



St. Augustine NEWSLETTER

Orchid Society February 2020

Volume 15 Issue #2

CLUB NEWS



Arthur Katz

February 4, 2020

Meeting

by Janis Croft

Welcome and Thanks.

President Tom Sullivan opened the meeting at 7:00 pm with over 85 attendees. Tom thanked Dottie, Mary Ann, Rae and Carolyn for bringing in desserts.

Membership VP Linda Stewart started by introducing the volunteers at the Welcome Table: Carolyn Rae, Dottie and Mary Ann

and thanked them for their help in greeting and talking to members and guests as they arrive. She next announced our returning member Karen Harvey and new members Teddy Moore and Maureen Tuttle. Linda also noted the large number of visitors joining us and had them raise their hands to receive their free raffle tickets for being first time visitors; Verna and Hank Plona joined our club the next day! All of the February birthday people also received a free raffle ticket. As our Sunshine Coordinator, Linda announced that if you know of anyone in need of a cheering up or a get well card, let her know by emailing her at info@staugorchidsociety.org.

Tom noted that it's time to renew your annual membership with Linda at the back table or you can renew online at our website. He then reminded all to drop a dollar in the basket while enjoying the refreshments. Tom reminded us to vote for your favorite plant on the show table.

Club Business. Janis Croft, Exhibit Chair, announced that the club would like to put an exhibit in the Jacksonville Orchid show and she was looking for volunteers to assist with installing the exhibit on Friday, March 20 and helping with the Sunday afternoon break down. Volunteers were asked to contact Janis if interested in working on this committee by email at info@staugorchidsociety.org. She also reminded everyone to start planning on what plants they could submit for the exhibit.



There are many orchid shows this month: Feb. 7-9 South Carolina Orchid Society Show, West Columbia, SC; Feb. 8-9 [Boca Raton Orchid Society Show](#); Feb. 14-16 [Greater Orlando Orchid Society Show](#); Feb. 15-16 [Port St. Lucie Orchid Society Show](#); Feb.15-16 [OS of Highlands County Show](#) in Sebring and Feb. 22-23 [Naples Orchid Society Show](#). Check out the SAOS website under SAOS Resources/Orchid Events for upcoming events.

Ace Repotting Clinic started up Feb. 1 and had a steady flow of plants that six volunteers helped repot. The next clinic will be on March 7 from 9 until noon at Ace Hardware, 3050 US 1 South.

Culture classes will be held at 6:15 pm before the main meeting each month in a separate side room. This meeting's topic was on Bud Blast and Flower Blighting by Sue Bottom. Next month will be on Staking Your Orchids for display.

Catasetum Competition Grow - Sue advised all to watch their Catasetums for signs of life and repot when the first green appears.

Deflasking Project – She then asked how Jim Robert's seedlings were growing. One tray was brought in with a good showing of growth. Others reported on their status. Sue said it's not unusual in deflasking to lose a third of the seedlings. We seem to be having good success and if continues, all will be able to get a plant in the fall or spring of next year. Fingers crossed.

All of the potting supplies sold out. There were still t-shirts, plant tags, pots and calendars remaining. If you need any supplies, email info@staugorchidsociety.org and we will have it ready for you at the next meeting.

Sue thanked Bea for her service as librarian and announced our new librarian Howard Cushnir. Howard then thanked Bea for her excellent organization of the library and efficient transferral of the books over to him. He brought in a book on Tropical Slipper Orchids to borrow as a complement to our guest speaker's topic. He also brought in three beginner books on growing orchids and encouraged all to use the library collection listed on our [SAOS website](#). If you would like a book, email librarian@staugorchidsociety.org and Howard will bring it to the next meeting.

Show Table. Courtney was back and amazed by the

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CLUB NEWS



Upcoming Orchid Events

February

- 7-9 South Carolina Orchid Society Show
Riverbanks Zoo & Botanical Garden
West Columbia, SC
- 8-9 Boca Raton Orchid Society Show
Safe Schools Institute
- 11 JOS Meeting: Bulbophyllums, 7 pm
Bill Thoms, Bulbophyllums
- 14-16 Greater Orlando Orchid Society Show
Orlando Garden Club
- 15 FL North-Central Judging, 1 pm
Clermont Garden Center, 849 West Ave
- 15-16 Port St. Lucie Orchid Society Show
Port St. Lucie Community Center
- 15-16 OS of Highlands County Show
Agri-Civic Center, Sebring
- 16 Keiki Club for Orchid Beginners, 1 - 3 pm
Growing Area Tour - Winterizing
Susan and Doug Smith's Home
- 22-23 Naples Orchid Society Show
Moorings Presbyterian Church

March

- 3 SAOS Meeting, 6:30 pm
Growing Specimen Plants
Bill Thoms, Bulbophyllums.com
- 6-8 Martin County Orchid Society Show
Martin County Fairgrounds
- 7 SAOS at Ace Hardware, 9 am til noon
3050 US 1 South in St. Augustine 32086
- 7-8 Tampa Bay Orchid Society Show
Tampa Scottish Rite Masonic Center
- 10 JOS Meeting, Show Update, 7 pm
Eric Cavin, JOS Show Committee
- 13-15 Orchid Society of Coral Gables Show
Fairchild Tropical Botanic Garden
- 13-14 Englewood Area Orchid Society Show
Englewood Methodist Church
- 14 FL North-Central Judging, 1 pm
Clermont Garden Center, 849 West Ave
- 20-22 Gulf Coast Orchid Alliance Show
North Collier Regional Park, Naples

