

CYMBIDIUM NEWS

Published by the Cymbidium Orchid Club of South Australia Inc.

<http://www.cymorchidssa.com.au> also see us on **Facebook**

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September 2020 Meeting

Best Overall

Best in Open Division

First Intermediate Brown

**Mem Amelia Earhart x
Pacific Sparkle**

Grown by John Moon



Judge's Choice Best in Second Division 2
Ice Breaker '105'
Grown by Tony Cummins

Cymbidium News Volume 22 No. 9 October 2020

The New Cymbidium News is published monthly, February to November inclusive and is the Official Newsletter of the **Cymbidium Orchid Club of South Australia Inc**

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Show Marshalls (WL) Wayne Baylis and helpers.

Life Members

Ray Brady, Moss Bray, John and Yvonne Longbottom,

Graham Morris, Dean Roesler #, Jeanne Hall #, Wayne Baylis,

Ben Knobben Brian & Shirley Brand,

indicates Deceased

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Presidents Message,
Welcome to our October issue,

Apart from any late flowering plants and some cascading plants, the flowering season is virtually over. Now is the time to be strong and fill your green bin with the ones you have failed to flower, the poor growers and anything that is taking up space that could be utilized with new seedlings that need to be potted up, or new plants.

Also make sure you keep an eye out for pests such as Red Spider Mite on your young plants and Scale on everything. Both seem to love the warmer weather.

October's meeting is going to be a bit of a fun night with a quiz night and a plant auction. The hall will be made up with double tables with six to a table. No more than that so please. Abide by the 1.5 distancing that is set up at each table, and all join together in teams of six.

We will have a multitude of prizes and giveaways throughout the night, and lots of fun. The auction will be in the middle of the quiz night, so please bring along any plants, com-pots or flasks that are of good quality, show condition, with a printed picture of each plant which in most cases can be found on the net, or a note with a description or crossing of the plant.

All plants must be named and a list of what you bring in, must be handed to me before the start of the meeting, with the plant's names and your minimum price for it. A 10% commission will be charged to the seller so bring along those extra dollars you've been saving and you never know what exciting plants will turn up on the night. Maybe something you have been looking for.

Because of the COVID restrictions we are not allowed to have food at Burnside, so our November meeting will be an end of year dinner at either a hotel, club or restaurant that can accommodate 50 to 60 people for a set menu or banquet. We are looking at around a \$30 cost menu and the club will subsidise \$10 so the cost to members will be around \$20. Please pay our Treasurer, Christine at the October meeting. We are close to finalising where we are going, but again because of COVID we are restricted in some venues. It will be announced at the October meeting what the venue will be, but be assured we will be going somewhere nice that would suit everybody.

I look forward to speaking to you all again in next month's magazine, and catching up with you at the October meeting. There are new rules to follow, but remember to keep your distance from one another, and no more than six to a table. If you have any queries Greg or Don Wallace are our COVID Marshalls.

Kind regards and stay safe and well.

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Graham Fear, President



**President
Graham Fear**



(Willunga Royal x Regal Fire) 'Olivia'
Grown by Ben Knobben



Regal Flames 'Queen of Hearts'
Open Division First Small Standard Red
Grown by Chee Ng



Easter Fire x Pacific Sparkle
First Flowering seedling
Grown by John Moon



Khanebono x Last Tango
First Flowering seedling
Grown by Graham Morris



Harbour City x Pontac Flame
First Flowering seedling
Grown by Laurie and Sue Carter



Pacific Sparkle 'New Horizon'
First Division First Miniature Yellow
Grown by Bill Jayne

