



The Cymbidium Newsletter

Reg No A0023705W COSV Website: www.cosv.com.au

March/April 2012

2012 Meeting Dates

January –
February 14
March 13
April 10
May 8
June 12
July 10
August 14
September 11
October 9
November 13
December 11

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Meetings: The 2nd Tuesday of each month (except January), Mt Waverley Community Centre, Youth Centre Hall, Miller Crescent, Mount Waverley (Melway 61/D12 and 70/D1). The hall is off Stephenson Road and is next to the Library.

Meetings start at 8.00pm. Basket Supper please.

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*Last Month's Meeting

Colin Cleak gave an excellent talk on Fungus which was very well received by all members present, the main item for the evening was a presentation by Terry Poulton on 'Building a Greenhouse', Terry's talks are always informative and entertaining and this was no exception.

*Cultural Talk this Month

Colin Gillespie will talk this month on what is happening at his place and touch on his recent trip to Santa Barbara.

*Main Item for the evening

David Francis from Duralite is our main speaker for this month,

*Cultural Notes

We are including an article by Peter Hall of South Australia on Fleck Virus, South Australia have recently had a problem with fleck virus and this article explains their problem and what they have done to combat it.

***Growing Competition for 2012**

This is our third month of this year's growing competition so please bring your plants in so we can all see how they are progressing, Colin Gillespie is back from Santa Barbara so he will be commenting on the plants again. The plants for this year's competition are:

Mericlone – Flaming Vulcan 'XTC" grown and supplied by David Wain, this is a dark red large standard cymbidium.

Seedling: Kirby Lesh 'Pink Ice' x (Cape Banks x Red Beauty) – hybridized and grown by Colin Gillespie, this cross should give light and dark pinks and is also a large standard, the Kirby Lesh 'Pink Ice' comes from Kimberley Orchids and the Cape Banks x Red Beauty comes from Royale Orchids in Sydney.

***Results for the monthly competition.**

This time of the year there are not many cymbidiums in flower, thanks to the members who brought their plants in, the winners were as follows:

| | | |
|----------------------|-----------------------------|-------------|
| JUDGES VOTE | dayanum | S & M Early |
| OPEN SECTION | dayanum | S & M Early |
| INTERMEDIATE SECTION | ZigZag 'Kim' | R Andrew |
| NOVICE SECTION | Kusada Shining 'Geyserland' | B Clemson |
| BEST SPECIES | dayanum | S & M Early |

Congratulations to everyone.

***Condolences**

Our thoughts go out to the family of Rosemary Crozier who passed away peacefully from a long illness, she will be sadly missed.

***Request from City of Monash regarding Smoking**

Our meeting Hall : 10 metres within the front and back entrances of the Hall are SMOKE FREE, kindly adhere to this requirement as this could jeopardise future leases of the Hall. Many thanks for your co-operation.

***Events coming up for our monthly meeting**

Our annual auction will be held at our June meeting this year as we have Greg Bryant from Sydney as our guest speaker for our July meeting, please diarise both of these dates.

The Committee try their best to make the meeting interesting but input from the members is always welcome, if anyone has any thoughts about items of interest for the meeting please speak to a committee member at the meeting.

***COSV Annual Show**

Last year's show held in the Hungarian Club was a great success, we will be holding our show at the same venue this year, Our show will be on the 8th and 9th September 2012 with setup on Friday 7th. We will also be having a dinner on the Saturday evening at the Hungarian Club the cost will be \$35 per person, more details later in the year.

***OSCOV Show**

This will be held at the Springers Leisure Centre on 24th - 26th August 2012, with setup on Wednesday the 22nd and Judging on Thursday 23rd August, the OSCOV Orchids of the Year dinner will be held on the 25th August 2012, more details later.

