WARRINGAL ORCHID SOCIETY INC.

www.warringalorchidsociety.com.au

April 2022

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All correspondence to be addressed to: The Secretary, 77 Carrington Blvd., Thomastown, Vic. 3074.

Our **April** meeting will be on **Wednesday 20/4/2022**

at the Senior Citizens Hall in Hawdon Street, Heidelberg.

The hall will be open from 6.00pm. **Urgent help needed to set-up**.

Please come early to help set-up, as this is always left to the same few every month. You are welcome to bench plants for judging and to socialise with other members. A sales table operates with pots and other orchid accessories for your convenience. Members are able to submit up to 6 **Healthy** orchid plants for sale, the Society deducts a 10% commission. Plants to be listed on the sales forms available at the sales table.

Please help to tidy the hall after the meeting.

Hall Entry Notice

We suggest you download the Service Vic app to your smart phone for ease of entry,

This will show your proof of vaccinations.
Jump on line or ask your family to help with this easy option.

COVID moderated restrictions apply.

- **Do not enter if you are feeling unwell.**
- **Proof of Double Vaccination must be provided by phone or hard copy or no entry.**
- **On entry, sign in.**
- **Social distancing 1.5m recommended**
- **Tea, coffee & supper back on again, please bring a plate to share.**

The next Committee meeting will be at 7.30pm on Wednesday 4th May 2022 via Zoom.

Presidents Message.

Welcome To All WOS Members,

I have noticed the numbers are down but look forward to seeing you all back very soon as we have lost the last couple of years to COVID. Come along and enjoy each other's company & the beautiful orchids that are currently blooming in season.
We are all looking forward to the Winter & Spring Shows that are not too far away.
The Committee & I would like to wish you and your families a very safe & happy Easter.

Kind regards,

Andrew Fernandez.

Presidents Choice

Paph. Sukakhulii x Roth Kew Grown by G. & C. Dimech

Guest speaker for April will be Stephen Early talking about Cymbidium Species.

Club Seedlings

Sarcochilus - Orchid Seedling. Kulnura Mischief 'orange gold' x Kulnura Kaliedescope 'Blazing Gold AD/AOC'

Only a couple of these Sarcs are left after the March meeting that will be available at the April meeting for sale @ $12.00 each. (This Sarc is supposed to be yellow/gold but may present as white so there are no guarantees.)

News letter archive

Past bulletins: Can be accessed on the website for your convenience. If you have any queries please call Andrew.

Open Winner

Cattleya – Burgandy x Delight
Grown by N. Chase

Intermediate Winner

Oncidium – Sunset Sugar
Grown by M. Bastecky

Novice Winner

Rlc – Redlands Beauty x Angel Heart
Grown by I. Catis

WOS Dates to Remember for 2022

- 1st Wednesday from April to December – Committee meetings at 7.30pm.
- 3rd Wednesday from April to November – Monthly meetings from 7.00pm
- 30th June Membership fees are due.
- (Fees must be paid by the due date or LATE show & sales entries will not be accepted)
- 5th August Winter Show- Set-up.
- 6th – 7th August Winter Show.
- 17th August AGM.
- 23rd September Spring Show Set-up.
- 24th – 25th September Spring Show.
- 20th November Xmas BBQ (TBA).
- 14th December Xmas Dinner (TBA).

Bark Sales

WOS Inc. members who wish to purchase medium bark in approx. 25lt bags @ $15.00 per bag please place your order with Alf for payment & collect via David on the below details: We only have a few bags left. We can issue invoices for card payments via our square payment system.
Alf Magnano 0403 006 104, alf_magnano@cppartners.com.au or
David Baxter 0407 841 437, kneebo@bigpond.net.au

House Keeping

It has been noticed that on a number of occasions some members are bringing in poor quality plants which are not rooted well or in an unhealthy condition, and expecting the sales table to sell them. Please see the insert below.
If you are unsure re the health of your plant please ask a member and they will be happy to advise you.