September 2020 Meeting Showbench Results

Category	Plant Name
Best	Mem. Amelia Earhart X Pacific Sparkle
Best	Mem. Amelia Earhart X Pacific Sparkle
Best	Red Beauty X Valley Vampire X Valley Zenith
Best	Ice Breaker '105'
Best	Lunar Blaze X Kirby Lesh
Best	Serene Splash X Kimberley Splash
Best	Easter Fire X Pacific Sparkle
First Prize	Vanity Fair 'Hollywood'
First Prize	Lemon Butter 'Tee Pee'
First Prize	Lunar Blaze X Kirby Lesh
First Prize	(Hazel Tyers X 'Dutchams's Delight') X Anastacia Wright
First Prize	Regal Flames 'Red Opal'
First Prize	Regal Flames 'Queen of Hearts'
First Prize	Serene Splash X Kimberley Splash
First Prize	Willunga Royal X Regal Fire
First Prize	Mem. Amelia Earhart X Pacific Sparkle
Second Prize	Easter Fire X Pacific Sparkle
Third Prize	Easter Fire X Pacific Sparkle
First Prize	
First Prize	Amaroo 'WB'
First Prize	Jacinta's Pride 'Jemima'
First Prize	Green with Envy
First Prize	Red Beauty 'Netty' 4N X Valley Vampire X Valley Zenith
First Prize	Khan Flame X Red Nelly
First Prize	Lunar Blaze X Apache Flame
First Prize	Harbour City X Pontac Flame
First Prize	Pacific Sparkle
First Prize	Unknown
First Prize	Ice Breaker
Second Prize	Unknown
First Prize	Fairy Rouge 'Lavender Falls'

Exhibitor

John Moon

John Moon

Glenn Stearnes

Tony Cummins

Ben Knobben

Wayne Baylis

John Moon

Ben Knobben

Chee Ng

Ben Knobben

Graham Morris

Ben Knobben

Chee Ng

John Moon

Ben Knobben

John Moon

John Moon

John Moon

Wayne Baylis

John Moon

Terry Honor

Glenn Stearnes

Laurie and Sue Carter

Laurie and Sue Carter

Laurie and Sue Carter

Bill Jayne

Peter Hennessy

Mark Hennessy

Mark Hennessy

Class

Best Overall

Best in Open Division

Best in First Division

Best in Second Division

Best Large Standard Seedling

Best Small Standard Seedling

Best Intermediate Seedling

Large Standard White

Large Standard Yellow

Large Standard Brown

Small Standard White

Small Standard Pink

Small Standard Red

Small Standard Novelty

Intermediate Pink

Intermediate Brown

Intermediate Brown

Intermediate Brown

Intermediate Novelty

Intermediate Pastel

Miniature Pink

Large Standard Green

Large Standard Pastel

Small Standard Other Colour

Intermediate Pink

Intermediate Brown

Miniature Yellow

Large Standard Cream

Miniature White

Miniature White

Miniature Red

Class

Judge's Choice

Judge's Choice

Judge's Choice

Judge's Choice

Judge's Choice

Judge's Choice

Judge's Choice

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

Open Division

First Division

First Division

First Division

First Division

First Division

First Division

Second Division

Second Division

Second Division

Second Division

Orchid Viruses

By Joshua White

Part 4: Orchid Fleck Virus

In Part 3 (September magazine), I looked at CymMV and ORSV, the older two of the three main viruses in Australia. The third is the more recently introduced Orchid Fleck Virus, which is discussed here.

Orchid Fleck Virus (OFV)

Relatively speaking, OFV is the new kid on the block, despite having first been identified in Cymbidiums in the 1970s. Its spread across the globe and through many Orchid genera seems to have been caused by poor lab practices (cloning of virus mother plants), particularly in Southeast Asia, and it has become a significant problem in Australia over the past couple of decades. Some growers consider it to be the worst of the three main viruses.

When the virus was analysed in the early 2000s, it was found to be different enough to all known Rhabdoviruses such that it required its own genus – *Dichorhabdovirus* in the family *Rhabdoviridae*. Much of the research on this virus has happened in the 21st century; thanks to the support of the Cymbidium Orchid Club of South Australia, Raymond Ali at the University of Tasmania studied OFV and its vectors (Wilson & Ali 2013). As a result, the Department of Primary Industries, Parks, Water and Environment (DPIPWE) Tasmania includes a test for OFV in its Orchid virus test regime.

