#### **11. POPULAR VOTE AT THE APRIL MEETING**



Popular Vote at the April General Meeting was awarded to this *Dendrobium bigibbum* Congratulations

to

**Helen Seiver** 



#### **12. BEAUTIES FROM THE APRIL BENCHING:**



Miltoniopsis Rene Komoda 'Pacific Cloud' Owned by Paige Sinclair



Vanda Somsri Glory 'Blue' Owned by Peter Gough

## 13. MORE AUTUMN SHOW SHOTS:



Den. bigibbum-Helen Seiver



Clowesetum Elizabeth Anne Gallagher - Paige Sinclair

# CHOS AUTUMN SHOW RAFFLE RESULTS

#### 00000000

| IST PRIZE— | Red ticket B68 |
|------------|----------------|
|            | Marion Brooks  |
|            |                |

2ND PRIZE— Black ticket B46 Sue Flanders

Raffle prizes are sponsored by Bruce Hall. Thanks to Bruce for his donations

## **14.** Coffs Harbour Orchid Society Facebook

**By Paige Sinclair** 

April 2023 – Currently, the Coffs Harbour Orchid Society has 682 likes. This is up by 8 people from March 2023. The images below show a range of insights. Additional, the photos, on both pages have been changed to the Grand Champion and the Reserve Champion of our Autumn Show 2023.



#### 15. SPONSORS' SPOT: .

#### **SHEARWATER RESTAURANT**

## **'UNMATCHED WATERFRONT DESTINATION'**

Welcome to Shearwater Restaurant, offering you cherished moments alongside friends and loved ones within our serene, tucked-away location on the water's edge of the scenic Coffs Creek. With mother nature's panorama serving as the backdrop to the marvellous food and beverage creations we serve, time spent at Shearwater is a community treasure, worth sharing. Atop our weatherproof balcony, for an experience well-remembered. Indulge in the fruitful creations of our virtuous chefs and bar staff after work, over the weekend, amidst the holidays, or during your lunch break. Brekkie and Modern Australian dishes in a bright, upscale location with outdoor tables and lovely views over Coffs Creek.



321 Harbour Drive, Coffs Harbour.



www.shearwaterreastaurant.com.au or Phone 6651 6053.

#### SUPPORT THEM AS THEY SUPPORT US

<u>EDWARD PEARCE COELOGYNE BREEDING PROGRAM</u>: Past CHOS President, Ed Pearce, was an enthusiastic grower of the Orchid Genus Coelogyne. Ed carried out a large number of crosses between Coelogyne species and produced numerous seed pods which were then germinated in a laboratory and grown into seed-lings. Before Ed passed away, his wish was that members of the CHOS receive one or more of his seedlings once they reached a suitable size. The Committee hopes to distribute these at future monthly meetings.

# **16. Miltoniopsis Orchids** A beauty for your collection

Miltoniopsis are also known as pansy orchids. They are cool-growing orchids that originate in the higher elevations of the Andes in Colombia, Panama and Ecuador. The warmer-growing species, properly Miltonias, originate from the Minas Gerais area of Brazil and more closely resemble large-flowered Oncidiums. Their flowers can be brilliantly patterned. Light should be relatively shaded. Direct sunlight burns the thin leaves within a short period of time. However, the warmer growing types prefer more light than their coolergrowing relatives. Temperature is critical for the cool-



growing plants. Unless temperatures are kept under 26C, they may not flower. The minimum temperature is 10 to 12C. The warmer growers will take temperatures over 32C as long as humidity levels of 70 to 75 percent, or higher, are maintained. The minimum temperature is 15C. Water must be plentiful and the medium must drain perfectly. In their native habitat, the plants are drenched almost daily and, because of this, they are intolerant of salt build-up, so leaching every fourth or fifth watering is important when growing in pots. When they are not getting enough water or humidity, the leaves have a tendency to grow with accordion-like pleats. The warmer-growing Miltonias should be grown like Cattleyas; allow them to approach dryness between watering. They also tend to be slightly more tolerant of salt build-up than their Colombian cousins so they can dry more between watering. Humidity must be at least 70 percent because of the plants' need for abundant water. Less humidity will stress the plants and can lead to susceptibility to disease, though too much humidity is worse than too little. Fertilize at the same level as other orchids: half-strength, balanced fertilizer every two weeks. This can be reduced by half during overcast weather or in winter.

