Dear TOS Members,

**Jan 2024** – it is hard to believe that the first month of 2024 is already coming to an end. All my New Year's resolutions have been long forgotten, passing quietly into oblivion. But I'm pleased to write that none of those resolutions was for orchids. Why? It's because orchids have become such an integral part of my life that resolutions for them are dreamed up not annually but daily……and acted upon!

## In Reflection: Jan 8, 2024 TOS meeting at JCRA

Jennie Fagen, PhD of NCSU educated us about plant viruses that can be problematic amongst our orchid collections if infected plants are not recognized and dealt with in a timely manner. Cymbidium mosaic virus (CyMV) and odontoglossum ring spot virus (ORSV) are the main culprits, but there are certainly several other known plant viruses out there that indiscriminately infect orchids, e.g. orchid fleck virus (OFV).


Jennie demonstrated that testing with Agdia ImmunoStrips® is an easy procedure. However, waiting to see whether the dreaded purple band(s) appear – VIRUS ALERT! – can be a nail-biting experience, especially when testing a plant of monetary or sentimental value. Ignorance may well be bliss but if it is one, or just a few plants, amongst a valuable collection of many, it is best to just bite the bullet and make a deposit in the trash can!

**Are viruses more of a concern than other pests and diseases for orchids?** From the perspective that there is no known treatment I would say yes. However, if we adopt a disciplined approach by becoming knowledgeable of the symptoms of virus-infected plants, and test suspect plants, viruses are clearly manageable. After Jennie's presentation I quipped that even a virus must make a living! So, I leave this topic with an interesting thought for you to ponder about viruses and life. Though structurally relatively simple (a strand of genetic material wrapped in a protective protein coat), a plant virus is highly sophisticated in its mode of replication: it must evade its host plant's defensive mechanisms (physical and chemical), penetrate the cell wall, facilitate passage through the cell membrane, and then stealthily hijack its host's intracellular machinery to replicate itself. Truly an elegant way of making a living when one considers replication as a key defining parameter of a life-form as described by biology. Perhaps we should tip our hats to the lowly viruses instead of cursing them for they truly do make a living, but without having to sustain all the complicated trappings associated with multicellular life-forms!

**Practical measures to adopt for controlling viruses (and other pests and diseases):**

- Obtain plants from reputable suppliers
- Arrange plants in your collection so they DO NOT touch one another
- Sterilize cutting implements before using them on another plant. Wipe thoroughly with 70% isopropyl alcohol; soak for 15 minutes in 10% bleach solution or a saturated solution of trisodium phosphate (i.e. TSP dissolves no more); flame metal implements using a small, hand-held propane or butane torch (a great gift for an orchidist by the way!)
- Never reuse old potting medium to repot orchids
- Be diligent at eradicating any piercing/sucking insects and mites because they spread viruses
- Thoroughly sterilize used pots before using them again
- Test a suspect plant, especially one looking a bit peaky!

Post meeting, new Member Roxas Reeves shared interesting additional information with me which I pass along as it relates to the potential of virus transmission when an infected plant is used for breeding. Though virus transmission from the seed parent to the progeny of a cross is inevitable, virus transmission via pollen from the pollen parent is also known to occur (see https://www.cosv.com.au/orchid-viruses). For me, the conclusion is clear: DO NOT use virus-infected plants for breeding at all.

The kind donations of orchids and plant stands from the parents of the late Ms Shannon Evans raised $60 towards future TOS events.

## Feb 12, 2024 TOS meeting at JCRA

Linda Thorne will be speaking on *Denbrobium* orchids. This genus is large, with well over 1500 species and many registered hybrids too. They have broad appeal to both beginners and orchid experts. The so-called antelope hybrids with their tall, antelope-like, twisted petals are particularly beautiful and can create a very nice orchid collection just by themselves. Linda will be selling a variety of orchids at the meeting.

Linda owns and manages Seagrove Orchids nursery in Seagrove, NC. She is a very knowledgeable orchidist and the plants she sells are top notch. TOS is looking into arranging a Members' outing to visit Linda's greenhouses at some point this year, so stay tuned.

## TOS Orchid Growers Day on Sunday, February 25, 2024 at 1:00–4:00 PM

This is a TOS event to be held at, and in cooperation with, **Watered Garden Florist, 955 Trinity Road Raleigh, NC 27607**

Attendees will learn from expert growers how to grow different types of orchids in the home and greenhouse. The program will benefit the windowsill grower, novice orchid collector, and those curious to know why so many people are growing orchids.

**Cost**

Registration is free for 2024 TOS Members. For non-members there is a fee of $25.00, but that comes with membership to the Triangle Orchid Society for the remainder of 2024. What a deal!