Like CymMV and ORSV, OFV is mechanically transmissible. *Brevipalpus californicus*, a type of false spider mite or flat mite, appears to be the primary natural vector (Peng et al. 2013; Kubo et al. 2009) and the mites remain capable of infecting plants “for a long period.” This sustained infectivity makes pest control critical to prevent the spread of OFV within a collection. Additional research indicates that similar pests – *Brevipalpus oncidii* (Ali et al. 2017), some aphids (*Myzus persicae* and *Aulacorthum solani*) and the red spider mite (*Tetranychus urticae*) (Kondo et al. 2003) – may not be able to act as a vector, fortunately OFV is thought to be less contagious than CymMV and ORSV, partially due to its narrow optimum temperature range. It is most successful at infecting a new host at 30°C or higher (Chang et al. 1976), although can still transfer at lower temperatures and has a thermal inactivation point of ~45°C (Peng et al. 2013). I was unable to find any research into whether the virus could transfer via pollen or seed. Thankfully, OFV is short-lived outside a host, lasting only a matter of hours.

More troubling, though, is the fact that OFV can infect non-Orchid plants (Kondo et al. 2003; Kubo et al. 2009), such as some members of *Chenopodiaceae* (the Goosefoot family, now part of *Amaranthaceae*), *Solanaceae* (the Nightshade or Potato family), *Leguminosae* (the Legume, Pea or Bean Family) and *Aizoaceae* (the Carpetweed family). How long the virus persists in these plants is not known, but it is advisable to maintain good pest control in the garden in order to prevent OFV establishing a reservoir from which it can reinfect your orchid collection.

An incubation period of 2-3 weeks was recorded for Dendrobiums, although anecdotal evidence from some Victorian growers suggests Cymbidiums may not show symptoms until the next growth cycle. The symptoms of OFV vary depending on the host genus. For Cymbidium Orchids, potential symptoms include concentric oval-shaped necrotic flecking patterns or cross-crossing lines along the leaves (Kim et al. 2010). Chlorotic blotching can also be present and under the right conditions, the plant can be completely asymptomatic.

On the next page (Page 9) is a photo of a confirmed OFV infection (one of the few occasions I have actually seen symptoms). **(It is in colour if you view the electronic form of this magazine)**



Once again, Nado Lenkic has provided additional examples of OFV symptoms for reference:



My own personal experience with OFV leads me to suspect that the virus can be present in very low levels and produce a false negative test result under the right conditions. I obtained three Cymbidium backbulbs from a historic plant and potted up them together. All three struck successfully. For the first 6 months or so they were kept with other plants from the same source. They were then isolated after I noted suspicious markings on one of the other plants in the group. About 18-24 months after they produced the initial growth, I finally got around to sending samples off to DPIPW-WE.

Now, you might wonder what the point was – all three were from the same parent plant, shared the same pot and were asymptomatic, so surely one sample would have been enough. As I am very cautious about viruses and didn't want to take any chances, I sent a sample from all three. I am glad I did, as only one of the three returned a positive result for OFV (and DPIPW-WE noted that it was a low level).

I consider it practically impossible that only one of the three plants in the pot had been infected for several reasons – I never noted any pests or pest damage; the pot had been isolated for over 12 months (ample time for any infection that might have been introduced to spread amongst the three) and I had no other known OFV cases in my collection or quarantine areas. I theorise that had I reduced the quality of care and allowed the virus to multiply, the other two plants would later have tested positive.

Conclusion

If there is one thing I would like the reader to take away from this article series, it is that they should not rely on visual symptoms being present before suspecting a viral infection – always act as though there might be a virus in your collection. All three viruses can be asymptomatic or vary significantly in the degree of symptoms displayed. That said, I encourage the reader not to ignore any markings that resemble the photos included in this article series; if there is any possibility it is virused, please get the plant tested.