***Stawell Orchid Society**

The Stawell Orchid Society is holding a seminar on the 2nd June 2012 in the Stawell Entertainment Centre, Main Street, Stawell, there will be 4 speakers and plants for sale, if you require any more information kindly contact Anne Gardiner on 5358 3742

***Assistance in the Kitchen at our monthly Meeting**

The Committee is appealing to members who would like to be part of running the kitchen at our meetings to speak to a committee member, this can be on a permanent or roster basis. We thank you in advance.

***COSV Website**

Your club is looking for somebody to manage the website, if anyone is interested please speak to a committee member.

We kindly request you to bring a plate of eats to share to the meeting on the 10th April 2012.

More on orchid fleck virus

Two to three years ago some of us noticed that the leaves on our cymbidium orchids had streaky yellow flecking on them. We spoke to a few people and some of which were fertilizer supply businesses. Most people including the fertilizer suppliers said that it was a deficiency and indeed when we looked on the internet the symptoms certainly looked like a deficiency. We were advised to add magnesium and Manganese to our fertilizer regime.

We added Magnesium and Manganese over a period of time and waited to see some sort of improvement in the look of our plants but there was none. We were at a loss as to what the problem was, we didn't think that it was a virus because we tested several plants for virus Odontoglossum Ringspot Virus (ORSV), Cymbidium Mosaic Virus (CyMV) and Tobacco Mosaic Virus) and the tests proved negative to these viruses.

Some of the flecking was now turning black. Time went by and we had many discussions with numerous people and the general consensus was that it may be a fungal problem caused initially by a bacterial infection and then progressing to a fungal infection.

Wayne took an infected plant and some leaves up to South Australian Research and Development Institute (SARDI) Waite Research Precinct URRBRAE SA

Wayne had an appointment with Barbara Hall PLANT DIAGNOSTICIAN HORTICULTURE PATHOLOGY. Barbara took one look and said that it was a virus.

Several of the infected leaves were then sent up to a plant pathology testing facility in Queensland.

The spell of humid weather plus our fogging seemed to have accelerated the problem we were discovering more infected plants as the days went by. The speed at which the flecking seemed to be moving through our plants suggested that it was not a virus but a fungal problem.

We travelled out to Complete AG and Seed Supplies (agriculture and horticulture supplies). Virginia and whilst we were there discussing our problem a horticulture consultant called Vic Szabo called in and as happened Wayne had an infected leaf with him and he showed it to Vic and he said that it looked like it may be a fungal problem Anthracnose Collectotrichum Gloeosporioides. Vic recommended using a product called OCTAV Wp a Group Y systemic fungicide used in conjunction with a wetting agent called SYNERTROL HORTI . One of the ingredients in the Synerrol solution is tea tree oil and this would kill off any scale insects.

Vic also asked if we sterilized our potting medium before using and suggested that we should seriously think about doing so and he recommended Condyl's Crystals (Potassium Permanganate). The dilution rate for Condyl's Crystals is 40g/10 litres.

We left there happy that we had solved our problem and came home, drenched and sprayed our plants and eagerly awaited some sort of result.

I was speaking with the secretary of the ACS Kevin Butler (EZI-GRO ORCHIDS) in Western Australia and our problem came up during our conversation. I explained the symptoms and what the plants looked like and he said that it sounded very much like orchid fleck virus and that it was spread by a false spider mite and of course we did not believe that scenario because of the large number of plants that showed up in a short space of time.

Wayne had spoken to a grower in Victoria and said that he had the same problem and that he had Quarantined the suspect plants, stripped them back to bulb only and that the new growth looked healthy. That was about 2 years ago.

Horror upon horrors Wayne received the test results from SARDI and the result was that the plants had orchid fleck virus

Wayne went around to one of our members place Vic Haskard and showed him one of his infected plants and Vic said straight away that it was orchid fleck virus and that he had it in his collection about 3 years ago. Vic had his plants tested for the virus.

We now know that there are several growers that have the same problem and that we will have to be vigilant in our approach to identifying this virus especially when plants are brought in to our club meetings and shows

Orchid Virus

Viruses are organisms invisible to the naked eye. They can only be seen through transmission electron microscope.

