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Anne O’Callaghan Award May 2018
Phalaenopsis gigantea
Lina

NEXT MEETING - TUESDAY 12 June
MINUTES OF THE GENERAL MEETING
8 May 2018 7.50pm

Present: 34 present as per the register
Apologies: 12 as per register
Visitors: Nil.
New members: Nil
Minutes: Minutes April meeting accepted (Ray, Paul)
Business Arising: Nil
Financial Report: Charly provided the financial report. Current balance is $3,084.03 plus $6,000 in term deposit. (Jacqui, Ray)

Correspondence:

Inwards:
- GCA – Certificate of Currency & Our Gardens,
- WAROO – affiliation and a report,
- AOF – Newsletter,
- Lotterywest – grant conditions

Outwards:
- Lotterywest - acceptance of grant conditions.

General Business:
- Adrian gave a farewell address as it was his last as President.
- Reminder that our silent auction is to be held during the June GM.
- 22 people have nominated for the 17th of June Anniversary dinner. The menu was circulated.
- Foliar nematodes were discovered in the Columbian plant shipments and the treatment to be used costs $11 per plant and will probably kill the plants.
- The cost ($1,491.04) published for the new printer includes a full set of extra ink cartridges.
- Over $200 was spent on plants from the auction. Chris, Ken and Graham will divide them up for repotting.
- John Brogan will present a talk to the Society at its September meeting.
- Adrian and Paul will construct our ISODW display this weekend. Lists of plants which may be in flower for display or for sale should be sent to Ken for label preparation.
- As from its meeting in April the WAROO is now named Orchids Western Australia. Members will visit the Bunbury Society to update its members on the WOC. There will be a display at the AOC in NSW. New rules have been written for OWA. A website is being professionally constructed. Ron Fauntleroy is the OWA conservation officer.

Anne O’Callaghan Cultural Award:
Awarded to Lina for a large flowering Phalaenopsis gigantea that she ordered and purchased as Phalaenopsis bellina!


Name Badge: Adrian & Dee

NOTES FROM YOUR COMMITTEE
• The plants imported from Colombia have now been destroyed as the treatment option was withdrawn.
• The Silent Auction will be held at our June General Meeting. Please bring along any spare orchids that you are able to donate (including hybrids).
• The Species Society is the host for the 2018 Intersociety Orchid Display and Workshop to be held at Morley Recreation Centre on 3-5 August 2018. Please add your name to the roster sheet. A combined sales table will be in place- please see Ken or Charly if you wish to sell orchids.
• All donations to the ISODW raffle will be gratefully accepted as this is one of the major fundraisers.
• The Spring Orchid Fair will be staged on the weekend 15-16 Sept., (set up on Fri 14th evening) at Aranmore college in Leederville. SOSWA is one of the four societies jointly staging this event. We will refresh the ISODW display for this event. If you wish to sell orchid plants at this event, please see Ken or Charly.
• Thanks to Adrian for accepting nomination as Treasurer, Paul as President and Peter as Vice-President.

Quiet Achievers
2013 Ian
2014 Chris
2015 Margaret
2016 Tom & Pat
2017 Charly & Gerda

Life Members
Barry (dec'd)
Gordon
Maxine
Ken & Chris
Joan (dec'd) & Ted (dec'd)
Trevor
Neville
Noel & Eva
Tony & Mavis
Barry (dec'd)
NOTICEBOARD

FORTHCOMING

Home visits:
At 10 am on the Sunday after the fourth Thursday of each month. Please bring chairs and food to share.
* 1st July - Catarina, Brentwood.
* 29th July - Chris & Ken, Henley Brook.
* 26th August - Lina, North Perth.

FOR SALE/WANTED

Victor wants to acquire a plant of *Rossioglossum grande*. If you have a spare plant, please contact Victor on 9243 1843 or e-mail vnquin@gmail.com.
The following article by Charly was written as part of the requirements for the Judge Training program and to address requests that he has received from growers to provide information about how he grows his Bulbophyllum species. Much of the content is not only relevant to us as species orchid specialists, but applies to the culture of orchids generally.

In 2017, Charly received a First Class Certificate for his plant of Bulbophyllum Kairit Vejvarut to which he has given the grex name of 'Gerda'.