References

- Ali, R.N. et al., 2017. *Brevipalpus oncidii*, a new record for Australia, is not a vector of Orchid fleck virus. International Journal of Acarology, 43(1), pp.44–51. Available at: <http://dx.doi.org/10.1080/01647954.2016.1232310>.
- Chang, M. et al., 1976. *Morphology and Intracellular Appearance of Orchid Fleck Virus*. Ann. Phytopath. Soc. Japan, 42, pp.156–167.
- Kim, S.-R. et al., 2010. *Molecular Characterization and Survey of the Infection Rate of Orchid fleck virus in Commercial Orchids*. The Plant Pathology Journal, 26(2), pp.130–138. Available at: <http://dx.doi.org/10.5423/ppj.2010.26.2.130>.
- Kondo, H., Maeda, T. & Tamada, T., 2003. *Orchid fleck virus: Brevipalpus californicus mite transmission, biological properties and genome structure*. Experimental & applied acarology, 30 (1-3), pp.215–223.
- Kondo, H. et al., 2006. *Orchid fleck virus is a rhabdovirus with an unusual bipartite genome*. The Journal of general virology, 87(Pt 8), pp.2413–2421.
- Kubo, K.S. et al., 2009. *Orchid fleck symptoms may be caused naturally by two different viruses transmitted by Brevipalpus*. Journal of general plant pathology: JGPP, 75(3), pp.250–255.
- Peng, D.W. et al., 2013. *Orchid fleck virus: an unclassified bipartite, negative-sense RNA plant virus*. Archives of virology, 158(2), pp.313–323.
- Wilson, C.R. & Ali, R., 2013. *Improved detection of Orchid Fleck Virus and other important Orchid viruses and a new Brevipalpus mite vector*, University of Tasmania.

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OCTOBER and NOVEMBER MEETING DETAILS

October's meeting quiz night and plant auction.

Quiz Night

The hall will be set up with double tables with teams of six to a table no more than that at each table.

We will have a multitude of prizes and giveaways throughout the night and lots of fun.

Plant Auction

The auction will be in the middle of the quiz night, please bring along any plants, compots or flasks that are of good quality, show condition, with a printed picture of each plant which in most cases can be found on the net or a sign with a description or crossing of the plant.

All plants must be named and a list of what you bring in be handed to me before the start of the meeting with the plant's names and your minimum price for it, a 10% commission will be charged to the seller so bring along those extra dollars you've been saving and you never know what plants will turn up on the night maybe something you have been looking for.

November Meeting

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This will be payable to Christine at the October meeting; we are close to finalising where we are going but again because of COVID we are restricted in some venues but it will be announced at the meeting what the venue will, but be assured we will be going somewhere nice that would suit everybody.

On Sunday 18th October, the beginner's group conducted a practical growing workshop. Below is a brief description of what happened.

We initially met at my house at Morphett Vale, and chatted about how to grow cymbidiums, and looked around a typical suburban shade house. We then travelled to Mount Compass to see Jong's Nursery, a large commercial establishment, which produces many thousands of pot plants each season. We divided a couple of plants, potted on small plants and deflasked some seedling flasks

We are hugely indebted to Nico Jong, for allowing us to visit his nursery, and for assisting us, and providing facilities and materials to learn how to grow our plants.

A huge THANK YOU, Nico

The photographs below shows some of our members working hard (and getting dirty), deflasking some seedlings. Hopefully we get some champions from this exercise



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Trisodium Phosphate	\$5.00 per 500g, \$10 per Kg

Larger bags available but pre ordering is required.

Please phone Wayne Baylis to order

Home 08 8235 0340, Mobile 0417 887 431

(Best time to call is early evening on home number)

Neutrog are great supporters of our Club.

