive as to which season is best. Some experimentation may be necessary. If in doubt, the start of their growing season may be best. Some prefer to be deflasked during winter so they can toughen up without drying stress to slow them down. Some will be guaranteed to die if deflasked in winter and prefer a mid-Spring deflask or perhaps a bit later so they will get under way quickly. The terrestrials and deciduous orchids such as Catasetum alliance do best only when deflasked while they are really in active growth in the flask which is late spring – early summer for us. They also must be of good size and sturdy plants in the flask to have high survival at deflasking. Best check with someone in your area who has already been successful in deflasking them or do lots of research and relate that to your own conditions.

Ignore the idiots who preach that if the flask is so jostled during postage to you that the agar will burn the leaves – this is absolute bullshit to put it mildly and such persons need to be completely ignored! More bull is to leave the seedlings in flask under poor light and so long that they start to go backwards and then deflask them. That's a formula for failure.

#### Harry Brassavola nodosa Sarcochilus eriochilus Vanda falcata

Lynn Dendrobium bigibbum

Chris Paphiopedilum concolor

Charly & Gerda Phalaenopsis cornu-cervi 'Red'

Ken & Chris Bulbophyllum arfakianum Cattleya gaskelliana alba Cattleya x guatemalensis Dendrochilum (unknown) Octomeria grandiflora Pescatoria ecuadoriana Adrian & Dee Brassavola nodosa Stanhopea inodora

Norm Encyclia megalantha

Siva Cattleya araguaiensis Phalaenopsis bellina

# PLANTS DISPLAYED February 2020



Stanhopea inodora Adrian & Dee



Phalaenopsis bellina Siva



Pescatoria ecuadoriana Ken & Chris

# PLANTS DISPLAYED February 2020



Cattleya araguaiensis Siva



Octomeria grandiflora Ken & Chris

Photography by Tony

#### DEFLASKING - THE PROCESSES

#### REMOVAL FROM FLASK

Conical flasks or flasks that have necks significantly smaller than the rest of the flask require smashing the flask to get the seedlings out. I wrap them in newspaper and break the glass with a hammer to get them out. I won't use that type of flask for that very reason

and for other reasons.

Plastic imitation Whiskey bottles so commonly used by Asian laboratories can just be cut open carefully to get your seedlings out.

Ceratocentron fesselii flask

My own flasks/jars have a neck that is only a little smaller than the plug of roots and medium so they





generally slide out quite easily. Occasionally Sarcochilus seedlings in particular will have made such an extensive root mass that they won't slide out without damage so I then wrap in newspaper and break the flasks in those instances.

Adding water to the flask makes removing the seedlings much easier and depending on what your tap water supply is like, or rain water of available is good for the process.

Unless you are deflasking truly tropical orchids and your water supply is very cold, there is no need to use tepid or warm water as the plants may naturally be accustomed to that water temperature in their native habitat anyway.

#### REMOVING AGAR AND POTTING UP

Washing the agar/medium off the roots is easily done using the water supply and a hose fitted with a typical garden watering gun. I set it to "shower' or 'flat' for good results.

Just hand hold the plug of plants and agar or put it in a wire mesh basket lined with 50% shade cloth and gently to vigorously, depending on the hardiness of the seedlings concerned, blast the agar away. Getting rid of most of the agar seems preferable because rats, mice and other critters can be attracted to the smell of the agar and come and damage your plants for you. Any difficult to remove agar may best be left in place rather than risk excessive damage to the root systems. A small amount of damage to leaves or roots will not have significant impact on their survival but is best avoided if possible.

Generally, try to tease the seedlings apart from each other before grading them according to size and stature for potting up or mounting but in some cases it's obvious that attempts to separate them will do more damage than good, so just plant them all in a community pot and separate them after a year or so of growing together. The epiphytes that must be grown on mounts are rarely too tangled together to be separated but if they are, then remove any dead ones and put the plug of seedlings on a pad of sphagnum moss in a tray about 120mm deep and place that under good light and suitable air movement to harden off and be separated later on. Remember to fertilise them regularly with liquid fertiliser so they can grow.