Charly also received the AOC West Australian Hybrid of the Year Award 2017 for this plant.

This is a significant achievement and one that we can share with Charly and Gerda, even though the awarded plant is not a species.

Editor.

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Growing *Bulbophyllum* orchids

By Charly

A number of members have asked me to write about my growing methods for *Bulbophyllum* orchids I am pleased to share information about the techniques and conditions I now use. Before starting, I would like to say that my growing conditions may not be perfect, nor the same as yours, and that each grower has his or her own ways and unique conditions to achieve success. In recent years, I have concentrated on *Bulbophyllum* orchids and over time have learned not to slaughter too many. In fact over the last year my mortality rate was zero, a big improvement on previous years.

I would like to thank Bill, Ken Jones and Kirsty for their help in enabling me to become a better *Bulbophyllum* grower. They may not be aware, but they have influenced me in many of the decisions I have made.

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This article is written in the hope that the odd idea or two of mine may be of help to other members to successfully grow this beautiful genus, *Bulbophyllum*. I am also writing this in the hope that perhaps other members will also share information about how they successfully grow other orchid genera as I know that I still have a lot to learn.

*Bulbophyllum* orchids can be grown in many different ways, and all the growers I know do just that; some with excellent results and some not so good. Here is a simple example. About a year ago I was given a *Bulbophyllum* and judging by its growth, it looked like a one-year old plant. However the label was dated 2007. So, this 10-year old plant had not progressed past one-year’s growth. In comparison, I bought a *Bulbophyllum* from Bunnings in July 2016. It had two leaves, one of which was damaged as it did not fit into the tubing it came in. After just 2.5 years, it has 15 fully grown leaves, seven new leaves sprouting and one flower spike which opened before this article was published. The difference in these two orchids is that the plant from the tube was grown with my methods and under the conditions that are described in this article.

Where do I grow my Bulbophyllum?

I grow all my *Bulbophyllum* orchids in a small hothouse, about 9 square metres. The frame is made of patio tubing and covered with UV treated bubble wrap. The roof is covered with laser light sheeting. Inside the hothouse there are two orbital ceiling fans, a heater, an evaporative air-conditioner, a humidifier and for winter, a greenhouse fan heater.

**Air Circulation**

Orchids don’t like stagnant air so two orbital fans run 24/7 to prevent fungal problems.

**Heating and Cooling**

*Bulbophyllum* orchids like warm but not hot conditions. My hothouse environment is such that even on the coldest winter night the temperature
will not be lower than 15°C and in summer the maximum temperature will not exceed 33°C. An evaporative cooler is installed to make sure that 33°C maximum can be maintained. It operates on a thermostat and switches on at 33°C and off again at 31°C. In addition to keeping the temperature almost constant, it introduces fresh air into the hothouse. As a simple test in summer, feel the leaves and if they are not cool to the touch then it’s time to find a way to cool it down. Misting or spraying with water will do the trick.

**Humidity**

The optimum relative humidity for *Bulbophyllum* orchids seems to be about 70%. To achieve this, I have two humidifiers. One is installed outside the hothouse and the other is in the hothouse itself as a backup in case the external unit fails. Early in the mornings the humidity reading is about 80%, after watering 95% and then it will slowly decrease to about 70%, at which point the humidifier will switch on keeping the relative humidity between 70% and 75%. In the late afternoon it will start to slowly rise again to about 80%. On hot and dry summer days I increase the humidity to 75% to 80%. The humidifier is operated by a humidistat and thermostat. Since most growers do not have commercial humidifiers, I suggest placing a shallow dish under your pot filled with 1-2cm of water. *Bulbophyllum* orchids do not mind having their feet wet.

**Rainwater**

I have a 5,000-litre rainwater tank used for watering my orchids and humidifying my hothouse. It is quite amazing how much water the humidifier uses. My observation is that it uses at least 1/3 of my available 5,000 litres over a 6-month period; principally between October and March. I have now installed another 3,000 litre rainwater tank to ensure that I have enough water for these months.

**Watering**

**Water pH**

From my water tank I pump the water into two 60-litre rubbish bins. In those two bins I add enough Hydrochloric acid (HCl) to lower the pH to between 6.2 and 6.5. Only very small amounts of HCl should be added at a time, and care needs to be taken when using highly corrosive chemicals like acids. I check the pH with two different pH meters to ensure that I have the desired pH levels. Why do I use two different pH meters, you may ask? In my experience, these electronic probes are prone to error and need re-calibrating monthly; a very annoying but necessary task.