Potting should be done after flowering when the new growth is starting. Miltoniopsis should be repotted every year as they are intolerant of stale conditions. The cool growers do well in small pots. The warmer growers tend to have a relatively elongated creeping habit and, therefore, do better mounted. Any potting mix suitable for fine roots such as 6-9mm Orchiata bark with charcoal and perlite or tree fern substrate. Mounts may be cork, tree fern or other hard wood. They should be longer than wide. Over-watering symptoms include lower yellowing of leaves, a rapidly declining stem, flower loss and a rotten base (pseudobulbs). These issues are commonly down to either: too much soil moisture, an incorrect soil medium, too little light, or foliage that has allowed to remain wet for long periods.

This article has been previously published by Orchid Den and used here with their permission.

<u>ORCHID DEN</u> specializes in the sale of orchid growing supplies, fertilizers and potting mixes. We have a great range of orchid growing products, these include: orchid pots; fertilizers; specialty orchid potting mixes designed for each different type of Orchid genera; and numerous accessories. Our products are suitable for all potted plants. Our fertilizers are suitable for the whole garden. Check out the website.

Website: www.orchidden.co.au





**17. NEW SUPPLIES OF ORCHID BARK:** As reported last month, the CHOS/WDOS has had to source a new supply of bark suitable for potting orchids. A large order of KIWI Orchid bark has now arrtived

Kiwi Orchid Bark is a hard, clean, uniformly graded *Pinus radiata* bark suitable for growing orchids. Fred Clarke, Sunset Valley Orchids, California, rates it as the best orchid bark he has ever used. The Society will sell 50 litre bags for \$45 each.

Kiwi bark comes in four sizes— No.2: **3 to 8mm**; No.3: **8 to 20mm**; No.4: **20 to 25mm**; No. 5: **25 to 50mm**. (The 8 to 20mm size would be equal to mixing 9 to 12 and 12 to 18mm grades of Orchiata bark and would be the ideal size for general potting purposes).



Supplies of charcoal (Orchid Char) have also been ordered. Details of grades, bag size and costs are not yet available.

Supplies are available from Paige Sinclair— Mobile: 0427 591 901

You can pick up the bark from 4 Jean Street, Coffs Harbour or make suitable arrangements with Paige regarding delivery. Payment can be via cash or Direct Deposit (Bank details Page 2).

18. GUEST SPEAKER AT CHOS 4th MAY MEETING will be Paige Sinclair. Paige will talk on using the correct labelling on your orchids and will provide the guidelines on how to better improve your current plant labels. Proper labels are an essential part of orchid growing and we all will learn much from Paige's informative address. A great meeting for new and experienced growers.

## 19. <u>Feature Article — Applying Fertilizers:</u>

by Jim Brydie KOS Feb, 2023 Bulletin. Printed with permission.

(based on an article by Sue Bottom on applying fertilisers and chemicals)

For the benefit of newer growers, I feel it is worth starting with a statement that if you decide to grow orchids, a fundamental part of your culture regime, no matter what kind of orchids they are, must be that you feed them regularly. The artificial potting mediums we use for orchids have almost no nutritional value and as the orchids in our home collections are not being constantly drenched in the drip of mineral rich exudates from the rainforest canopy above, the only 'food' they will get is what we deliberately provide in fertilisers. In addition, as orchid mediums are generally coarse and open, they retain little of what we supply, so we must supply it again and again.

There are a number of ways to apply fertiliser to your orchids but they can be readily separated into two categories. The most basic is to water with some kind of soluble fertiliser dissolved in the water. The second is to apply the fertiliser to the pot in a form that slowly releases some fertiliser to the pot, and the plant, over a period of time.

*Slow Release :* There are several types of slow release. The first one is a scientifically engineered form which is really a little ball of concentrated soluble fertiliser encapsulated in a special coating that allows the fertiliser to slowly release through osmosis into the moisture of the pot. Typically, the little capsules are a like 2 to 3 mm diameter balls as pictured at the right. One such commonly available product is called Osmocote. *(pictured at the right)* 

Slow release pellets like these have different 'life' periods depending on the brand and type. Some last for up to 9 months, some much less. You can use them by incorporating some pellets in with the medium when you repot, or sprinkling them on the surface periodically. The packet will advise on the amounts.