3. **TRADING TABLE:**

a. The committee shall provide and control at monthly meetings a trading table where it may offer for sale –

i. Plants, seedlings or growing requisites on behalf of the society
ii. Plants, seedlings or growing requisites on behalf of members, provided that:
(a.) A member may present no more than six items for sale at one meeting
(b.) **Plants are of good quality, clean, healthy and well established in a container or on a mount.**
(c.) The Society will retain a commission of 10% from the price of such items sold.

b. i. Plants must be reasonably priced. It is intended that this service should provide an opportunity for members to obtain a desirable plant at a fair price.
ii. **Officers manning the trading table may decline to accept for sale items that do not comply with this requirement.**

VIRUS DISEASE OF ORCHIDS

Throughout the world some 25 viruses have been listed as infecting orchids, A lesser number of viruses have been recorded in Australia but as a result of intense surveying several new recordings have been noted. The most important viruses infecting orchids are Odontoglossum ring spot virus (ORSV) and Cymbidium mosaic virus (CyMV). Each of these have world wide distribution and have been known for many years.

This paper is designed to give you, the orchid grower, a nontechnical insight into orchid virus, recognition, diagnosis, transmission and control.

WHAT IS A VIRUS?

Viruses are the smallest, yet most destructive, type of plant pathogen so far described. They can only be seen with the aid of an electron microscope and then only when magnified tens of thousands of times.

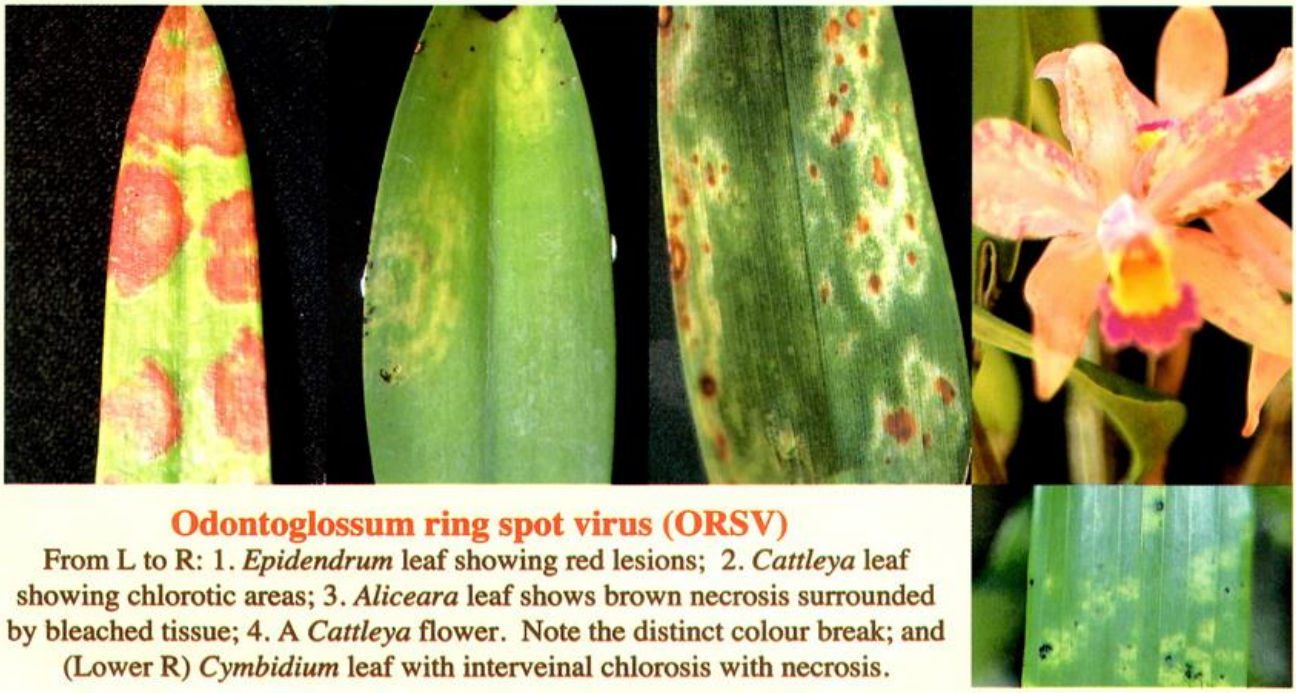
The infectious portion of the virus is the nucleic acid - this is surrounded or protected by a protein coat. This protein coat is the protection afforded to virus that allows the virus particle to remain viable outside the plant cell. ORSV, for example, can remain viable for up to seven (7) months in dried sap. Virus particles, however, do need living plant cells to replicate (multiply).