Why do I use HCl acid and what is it good for?

Well, it has all to do with the uptake of nutrient. Every nutrient has an optimum pH at which it can be readily absorbed by my orchids (see table overleaf). Since almost every nutrient has a different optimum pH for plant take-up, I find that a pH of between 6.2-6.5 is the most effective for a broad range of nutrients.
Ian
Zygopetalum mackayii

Ken & Chris
Bulbophyllum rothschildianum
Cattleya labiata
Dendrochilum cobbianum
Dendrochilum hampelii
Restrepia falkenbergii
Restrepia sanguinea

Adrian & Dee
Dendrobium bigibbum v
Laelia rubescens
Paphiopedilum henryanum

Bruce
Cattleya percivaliana

Lina
Phalaenopsis gigantea

Victor
Cattleya percivaliana

Norm
Liparis condylobulbon
Paphiopedilum henryanum

PLANTS DISPLAYED May 2018

Laelia rubescens
Adrian & Dee

Paphiopedilum henryanum
Adrian & Dee
PLANTS DISPLAYED May 2018

Zygopetalum mackayii
Ian

Dendrochilum hampelii
Ken & Chris

Cattleya percivaliana
Bruce
Victor

Photography by Tony
**Applying water**

For hand watering, I use a 5-litre pressure pump (from Bunnings). However as the nozzle was too fine for my purpose, I have enlarged the opening with a 3mm drill bit. I wanted lots of water since the *Bulbophyllum lobbii* baskets (40cm x 40cm) need almost 1 litre of water.

As I water very early in the morning, (about at 6:30am) the water temperature is not very friendly for *Bulbophyllum* orchids. The optimum temperature seems to be 25°C to 30°C (no higher). To achieve this, I put about 4 litres of water in my container and then add about 1 litre of boiling water from a kettle, checking with a thermometer that the temperature is between 25°C and 30°C. This aspect of watering is very important. Cold water on a new leaf tip or flower spike can turn this very tender growth black and kill it overnight (see photo following page).

This has happened to me more than once since I began growing *Bulbophyllum* orchids. However, once I increased the water temperature to 25°C to 30°C it did not recur. This also applies to seedlings. Using cold water, I experienced a 90% mortality rate. Since using warm water, the mortality rate has decreased to just about zero (not perfect but close).

There is one more benefit from using warm water. Due to the water-holding capacity of the sphagnum moss that I use (see later notes on media) and the strong air circulation throughout the night, the water in the moss gets very cool. This is not a desired
environment for the *Bulbophyllum* roots. So, when I water in the morning I expel the cold water and replace it with warm water. As I am watering from the top of the basket or pot, I place my hand underneath to feel the cold water running out being replaced by warm water. It’s like waking them up with a nice warm shower. You wouldn’t choose to have a cold shower on a cold winter’s morning!

**How often do I water?**

Last but not least. Salt is the enemy for all of our orchids. While I constantly try to avoid salt building up in my mix, this cannot always be avoided. Salt dissolves easier and faster in warm water than in cold water. So to my way of thinking, having warm water may help to flush out the accumulated salt from the moss. For this reason, I water almost every day. Not because my *Bulbophyllum* orchids need water every day, but to keep them warm and flush out any salt at the same time.

Some believe if you water your orchids in the morning, they will dry out by evening, a requirement for growing many species of orchids. However, in my experience this does not apply to *Bulbophyllum* orchids. I have found that you can water your plants at any time. They won’t hold it against you, if you have the right conditions and you use warm water. It is also a tremendous help to your *Bulbophyllum* orchids if you stand your pot into a shallow dish with 1 or 2 cm of water in it.
I do not seasonally change my watering regime - I have the same regime year round.

**Fertilizing**

Every package or container of fertiliser includes instructions as to how much you should use. I tend to ignore most of it, because none of it gives me the information I need and that is - HOW MUCH SALT IS IN MY WATERING CONTAINER WHEN I FERTILISE MY PLANT? How do I determine that?