There are approximately 30 different viruses infecting orchids in various regions of the world. There are three that we as cymbidium growers are now familiar with

- Odontoglossum Ringspot Virus (ORSV)
- Cymbidium Mosaic Virus (CyMV)
- Cymbidium Fleck Virus (CFV)

Orchid Fleck Virus is far worse than ORSV, CyMV, because it is spread by sap to sap transfer (poor hygiene) and more

importantly by False Spider Mite – *Brevipalpus Californicus* (Arachnida Arari: Tenuipalpidae).

Brevipalpus Californicus has an extensive host plant range and they are about half the size of the Red Spider Mite (228 microns long) and they do not spin a web.

This mite and the spread of Orchid Fleck Virus is a very serious situation because the infection may not show up in our plants for 24 months or more.

The virus affects the plants and then the plants end up with a fungal problem.

Important: Identify the infected plants and dispose of them because the spread of this virus is incredible. There is no cure.

These false spider mite love humidity so all our good work, installing foggers make for a wonderful habitat for these critters!

Two Spotted Mite (Red spider Mite) thrive in hot dry conditions.

What to do

Dispose of all infected plants and set up a mite eradication program.

We have purchased a product from Complete AG and Seed Supplies at Virginia, just opposite Virginia Nursery. The product is called OMITE. Omite came on the market to replace KELTHANE for the two spotted mite.

This insecticide is an Aracicide because the mites are in the spider family. This insecticide is by contact it is not a systemic insecticide so we must make sure that we have complete coverage. Completely wet the leaves on both sides and around the bulbs. Make sure to de-husk the bulbs prior to spraying.

Program

Spray every 5 days for four applications then every 14 days.

I would then recommend using dissolving sulphur every 28 days and even use a systemic insecticide now and again because if we use the same chemical all the time, mites become immune to them.

Host plants for the False Spider Mite are numerous. All Acacia, Callistemon, Citrus, Croton, Dendrobium, Jacaranda, Lycaste, Poinsettia, Rhododendron, and many more. Just about all plants are hosts.

Wednesday 22 February 2012

Wayne has now thrown out 150 plants and I'm up to 75. Some years ago I experienced bulb rot and I lost around 80 plants and I thought it was all doom and gloom but this Orchid Fleck Virus is worse because the False Spider mite problem won't go away, we will have to keep spraying to keep our plants healthy.

I have never used insecticides. The only thing I have used is ECO Oil. This mite eradication program will kill off all our beneficial bacteria and fungi and I'm not happy about that.

Orchid Fleck Virus Symptoms

Orchid Fleck Virus (OFV) causes necrotic or chlorotic ring spots and fleck symptoms in many orchid species and is sap transmittable (sap to sap) and by the false spider mite (*Brevipalpus Californicus*) the virus is transmitted by both the adult and nymph, but not the larva.

Brevipalpus Californicus is spread throughout the world.

Brevipalpus Californicus Taxonomy:

- **Class** - Arachnida
- **Order** - Acarina
- **Family** - Tenuipalpidae
- **Morphology**

Egg the newly laid eggs are bright orange and shiny.

Lava the lava is bright orange and ovoid in shape

Protonymph the protonymph has four pairs of legs and is almost colourless.

Deutonymph the deutonymph is bigger and more slender and is also almost colourless.

Adult the adult is similia to the deutonymph but bigger and has bright spots. The preoviposition lasts one to two days. The female lays on average 43 eggs in 20 days.

The incubation period is 3 days.

The mites undergo three moults which last 2-5 days between each moult. The mite reach adulthood (from egg to adult) in about 14 days and the males live for about 18 days and the females for about 21 days.

Important

It is important to regularly use an aracide (every 5 days) so that we can stop the life cycle and hopefully eliminate these mites.