DIAGNOSIS

There are several techniques available to diagnose orchid viruses. Unfortunately, not all of them are available to the average grower. Each will be discussed in turn with their advantages and disadvantages.

1. Leaf symptoms are extremely variable and of limited value in disease diagnosis. Although this variability exists the grower should be aware of the types of symptoms that can be associated with a particular virus. Although a particular virus has the same morphological characteristics within the group, the effect of that virus on the plant differs from genus to genus because of strain differences of virus, genetic factors in the plants and susceptibility of cultivars to virus.

Leaf symptoms caused by ORSV and CyMV are very variable. Flower symptoms are a little easier to observe. The flowers of CyMV infected plants will show necrotic streaks within 2-3 days after the bud breaks open but normally does not show for 10-12 days of opening. The lavender flowered cattleyas are possibly the easiest to determine virus infection with sunken brown necrotic spotting and streaking. The intensity of colour breaking varies from year to year and, as well, within the cluster of flowers on the plant.



Odontoglossum ring spot virus (ORSV)

From L to R: 1. *Epidendrum* leaf showing red lesions; 2. *Cattleya* leaf showing chlorotic areas; 3. *Aliceara* leaf shows brown necrosis surrounded by bleached tissue; 4. A *Cattleya* flower. Note the distinct colour break; and (Lower R) *Cymbidium* leaf with interveinal chlorosis with necrosis.

Cymbidium mosaic virus (CyMV)

Top left: *Phalaenopsis* with CyMV has twisting of the leaf and erosion of leaf surface; Left: *Dendrobium* with brown necrotic colour breaking; Above (L): *Dendrobium* flower with typical colour break; Above (R): *leaf of Brassolaeliacattleya* has large areas of necrosis; and Below: *Laeliocattleya* with raised brown necrotic lesions.

Other symptoms can be confused with colour break. It can be a genetic trait or even the effect of wetting agent used in the spray programme.

Research has shown that CyMV retards plant growth, but the sometimes less obvious infection by ORSV can be a greater threat because it may go undetected, especially in cymbidiums.

2. Bioassay. This involves the transfer of sap from the test orchid to another species that shows diagnostic symptoms. Within a short time of inoculation the presence of a virus may appear as yellow or brown necrotic spots on the leaves of the susceptible plant.

CyMV and ORSV are the two viruses most frequently detected by this kind of test.

Full details of this technique are available in the American Orchid Society's *Pest and Disease Handbook*.

3. Electron microscopy. Electron microscopy is a very specialised area and is confined to various Government Departments and Universities. Several of these offer diagnostic services on a fees basis throughout Australia.

4. ELISA (Enzyme linked immunosorbent assay). This is a serological method for identifying viruses, requiring expertise and expensive equipment. The test is very sensitive, especially in cases of low concentrations of virus and is very useful when large numbers of plants have to be screened. Test kits are available commercially for the detection of CyMV and ORSV.

TRANSMISSION

Viruses can be transmitted in several ways:

(a) in sap
(b) by insects feeding on the plant
(c) by nematodes
(d) in seed or pollen
(e) during vegetative propagation

(a) Sap (or mechanical) transmission. ORSV and CyMV are very stable viruses that do not break down under a wide range of conditions. Both can be easily transmitted mechanically when sap from an infected plant comes in contact with a healthy plant.

The virus particles pass across into the healthy plant cells via the smallest of wounds on the leaf surface. Once inside the cell, the virus multiplies rapidly and very soon can be detected in all parts of the plant. Mechanical transfer of virus can occur by leaf contact, through using contaminated tools and when plants are HANDLED by you, the grower.