Personally, I find that there is one serious drawback with osmotic release pellets, in that you can't readily measure whether the slow release pellets are still supplying anything. Dead pellets look the same as active ones. You never know when to put some more on.

If you have only a small collection of orchids, perhaps you could just apply pellets to every pot all at the same time. That way you wouldn't need to be able to tell by appearance. The calendar would tell you when they were running out. However, in reality, most of us repot orchids throughout the year and would likely apply fresh pellets when we repot. I am not saying that slow release osmotic pellets aren't a very valuable tool in a scheme of fertilising orchids, it is just that in my view they can't practically be used as the sole basis of nutrient application.

**Organic Slow Release**: The next type of 'slow release' fertilisers are the organic varieties such as the pelletised manures like Dynamic Lifter and Rooster Booster etc, and the more traditional products like powdered blood and bone fertiliser. Pelletised products like Dynamic Lifter are relatively mild manure based fertilisers that are safe enough to use from the point of view of fertiliser strength. You can add a small volume to the medium when repotting or apply a small pile around the base of the plant during the growth cycle from time to time. For orchids however, the drawback of pellets like Dynamic Lifter is that as they break down they clog the air spaces in the pot. Orchid mediums are designed to create a delicate balance between moisture retention and air spaces. Air content is vital to replicate the root

environment an epiphyte would encounter in real life in nature - that is, when growing on a tree or on rocks. Pellets such as Dynamic Lifter contain a high proportion of physical organic material that releases as the pellets break down, and they clog up the medium.

Another organic - Blood and bone, is less a problem in this regard, but it is best suited to finer, wetter mixes like some Cymbidium mixes or semi terrestrial mixes. It is not absorbable directly by the orchid. It needs to interact with bacteria and other microflora in the pot to break down the fertiliser to mineral forms that can be absorbed by the plant.





The final slow release type that I want to mention is "Magamp". This is an unusual form of pelletised fertilis-

er that looks like little white rocks, about pea size and a little less. They are formulated to just gradually dissolve away in water, releasing the fertiliser as they dissolve. I have read that they are used in Bonsai culture as a slow release fertiliser mixed into the soil mix, but that is not the way we use it with orchids. Orchid growers use a see through plastic tube mounted in line



with your hose. You can make it yourself, or buy a ready made one called a "Nutriflow" applicator. The tube has a wad of shadecloth fitted to each end to stop the fertiliser nodules washing out.

You fill the tube completely with Magamp pellets and use standard clip on hose fittings to attach it to the tap at one end and the hose at the other. They come ready to use in that regard. As you water the orchids, a very small amount of fertiliser is dissolved away from the pellets in the water flow and applied to the orchids every time you water. You can see the Magamp slowly disappearing over a period of a year or more, depending on how often you water. When it is getting down to a quarter full, dismantle the tube and refill it. (*NB: you* **can't** *use the Magamp Nutriflow applicator at the same time as the venturi suction device below*)

**Soluble Fertilisers** : The alternate strategy for fertilising your orchids is to apply soluble fertiliser as a drench. If you only have a small number of orchids, you can just make up the solution in a watering can, and pour it over your orchids, or use a pump action sprayer, or a battery powered sprayer. In all cases make sure the pots are moist before you do. When using a sprayer, make sure that you properly soak the plant and the medium with the spray.

**Venturi siphon devices** : For growers with larger collections, a more practical way to apply soluble fertiliser is to use a venturi siphon device that uses water pressure from your tap to suck concentrate from a reservoir and mix it with the tap water. These devices send a scientifically diluted fertiliser through your hose for you to just water onto your orchids which is very convenient. The device connects to your tap at one end, the hose at the other, and has a smaller diameter hose coming from the side with a filter at the end that goes



into the concentrate bucket.

There are a number of brands and designs available, including two of the brass made devices that I have always used. I think the one that George Birrs and Mike Hichcock sell (for \$50?) is the "Hozon siphon mixer" which operates at 16 : 1 (ie it sucks up one litre of concentrate for every 16 litres of tap flow). I have also seen the "Dramm Siphoneject" sold here, and that one operates at 20 : 1.