(see above recommendations on types of insecticides/acaricides and frequency)

Brevipalpus Californicus have been known to survive for extended freezing temperatures but are supposedly susceptible to temperatures above a dry 35 degrees Celsius. I wonder if the mite we have has adapted to our Australian conditions.

Inspect your plants every day and be aware that the infection may not show up for 24 months, although, I believe that it may be much longer.

Saturday 25 February 2012

Like Wayne the problem with Orchid Fleck Virus invades my thoughts quite often. I guess a couple of the questions are: How does *Brevipalpus Californicus* – False Spider Mite migrate and where they pick up the Orchid Fleck Virus.

The incidence of Orchid Fleck Virus is widespread throughout Western Australia, South Australia, Victoria, New South Wales and Queensland. I wonder if our changing weather is helping the spread of this mite? We used to get long periods of temperatures over 35° and into the 40's. This is supposed to kill off these beastly critters but I wonder if like all other pests and diseases that come from overseas, they have become acclimatized to our conditions and continue to proliferate no matter what.

Some people stated that we will be OK when the weather cools down (Wintertime), but I have read that they survive extended periods of freezing temperatures.

Another thought: How do we know if other plants are infected because of the 24 months or more for a plant to show signs of the virus? I suppose the only way to hopefully eradicate these mites from our collections is to keep spraying with all the 'nasties' and be very strict on plant inspections at club meetings and shows.

All orchid genera are susceptible to Orchid Fleck Virus.

The False Spider Mite probably hitches a ride on the wind also by leaves from trees *etc* that blow in the wind and host to this mite. The mite migrates to an orchid plant with the virus then travel from leaf-to-leaf and plant-to-plant spreading the virus as they travel.

I have heard comments from members of two different clubs as to where they think that they picked up plants with virus. I would advise people from getting on the blame game wagon because we really don't know where or how our plants contracted the virus. The time involved between the mite infecting the plant to showing signs of the virus is at least 24 months and as I have mentioned, I think it could be a lot longer.

These comments and the way that I am going about getting over this Orchid Fleck Virus is based on all the information I have gathered and is my own regime. I'm sure that someone who is more qualified than I am may come up with a much better solution to the problem.

Wednesday 29 February 2012

I have had a couple of comments on this article. One was to emphasize the introduction and use of foggers in the last 5 years. I agree that we have provided the perfect environment and habitat for the False Spider Mite therefore I will cease to use them from now on, which is a shame because they were a great way of reducing water use. The other comment was to introduce predatory mites. I spoke to Matthew Parker who breeds predatory mites (*Persimilis*) in Coffs Harbour - north coast New South Wales. Matthew said that *Persimilis* do not attack *Brevipalpus Californicus*.

I also contacted Biological Services in Loxton SA and enquired if the predatory mite *Californicus* (*Neoseiulus Californicus*) would attack the False Spider Mite. James from Biological Services cannot guarantee that the predatory mite *Californicus* (*Neoseiulus californicus*) will feed on the False Spider Mite (*Brevipalpus californicus*) but he is quietly confident that they will.

- *Californicus* (*Neoseiulus californicus*) does coexist quite well with the predatory mite *Phytoseiulus persimilis*.
- *Phytoseiulus persimilis* feed on the Two Spotted (Red Spider Mite).

These two predacious mites are available from Biological Services in Loxton, South Australia. Website: <http://www.biologicalservices.com.au/>

I would like to try using both these predacious mites. I hate having to use all the nasty chemicals in the shade-house because we have a very green garden and ponds that may host the False Spider Mite.

Please be responsible with the removal and destruction of your infected plants. One suggestion is to place the plant in a black plastic bag and leave it out in the sun for at least a week then dispose of it in the green compost bin. I have a large number of plants therefore the plastic bag method is not practical for my collection. I cut the leaves off and slice up the bulbs and place them in the green bin.

It is important to destroy the infected plants so that no one else can pick them up at the recycle depots and attempt to grow them.

Peter Hall