(b) Insect transmission. There are possibly many potential insect vectors of orchid virus. There appear to be no published results on the insect vectors of orchids exclusively. There is a high probability that aphids are the chief transmitters of orchid viruses, although the potential exists that any chewing or sucking insect could transmit virus in a non-persistent way. Dendrobium beetles and grasshoppers must be prime suspects although this has not been proven. There is circumstantial evidence that scale insects may be connected with the transmission of orchid fleck virus. The mode of transmission can be either stylet-borne, which possibly happens in the transmission of ORSV and CyMV, or circulative, where virus taken in at feeding multiplies within the insect and can infect a healthy plant at the appropriate time.

Note: The illustrations in this article show only some of the very wide range of symptoms that viruses cause on orchid plants.

Rhabdovirus-like Particles Over a Range of Orchid Genera

Above (L to R): 1. *Cymbidium* with chlorotic flecking along the leaf; 2. *Cymbidium* with necrotic ring-like pattern; 3. *Bifrenaria* shows a diamond-shaped pattern; and 4. *Vanda* showing chlorotic area with diffuse edge.

Below: (L to R): 1. *Miltonia* leaf has irregularly-shaped spots in a diamond pattern; 2. *Cym. madidum* with large areas of necrosis, usually along the central vein; 3. *Dendrobium delicatum* showing a necrotic ring pattern; and 4. *Dendrobium rex* with necrotic spots surrounded by areas of brown necrosis.

(c) Nematode transmission. Nematodes, tiny needle-like worms that live in soil, are known to transmit at least two viruses which infect orchids. Nematode populations in orchids are extremely low. The soil-less media in which many orchids are grown, are not conducive to nematode development.

(d) Seed and pollen transmission. The possibility exists of virus transfer through seeds, especially in the green pod technique of seedling production. Virus can also be spread by pollen transfer, especially if the recipient mother plant is damaged during pollination procedures.

(e) Transmission during vegetative propagation. Vegetative propagation, such as dividing up an orchid plant, is a sure way of transmitting a virus if the plant is infected. Virus is normally distributed throughout the infected plant and so virus goes along with each division. Virus-free meristems can occasionally be taken from an infected plant. The smaller the meristem, the better the chance of it being free from virus.

CONTROL

Too often orchid growers accept virus as an unpleasant fact of life. This need not be so. By following a few simple procedures your valuable collection can be virus-free.

1. Diagnosis is the first line of defence in obtaining that virus-free collection. You don't need to know which virus it is, just whether the symptoms you are seeing are caused by a virus or not.

2. Sanitation. Good sanitation (hygiene) within your orchid house is essential. The most stable viruses (ORSV and CyMV) can survive well on cutting tools, benches and pots. The more fragile viruses which do not survive well tend to have insect vectors.

GOOD SANITATION = HEALTHY PLANTS

RECOMMENDATIONS

Cutting tools, etc should be washed to remove any plant debris and soaked in a saturated solution of trisodium phosphate (TSP) which is made by adding TSP to warm water until it no longer dissolves. There should always be crystals visible in the bottom of the solution. The tools should be soaked for up to 10 minutes and then washed thoroughly in water to remove any TSP.

During repotting, work surfaces should be covered with clean newspaper, which should be replaced after each plant. Your hands should be washed thoroughly between clearing away the newspaper containing the remains of one plant and spreading the sheet of paper for the next plant.

Plants at orchid society meetings and shows should be well-spaced, no suspect plants allowed to exhibit, judges and commentators NOT to handle plants and, if possible, benches covered with a disposable covering.

Buildup of insects such as aphids, scale insects and mealy bugs which may transmit viruses must be controlled.

CONCLUSION

Obtaining a virus free collection does not come easily but it can be achieved with some effort on your part. In summary, the steps to follow are:

1. Keep tools and benches clean. Deactivate any virus by soaking tools, etc in trisodium phosphate. Use clean paper on the bench for EACH plant.
2. Wash hands between each repotting procedure.
3. Destroy virus-infected plants.
4. Do not reuse potting media.
5. Control insects.
6. Space plants - avoid overcrowding.
7. Avoid handling plants. Growers should respect other growers' property.