My EC (Electrical Conductivity) meter measures the salt content in the water. Before adding any chemicals or fertiliser, the reading for my rainwater is 0.22 when in a perfect world, it would be zero. When the rain runs off my roof it picks up salts. .22 is an acceptable level of impurities as the recommended maximum salt level for our orchids is 0.80.

I can therefore add fertilizer to my 5 litre container until the EC meter gives a reading of 0.80. However, some fertilisers can significantly change the pH because they are acidic or basic. My fertilizing regime for the months of November and December was:

01/11/17  Calcium Nitrate 1 level Tea Spoon/ 5 Litre
05/11/17  Bill's Best 1 level Tea Spoon/ 5 Litre
09/11/17  Omegazyme 1.5ml/L pH adjustment 6.5ml
13/11/17  Humibossta 0.5ml/L 2.5ml
07/11/17  Ezi-Root 10ml/ per 5 Litre
21/11/17  Epsom Salt 4grams/ per 5 Litre
25/11/17  Hygenseaessentials 3ml
29/11/17  Calcium Nitrate 1 level Tea Spoon/ 5 Litre
03/12/17  Bill's Best 1 level Tea Spoon/ 5 Litre
07/12/17  Omegazyme 1.5ml/L pH adjustment 6.5ml
11/12/17  Humibossta 0.5ml/L 2.5ml
15/12/17  Ezi-Root 10ml/ per 5 Litre
19/12/17  Epsom Salt 4grams/ per 5 Litre
23/12/17  Hygenseaessentials 3ml
27/12/17  Calcium Nitrate 1 level Tea Spoon/ 5 Litre
31/12/17  Bill's Best 1 level Tea Spoon/ 5 Litre

(Note—1 teaspoon = approx. 4 grams or 5 millitres)

From my list of fertilisers you can see that most of the amounts are very small but I fertilize every 4th day. Before fertilising, water first or you can risk root burn. The reason for my rotation of the fertiliser available is simply the fact that I do not trust the chemical
content labelling on the containers. By rotating I even out any inconsistency in the labelling

Potting *Bulbophyllum* orchids

I use 3 very distinct potting methods for my *Bulbophyllum* orchids.

**Method 1 - Deflasking**

Let’s start off with the deflasking mix and deflasking itself. Again use warm water at 25°C to 30°C to clean the seedlings after removing them from the flask. After washing off the agar, I put the seedlings into a bath of warm water, with 1 teaspoon of Bravo Weatherstik Fungicide (Chlorothalonil) for about 5 mins. This is a precautionary process in case they are infected and also protects them from any fungi they might be exposed to during the deflasking process. After the fungicide bath they go into a warm water bath with 1 teaspoon of EziRoot for about 10 min. EziRoot contains hormones to promote root growth. I compost the seedlings into a container with 50% fine (4-6mm) bark, 25% fine (5mm) perlite and 25% fine (5mm) charcoal. I soak this media in warm water for about 30 min to make sure that the bark is very well soaked (most essential). This is the only time I use bark.

The seedlings should have grown enough in 12 to 18 months to be transferred into individual pots. The photo to the left shows 5 plants that I deflasked in April 2017 with this photo taken early April 2018

The photo below and on the following page show the extent of pseudobulb, leaf and root growth when the five plants were removed to be potted into individual pots.

What is most pleasing to me is the new active root growth (see overleaf).
Method 2 - Repotting

This process will be used several times in the early life of the plant, until it eventually ends up in a basket because there is simply no pot available large enough to accommodate a fully grown *Bulbophyllum*.

I put a layer of Styrofoam packing donuts in the bottom of the pot and then press moist to wet sphagnum moss to about ½ to ¾ of the way up the pot, depending on the length of the roots. My aim is to have the finished plant above the rim of the pot so that new growth can easily spread over the edge of the pot and is not restricted by the side of the pot. With the pot ½ to ¾ full with compressed moss the plant goes in and more moss is added to each side of the plant until the plant is stable. As the plant outgrows this pot, it will be repotted into a larger pot in the same way.

Continued next month
ABOUT US

Monthly Meetings
Monthly meetings held on the 2nd Tuesday of each month at Wilson Community Hall, Braibrese 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 (1st 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 (1st 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.

Raffle
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.
Next meeting Tuesday 12 June