I use one of these siphon devices to apply fertiliser in both my glasshouse and my shadehouse. Because I water thoroughly as I fertilise, I use a lot of fertiliser



when I do. I need roughly a 20 litre bucket of fertiliser concentrate to do my 20 foot (6 metres) long glasshouse. When I do my much larger shadehouse, I need a

larger volume of concentrate solution and I use a 60 litre garbage bin. It takes two garbage bin batches to thoroughly water and fertilise the shadehouse. It is probably a bit wasteful of fertiliser, but it is the most simple and easily used methodology.

*Fertiliser Rates :* To give you an example of how to calculate the amount of fertiliser to use, let us assume you are using a Hozon 16:1 device. If you were making up a 10 litre bucket of concentrate in which to place the siphon hose, by the time the bucket is emptied the total amount of water delivered through the hose would nominally be 170 litres (the 10 litres from the bucket plus 160 litres from the tap). For the 20 litre bucket I use, there is 340 litres of diluted fertilizer delivered to the plants.

If you are using the Peter Excel Calmag Finisher fertiliser that we sell on our Society sales table, the manufacturer's recommended rate is 0.8 - 2.0 grams per litre of water applied once a week "to the soil" - obviously this is meant for soil grown plants. For orchids, most of our experienced growers recommend much less concentrated rates. Perhaps ¼ to ½ the recommended rate, but on the basis it is applied regularly.

Now be warned. Fertilisers do not weigh the same as the same volume of water. 1 millilitre of water weighs exactly 1 gram but with soluble fertilisers powder – volume does not equal weight. i.e. a 5 ml spoon of ferti-

lizer powder does not weigh 5 grams.

Each fertiliser is different. Some fertiliser packs come with their own measuring spoon which takes this volume/ weight issue into account but the spoon in that pack is only designed for that fertilizer. A friend and I did some sample measures a few years back which showed for example, that dry Peters Finisher weighed nearly twice as much as Aquasol soluble fertilizer powder. (5 mls of Aquasol weighed 3.2 grams – 5 mls of Peters weighed 5.8 grams. But, when I re-measured the latest Peters Calmag Finisher we are using today, 5 mls weighed 6.25 grams.

For practical purposes, I personally use a 200ml yoghurt cup when measuring the fertiliser into the bucket or bin. A 200ml cup of Peters weighs about 250 grams. For the 340 litres of diluted fertilizer delivered to the plants from my 20 litre concentrate bucket, that works out at 0.73 grams per litre (250 grams divided by 340 litres). I usually use a little less than a yoghurt cup full in the bucket so I am more likely delivering about 0.6 to 0.7 grams per litre.

When using a different fertilizer or the bigger bin, I just adjust the volume up or down accordingly.

<u>Making the siphon work</u>: There are limitations you must consider when using the siphon device. The siphon jet requires adequate water pressure and water flow to work properly. You need at least 35psi water pressure to make it suck properly. Sydney's water supply should easily supply more than that, but the water pressure and flow can be reduced by any of a number of factors:

- The length of the hose. Maximum length when using the siphon is 15 metres but 10 is better. A larger diameter hose may also help if you have problems with low pressure.
- Old hoses may be damaged internally, and may restrict flow. Try a new hose.

Any chronic kink in the hose, will restrict flow.

A spray head at the end of the hose that restricts the flow too much and does not deliver a full water flow will be a problem. <u>Don't use a gun type hose end</u>. (I always use a high volume aluminium waterbreaker spray rose on the end of the hose.)



When you use the siphon, turn the tap on just about full.

One further issue that can arise is that you need to make sure the fertiliser is fully dissolved as a concentrate before you try to start, and make sure that the filter at the end

of the uptake hose doesn't become clogged. Also, if you are using strong fertiliser rates, a salt encrustation may build up over a period of years in either the intake filter or at the siphon jet itself, hidden in the body of the device. When you finish applying the fertiliser, ALWAYS take the intake hose out of the concentrate bucket and apply the hose sprinkler (plain water stream) directly against the intake filter. Continue to squirt clean water through the venturi intake hose for about a minute to make sure you flush any residual salts. This will help ensure its long term use by keeping the inner parts clean.

If you think the venturi might be affected by a build up of salts encrusting the insides, I am told that sometimes an overnight soak in vinegar will remove deposits that plug the system and it will begin to siphon properly once again. However, I haven't been able to prove this. I only tried to fix a bung siphon once and that didn't work.