Please support them wherever possible and tell others about them

The Cymbidium Orchid Club of South Australia, was actively involved in developing and testing Strike Back for Orchids and endorses it's use.

The best summer recipe for your plants



Whoflungdung Super Mulch. A biologically activated, nutrient rich, weed free, absorbent super mulch that introduces a wide diversity of beneficial bacteria to the soil.

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Like humans and animals, plants require regular feeding throughout the year – at least once in each season. Happy, healthy, well nourished plants are more resistant to pests, diseases, heat stress and frost.

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**The next Meeting of the
Cymbidium Orchid Club of South Australia Inc.**

**Will be on Wednesday 28th October, starting at 8pm, in the
Burnside Assembly Hall
corner of Portrush and Greenhill Roads, Tasmore**

An exciting meeting is promised with a few surprises

See page 15 for details

Beginners Group will meet from 7.15pm on the stage at the front of the hall

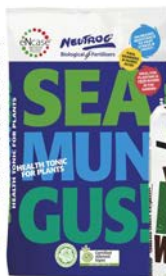
Newcomers and Visitors are most welcome

Covid-19 spacing conditions will be in place

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16" wand set - \$37.49 - 20% = \$29.99 + gst = \$32.99

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9 position revolver sprayer- \$23.19 - 20% = \$18.55+ gst = \$20.41



Has anyone had an experience where a top quality plant, of very good quality has flowered very poorly, after flowering well previously.

I have a plant of Darch Wonder 'Claudia', which is a very high quality, big round white standard, has flowered very poorly this season, after flowering extremely well on previous flowerings. I do not have a photo of a good flowering of it, but it has flowered well on two previous occasions. However, this year, the same plant has flowered as shown in the photograph above. I have also been sent a photograph of another high quality showbench cymbidium, which has flowered with a very similar, distorted lip, and unusually poor shape.

It has been suggested that the flowers, when in bud may have been exposed to very cold conditions. Has any other grower experienced this problem?

It will be interesting to see how they flower next season

Our "Cymbidium Orchid Club of South Australia" Facebook site is receiving well over 1000 views per posting, from growers all around the world.

Bags of TriSodium Phosphate are now available from the trading table (for sterilizing cutting tools etc). One Kilogram bag \$10, 500 grams \$5.00. Larger bags are available on request. Note, these prices are much cheaper than you can get privately. **Contact Graham Morris if you need some now.**

There will be some First Strike roedenticide bait available from the trading table when meetings commence, or collect from Graham Morris 0419 823 724

Packs of 10 baits \$5.00, Packs of 25 \$10.00

This new product is getting good reviews from growers interstate who have been using it for some time.

Plants wanted

Khanebono 'Jacinta' Marilyn Thomas 'WB'
Please phone Bill Jayne on 0419 039 022 if you know of someone who has one available

Mary Pinchess "Sunbeam" Graham Morris 0419 823 724

Prices effective from January, 2018

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Bush Tucker
An organically based fertiliser, developed for the specialised needs of Australian native plants - even the most phosphorous sensitive. **20kg bag \$30**



Gyganic
Perfect for fruit and citrus, Gyganic has been specifically developed to enhance fruit size, quality and taste. **20kg bag \$30**



Kahoona
Ideal for all acid loving plants such as Camellias, Gardenias, Azaleas and Rhododendrons. **20kg bag \$30**



Sudden Impact for Roses
Ideal for all flowering and fruiting plants - not just roses. **20kg bag \$30**
1L Bottle \$10



Strike Back for Orchids
Ideal for the all potted flowering and fruiting plants - not just orchids. **20kg bag \$30**

Strike Back for Orchids Liquid
Ideal for all potted flowering and fruiting plants - not just orchids. **1L bottle \$10**



Sudden Impact for Lawns
Ideal for new and established lawns, along with other non-flowering plants such as palms, ferns and conifers, as well as leafy vegetables and herbs. **20kg bag \$30**