From now on the aim is to protect them enough so they don't dehydrate and perish, to give them enough light to start to grow but not so strong that they are burned by it, enough water that they remain properly hydrated but not so much that they rot, enough protection from drying but not so humid that lack of air movement leads to rot, medium or mount material that you know will grow that species or genus or family of orchids and weak, balanced fertiliser at each watering so they have some nutrition to grow on.

A hot-bed may be of value at first but is not necessary in most cases. Commercial nurseries are likely to use these to hasten growth to saleable size but you may not need to do so.

No fungicides or antibacterials are needed. If you need them you're doing it wrong! In my opinion, if you need to use antifungal or antibacterial sprays to control rot in deflasked orchid plants, then your growing conditions for the deflasked seedlings need to be improved or you are just shutting the gate after letting the horse bolt in the first place.

Some growers swear that the use of products such as "Envy' or 'Vapour Guard' are essential in getting their deflasked seedlings to survive but I don't find that is so. However, if you are convinced of their value then remember to dip the leaves and bulbs only but don't dip the roots as this will prevent them from taking up moisture from the mount or the potting mix. Some seedlings just seem to attract mites and other nasty

critters. A puff of surface spray or a systemic pesticide may be needed if a problem arises.

When deflasking, the aim is to provide a sufficient level of protection immediately after deflask to support the seedlings while they harden up, and having them growing alongside their peers, wherever they are being grown, in the shortest time possible without killing them from rot or dehydration, over or under fertilising or lack of light and air.



Compots deflasked January 2020 by Kevin Western



#### POTTING MEDIUM

I generally do very, very well using good sphagnum moss to pot up the deflasked seedlings:- Sarcochilus, Cymbidium, Oncidium alliance, Zygopetalum alliance, Stanhopea alliance and numerous other, normally pot culture loving orchids. So good in fact that Sarcochilus seedlings grown to decent size in the flask and taken out in late February to very early April here in the southern hemisphere and put straight away into the Sarcochilus shade house under good sun light may produce flower spikes and flower in the same year. Sphagnum is expensive but first year survival and growth is very good and at first repot they then go into whatever you find cheapest and best for the genus concerned.

If sphagnum moss is used, then you must ignore the completely idiotic suggestion to use tightly packed moss. I find that just enough well teased and then very loosely packed moss to just support the seedlings gets absolutely excellent results. Potting up can be as a community pot or in single pots depending on the size and stature of the seedlings involved.

Generally, any potting medium that suits mature plants of the same species, genus or family of orchids should also be ok for your deflasked seedlings. Perhaps a slightly finer grade is better at first.

#### MOUNTING ORCHIDS

Some genera seem not to grow in any situation except when mounted. Some prefer to be mounted direct on to naked cork with all roots in contact with the bark or other suitable material while others want only the terminal 1-3 cm of the roots tied to the mount and the plant itself not in contact with the mount at all. Some prefer to be mounted over a pad of live moss. Some prefer to be mounted with a pad of moss over their root system. Unfortunately, what the plants prefer in your environment will only be discovered more or less by trial and error. Reference to successful growers in your area may be of help.

*Ceratocentron fesselii* mounted on natural cork immediately after deflasking



#### FERTILISING

This is a very personal thing and will depend on what is giving you good results already. They must be fertilised and ideally quite regularly to have any chance to survive and grow quickly for you.

In my opinion, Sphagnum moss must only be fertilised with weak soluble fertiliser solutions as the use of solid fertilisers such as blood and bone, chicken manure based products or slow release, pellet type fertilisers seem to be an absolute disaster with sphagnum.

Conversely, typical bark, coconut, perlite, vermiculite, etc., potting mixes don't suffer that problem and normal fertilising can be done according to your previously successful experiences.