I have been using the brass venturi devices for over twenty years and have only had to throw away one. The part that I always find causes the most trouble is the intake filter. The old ones used to have a 4cm wide, circular intake head fitted with a lovely fine copper mesh filter, which is quite delicate and prone to tearing or falling out. The filter is important to stop the suction head pulling in detritus from the bottom of the concentrate bucket or bin. I eventually had to replace the mesh on mine with shadecloth as a filter, tied it in place with copper wire. I suspect that the device that stopped working, and that vinegar couldn't fix, was probably clogged with a piece of fine debris it sucked in through my adapted, rather coarse filter.

Many growers who buy a siphon applicator without realising the very simple factors above, find that they can't get the siphon to work reliably. If you abide by the rules and take care, these are a great, reliable, orchid growing tool.

**Dosatron?** While the Hozon is the everyman's siphon device, there are much more sophisticated, more expensive versions of the same kind of device. The "Dosatron" is one example. These are used in many agricultural or

horticultural situations where there is a requirement to add a liquid solution to a water flow. It can be used for feeding animals or plants, or applying chemicals for pests or diseases, as well as other functions. It still uses a venturi suction device driven by the water pressure but it is more adaptable because the siphon rate is adjustable and maintains the dosage rate regardless of variations in water pressure. I doubt it is what most growers would be looking for so I won't go into it further here. If you are interested, I suggest you consult Dr. Google.

**One final Note :** The chemicals in some soluble fertilizer will react with some of the metal parts in your watering system. Peters Finisher certainly reacts with copper elements such as the Hozon uptake filter. After a while it will look like very clean naked copper meaning the copper is being eaten away by some of the other metal compounds in the solution. ALWAYS wash out your equipment thoroughly with clean water after you finish using it.

# **20. ORCHID APPRECIATION COURSE:** The OSNSW is organising an Orchid Appreciation Course starting soon. We reprint the information letter from Ian Chalmers, State Registrar, OSNSW.

The OSNSW Judging Panel seeks your assistance in promoting an Orchid Appreciation Course which we expect will greatly benefit your established orchid growers, newer members and your society. The workshop's aims to provide an understanding of how judges assess orchids at shows; how awards are made; the relevance of the Australian Orchid Council's (AOC) award judging system; and well as provide information on orchid nomenclature and terminology, major pests and diseases; cultural guidance; and plant presentation.

Members of all Orchid Societies who attend this course can expect to be better equipped to grow quality orchids, gain knowledge, confidence and a capacity to judge at monthly meetings and, generally, better contribute to the workings of each society.

The course will be delivered via Zoom by local Judges from various NSW AOC judges. Knowledgeable growers in specified fields will also be invited to present. Notes and AOC judging books will be supplied to participants.

An introduction to this Orchid Appreciation Workshop will be via digital Zoom session on the **14**<sup>th</sup> **of May starting at 7.00pm. The practical appreciation portion of the Workshop will be organised** by the local panel.

Participation in the course will incur a \$50.00 cost payable to the Orchid Society of NSW.

The course will cover around 30 related topics and, consequently will extend over 2 years. Subsequent sessions will be on the 1<sup>st</sup> Sunday of each month except no sessions in December or January. The sessions will be recorded and will be made available for review by the participants,

For participants who cannot be present for the initial presentation, the presentation may be repeated at a later date or viewed off line as appropriate.

After completing this course some participants may wish to undertake further training to become AOC judges. Those that wish to do so, will have the opportunity to undertake theory and practical exams and attend orchid shows within the local region as part of a judging panel.

If CHOS members are interested in joining this course then they can register by contacting: Dick Cooper – 66548447 or Grahame Beatton 65688978.

EVEN IF YOU HAVE NO INTEREST IN BECOMING AN ORCHID JUDGE, THIS IS A GREAT WAY TO LEARN MORE ABOUT ORCHIDS ESPECIALLY WHAT ARE THE FEATURES OF A QUALITY ORCHID AND HOW THEY ARE JUDGED. YOU STILL HAVE TIME TO ENROLL IN THE COURSE—STARTS 14TH MAY, 2023.

(Editor: Having recently completed this course, I would recommend it to all who wish to understand more about orchids & orchid judging)