Upsurge
Ideal for turf to improve soil structure and increase earthworm activity, root growth and resistance to pests and disease. **7.5kg bag \$16**

ORGANIC FERTILISERS



Bounce Back
A high quality, general purpose fertiliser, specifically formulated for the most effective and safe feeding of all your garden plants. Ideal for winter and summer application. 100% organic and ACO registered. **20kg bag \$13**



Rapid Raiser
A high quality, boosted general purpose fertiliser. The increased phosphorus level makes it ideal for planting and promotes faster, healthier and sustained growth for all plants. Particularly suitable for heavy feeding plants such as roses and citrus. 100% organic and ACO registered. **20kg bag \$15**



Blade Runner
A high quality, general purpose lawn fertiliser. Ideal for all use on all lawns, particularly new lawns and summer application of established lawns where the slow release properties help to prevent thatch build up. 100% organic and ACO registered. **15kg bag \$15**



Rocket Fuel
Specifically developed for growing healthy, organic fruit and vegetables. A portion of all retail sales go to supporting the Stephanie Alexander Kitchen Garden Foundation. 100% organic and ACO registered. **15kg bag \$13**



Cock'n'Bull
A mix of cow and chicken manure, Cock'n'Bull is ideal for conditioning the soil whilst adding nutrients. A perfect additive to any garden or vegie bed. 100% organic and ACO registered. **30L bag \$7**



Meatworks Blood'n'Bone
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ORGANIC FERTILISERS



Seamungus Pellets
Ideally suited for establishing new plants (particularly bare-rooted roses) and for use on natives. Seamungus can also be used as a plant tonic to revitalise all your plants throughout the year. 100% organic and ACO registered. **20kg bag \$20**



Seamungus Liquid
Ideally suited for establishing new plants (particularly bare-rooted roses) and for use on natives. Seamungus can also be used as a plant tonic to revitalise all your plants throughout the year. **1L bottle \$10**



Seamungus Green
The smaller crumble form makes Seamungus Green ideal for lawns and in dry conditions where more immediate breakdown is required. It can also be used as a plant tonic to revitalise all your plants throughout the year. 100% organic and ACO registered. **20kg bag \$22**



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Biologically activated, nutrient rich, weed free, absorbent super mulch **20kg bale \$14**



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A pro-biotic for your soil and plants, GOGO Juice provides all the benefits of applying liquid kelp, seaweed and humic acid, whilst adding beneficial bacteria to assist in breaking down the organic matter, maximising the nutrients available to your plants.



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2L Concentrate \$15



2L Ready to Use \$10

BOOKS



From the Ground Up SA currently out of stock



From the Ground Up

From the Ground Up is a complete and comprehensive, state-based garden guide for gardeners. The books utilise the recommendations of many plant experts, coupled with the fantastic knowledge and experience from our authors - Sophie Thomson (SA edition), Jane Edmondson (VIC edition) and Linda, Sandra and Graham Ross (NSW edition). **\$35 each**

- Prices include GST - Free delivery to agreed delivery points for minimum 1 tonne / pallet orders
- These prices are strictly for members only and are not to be knowingly disclosed to the general public



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Like humans and animals, plants require regular feeding throughout the year - at least once in each season. Happy, healthy, well nourished plants are more resistant to pests, diseases, heat stress and frost.

The programs have been specifically developed by experts who rely upon optimum plant growth to earn their living. To find the Neutrog feeding program that is right for you, log onto our website www.neutrog.com.au

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**Above Open Division Best Large Standard Seedling
Lunar Blaze x Kirby Lesh
Grown by Ben Knobben**

**Below
Open Division 1st, Miniature Pink
Jacinta's Pride 'Jemima' Grown by John Moon**





Judge's Choice

**Best in First Division
First Large Standard Pastel**

**Red Beauty x Valley Vampire
x Valley Zenith**

Grown by Glen Stearnes