Always remember frequent weak fertilising seems safest. For soluble fertilisers, don't exceed 500 ppm; that is about one level teaspoon of products such as or similar to Aquasol, Thrive, Campbells products etc. per 10 litres of rain water.

My own experience with Campbells "19 Carat" fertiliser has been good where 4-5 waterings are done with that then the next with a 50/50 mix of Calcium Nitrate/ Magnesium Nitrate mix at the same rate for the next watering then back to the "19 Carat" and so on. This provides absolutely everything the plants need. Occasional use of Seasol and Power Feed at about 1/4 the minimal recommendations on the packs seems to be quite beneficial too.

GENERALLY IF YOU HAVE PROBLEMS CHECK :-

- DOES YOUR WATER SUPPLY HAVE TOO MUCH IN THE WAY OF DISSOLVED SALTS TO BE USED TO PREPARE FERTILISER SOLUTIONS.
- WERE SEEDLINGS TOO SMALL FOR SUCCESSFUL DEFLASKING
- WAS/IS IT THE RIGHT SEASON / TIME OF YEAR TO DEFLASK
- WERE THEY KEPT TOO HUMID
- WAS THERE ENOUGH AIR MOVEMENT
- WAS THERE ENOUGH LIGHT
- WAS THE FERTILISER TOO STRONG

ONCE YOU GET THESE FACTORS UNDER CONTROL IT WILL BE EASY TO HAVE HIGH SUCCESS LEVELS WITH DEFLASKED ORCHID SEEDLINGS.

## **ABOUT US**

#### **Monthly Meetings**

Monthly meetings held on the 2nd Tuesday of each month at Wilson Community Hall, Braibrise St, Wilson commencing 7.45 pm. Usually, the short formal meeting is followed by plant descriptions given by members. Supper follows to allow member's time to socialise and discuss orchids. All visitors are very welcome

#### **Membership Fees**

**Family** \$30 PA + 2 badges (1<sup>st</sup> year only) [Badges come in two versions. Pin fastening (\$11.50) or Magnet fastening (\$13.50) *Please indicate your preference.*]

**Single** \$20.00 PA + 1 badge (1<sup>st</sup> year only) [Pin fastening (\$11.50) or Magnet fastening (\$13.50)] New members who don't live in Perth will not require name badges, therefore membership will be at the

#### renewal fee only Monthly Home Visit

On the weekend following the fourth Thursday of each month (generally on the Sunday morning), a home visit is held at a member's home. This gives members an opportunity to enjoy the fellowship that our mutual interest provides, and to see how others go about growing their orchids.

#### **Monthly Plant Display**

Given that the prime objective of the Society is to promote the cultivation of species orchids, only species or natural hybrids are acceptable for display. Since we all may be uncertain about the identification of a plant from time to time, we encourage members to bring plants along about which they are unsure since someone may be able to identify them. There is no competition nor restriction on

flower count, quality or length of ownership. We want members to be able to see species plants in flower. So even if your flowers are a bit past their best, bring them in as others may not have seen that species in flower.

#### **Plant Sales**

The Society provides an opportunity table for members to sell surplus plants and equipment, and for the Society to sell product from time to time.

#### **Plant Purchases**

The Society endeavours to obtain a different species seedling for sale at each meeting, usually costing between \$6.00 and \$15.00. The Society makes a small profit on these sales which is invested in benefits to members. As it is always difficult to get new or different species, should members have 20 or more plants of one species which they feel might be suitable as a monthly plant, please contact a Committee member.

The Society conducts a raffle each meeting and at home visits as a means of generating funds.

#### Management

In accordance with the Constitution, the Annual General meeting is held in May each year at which time the office-bearers and committee are elected. The majority of Committee members serve two year terms. If unclaimed, return to The Editor 204 Park Street, Henley Brook WA 6055

## Next meeting Tuesday 10 March