Acknowledgements

This work has been supported by a grant from the Australian Orchid Foundation and would have been impossible without the willing cooperation of orchid growers, large and small. This interest and assistance is gratefully acknowledged.

Don Gowanlock,
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Reprints of this article are available from:
Australian Orchid Council Inc., PO Box 145, FINDON, S.A. 5023

JUDGING RESULTS – March 2022

OPEN

Miniature Cymbidium
1st. Vogels Magic x China Mini — G. & C. Dimech

Paphiopedilum
1st. Sukakhulii x Roth Kew — G. & C. Dimech
2nd. Jog Joy — G. & C. Dimech

Species Paphiopedilum
1st. Hermannii x Sibling — G. & C. Dimech

Miltonia
1st. Mtps. Crimson Cascade — A. Fernandez

Cattleya
1st. C. Burgundy Delight — N. Chase
2nd. Blc. Tathrown Blumen Insel — G. & C. Dimech

Novelty Cattleya
1st. C. Hawaiian Varible x Luly x Lucky — A. Fernandez
2nd. Lc. Tropical Pointer 'Cheetah' — G. & C. Dimech

Any Other Hybrid
1st. Coel. Lyme Bay — G. & C. Dimech

Species- Any Genera
1st. Ross. Grande Var. Beggs — G. & C. Dimech
2nd.C. Loddigessi V Coerulea x Self — G. & C. Dimech
3rd. Mormdyea Ringens — A. Fernandez

BEST IN SECTION
C. Burgundy Delight — N. Chase

Happy Easter

INTERMEDIATE

Phalaenopsis
1st. Phalaenopsis Unknown — M. Bastecky

Oncidium
1st. Onc. Sunset Sugar — M. Bastecky
2nd. Onc. Kilauea — M. Bastecky
3rd. Onc. Unknown — M. Bastecky

Species- Any Genera
1st. Odm. Arasii — A. Magnano
2nd. Ornithophora Radicans — L & A Shepherd
3rd. Cym. Erythrostylum — M. volodina

BEST IN SECTION
Onc. Sunset Sugar — M. Bastecky

NOVICE

Any Other Hybrid
1st. Phal. Spica — S. Karunaratne

Species- Any Genera
1st. Phal. Puulchra Tops x Self — S. Karunaratne
2nd. Gomesa Radicans — K. Ridgway
3rd. Max. Schunkeana — K. Rdgway

Cattleya
1st. Rlc. Redlands Beauty x Angel Heart — I. Catis
2nd. C. Bico;our V. Braziliensis — K. Ridgway

BEST IN SECTION
Rlc. Redlands Beauty x Angel Heart — I. Catis

SEEDLING FLOWERING 1st. TIME

PRESIDENTS CHOICE
Paph. Sukakhulii x Roth Kew — G & C Dimech

Current Point Standing April 2022

Open Section

G. & C. Dimech	40
M. Coker	39
A. Fernandez	11
J. & L. Karbownik	8
C. Krolikowski	4
N. Chase	4

Intermediate

M. Bastecky	26
M. Volodina	9
A. Magnano	8
L. & A. Shepherd	3

Advance Novice

Novice

I. Katis	13
K. Ridgway	9
P. Kennedy	8
G. Tetis	4
S. Karunaratne	4

Social Media:

W.O.S. Inc. Website

Information regarding Warringal Orchid Society can be accessed via our official website:
https://warringalorchidsociety.com.au/

Thank you to the members for sending in your photos of your current orchids flowering, keep up the good work and keep sending them to me with names & details if possible.
Please send any photos and info to kerriridgway@gmail.com
Your editior.
Kind regards, Kerri.

Keep up with all the club news by visiting and liking us on Facebook.

THE WARRINGAL ORCHID SOCIETY INC.
WOULD LIKE TO THANK THESE SPONSORS FOR THEIIR DONATIONS
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