**Registration**
Reservations must be made in advance to ensure the availability of places for all attendees. Please email **triangleorchidsociety@gmail.com** to register or for questions. The reservation deadline is **Feb 19**.

Workshop content includes:
- Tips for growing and blooming orchids
- Lectures and demonstrations
- Refreshments and a free orchid
- Quality orchids for sale
- 2024 membership to the Triangle Orchid Society (applies to non-members registering for the event)

## Ecuagenera Pop-Up Orchid Sale, March 23-24, 2024 in Nashville, NC

Ecuagenera is an orchid company in Ecuador. They have an extensive list of plants from all over the world that they propagate and sell. One can order plants and have them shipped or pick them up…they handle all the importation regulations. Information about the company and plant lists are online at www.ecuagenera.com

They will be selling plants at Growin Green in Nashville, NC. This is just about an hour east of Raleigh so it is easy to get there. They will also have plants available at the orchid show in Asheville. Note the order date for the Pop-Up sale is not correct….it is most likely around March 1st based on dates for other sales. Some members have orders to pick up and are planning to go to the Pop-Up. If you have questions or are interested in carpooling, contact TOS Member John Barnes at hjbarnes43@icloud.com

## Members' Feature

Roxas Reeves shared this photo of *Bulbophyllum lobbii* 'Kathy's Gold' AM/AOS that is currently flowering for him. Roxas says, "It really is stunning, seeing how the petals shift and pull back, then forward from morning into night, and has been delightful to watch!" It is a species from Borneo, Malaysia, Indonesia, and the Philippines, and Roxas grows it indoors in a warm grow tent. Regarding its fragrance (odor?), he says, "when I first open my warm grow tent in the morning, the smell isn't awful at all! More like stepping into a room that was shut too long. It dissipates quickly and is barely detectable the rest of the day. Well worth it, in my opinion. It's currently sprouting two new pseudobulbs, as well!"

Thank you, Roxas.

This splendid specimen of *Cattlianthe* (formerly *Soprolaeliocattleya*) Jewel Box 'Dark Waters' AM/AOS is owned by Member Bob Meyer. Lucky Bob! I just love the dusky red color of the flowers and when the morning light catches the plant at Riverwood Orchids Farm, where it is boarded, the flowers really do glisten like jewels. With yet a few more buds to open, it's a great pity TOS is not putting in an orchid display anytime soon.

Thank you, Bob.

I cannot let January pass without mentioning *Angraecum sesquipedale*. It's endemic to Madagascar and in culture (in the US) it flowers late Dec – early Mar. The specimen shown, generously gifted to my wife in 2016, flowers reliably each year within a one-week window around Christmas. It's an excellent living aid for teaching plant-pollinator coevolution.

The orchid's exceptionally long nectary spur led Charles Darwin to speculate in letters to Sir Joseph Dalton Hooker that there must be a moth with an equally long proboscis. In his 1862 book, On the Various Contrivances by Which British and Foreign Orchids are Fertilised by Insects,……., Darwin gave his idea coevolutionary context: he reasoned that some *Angcm. sesquipedale* flowers would become fertilized as a result of pollinator moths striving to reach nectar in the tips of the long nectary spurs. Darwin found an advocate for his idea with his contemporary, the noted entomologist Alfred Russel Wallace (of Wallace Line fame), who predicted further that the pollinator would be a sphinx moth and he encouraged naturalists visiting Madagascar to look for it. Some 20 years after Darwin's death, a Madagascan sphinx moth with a suitably long proboscis was found; it was described and named *Xanthopan morganii praedicta* in 1903 by Rothschild & Jordan. If you wish to explore more of Darwin's extraordinary deductive reasoning, I highly recommend checking out the website https://www.darwinproject.ac.uk/commentary/life-sciences/was-darwin-ecologist

I advocate that more TOS Members grow this majestic *Angcm.* species so that you too can experience a bit of Darwinian magic when it flowers.

## A closing sad note

It is with a heavy heart I inform you that Miriam Sagasti died recently. Miriam was a long-time Member of TOS and was a great volunteer for the Society. She hosted speakers, created show posters, and

worked hard to help TOS succeed. Besides her love of orchids, Miriam was a very accomplished artist within the local community. Her work captured the beauty of the natural world and indeed stands as a wonderful legacy. She will be dearly missed by all who knew her. Miriam's family is arranging a memorial service, the date of which will be forwarded to everyone as soon as we hear.

Wishing you a warm and wonderful February. And, please do send me your orchid photos and stories!

Phil Brindle, TOS President

**http://TriangleOrchidSociety.org** **https://www.facebook.com/TriangleOrchidSociety/**