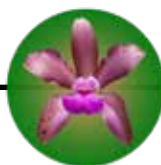
- 21-22 Jacksonville Orchid Society Show
The Garden Center of Jacksonville
- 28-29 Central Florida Orchid Society Show
National Guard Armory, Orlando
- 28-29 Deep South Orchid Society Show
Coastal Georgia Gardens, Savannah
- 28-29 EPIC Celebration of Spring
Annual Flower and Garden Expo
St. Johns County Agricultural Center
- 28-29 Nature Coast Orchid Society Show
VFW Post, 18940 Drayton St, Spring Hill

April

- 4 SAOS at Ace Hardware, 9 am til noon
3050 US 1 South in St. Augustine 32086
- 7 SAOS Meeting, 6:30 pm
Potting and Mounting Orchids
Tony Millet, Bonnet House

St. Augustine Orchid Society Organization

| | |
|----------------------------------|--|
| President | Tom Sullivan tomjs91@gmail.com |
| Vice President Communications | Janis Croft croftie1984@gmail.com |
| Vice President Events | Dianne Batchelder ladydi9907@aol.com |
| Vice President Membership | Linda Stewart lindstew@hotmail.com |
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CLUB NEWS

Continued from page 1

variation on the show table. He stated that if you wanted an education on the varieties of Cattleyas available, our show table seemed to have examples of almost all. He moved back and forth to discuss all of the cattleyas first with Sue's help in holding them up. The first was the small miniature coerulea Lc. Love Knot 'Blue Moon' which had a beautiful flat flower about 3" wide and quite blue. Next were the golden yellow cattleyas, Pot. Heather's Gold (an EFG cross), Great Hero and Yellow Bird. The latter is quite fragrant and has spots on the lip due to B. nodosa in its background. A classic corsage cattleya, Madame Edith Bongo, has a beautiful contrast of white and yellow. If grown in lots of sun, this can have a pink blush particularly on the back of the petals. The Pot. Hey Song from the far-east is an interesting cross between yellow flowering and purple flowering cattleyas that produce a classic red hybrid. The very nice and mature orchid, Lilac Dream, had 18 flowers, 4 per long stem. Then there was the small, cute white and purple lipped flowers of the species, Laelia lundii which surprisingly is in the Cattleya alliance.

He discussed the Dendrobiums on the table which bloom either with leaves or without or somewhere in-between. The Den. tetragonum 'Dark Red' on a cypress knee mount was stunning. There were many spring blooming dendrobiums, including the brilliant Red Senator which had perfect spacing along the cane.

There was a wonderfully grown Angraecum from Madagascar whose large and fragrant flowers are pollinated by a long tongued moth. Courtney noted the keikis growing at the base which will continue to make this plant larger and larger in subsequent bloomings. There were so many plants it was hard to list them all. Check out the photos of our show table examples at the end of the newsletter and on the SAOS website.

SAOS Program. Sue Bottom announced our guest speaker, Arthur Katz, who besides being a hobbyist and accredited orchid judge, was the Chair of the Florida North-Central AOS Judging Center. Arthur has been growing orchids for over 35 years and he appreciates the orchids that are unique and unusual. He started by saying our show table was one of the finest display of orchids he has ever seen at any society where he speaks which was quite a compliment to us.

Arthur's talk was on "Rare and Unusual Orchids" and he began by asking the audience how many grow unusual orchids. After a show of hands, he then asked how many kill unusual orchids and there was another large showing of hands. He then defined "rare" orchids as those that die for everybody and "unusual" orchids as those that will live for a few growers in the right conditions. He has traveled back and forth from Ecuador and located many rare and usual

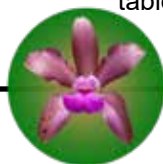


orchids in that country. Some he has been able to bring back and grow but mostly they remain in their location due to their fragility.

He spoke of the first orchid he ever bought, a Salagia accrete, which he was told was easy to grow indoors. It actually is a very unusual orchid from the Himalayas and he now knows only two people who were able to keep a plant alive and he wasn't one of them. Luckily he also bought an Slc. Jewel Box and that started his growing passion. The world has over 40,000 species and 150,000 hybrids. Most of these orchids have a wide range adaptive quality meaning they can be grown in a wide range of different conditions and survive. Rarity is frequently because the plant needs such specific requirements, sometimes it's a unique bacteria or fungus only found at the original location. Arthur showed a slide of a Disa. This orchid flowers all over South Africa but if removed, it dies because it requires such a narrow temperature range. Another example is the Telipogon with its beautiful yellow flowers with linear stripes. Even though the seed pots may contain a million seeds, in order for one to start a new plant, it has to land in just the right tree branch with the right detritus, moisture, temperature, and light conditions to germinate.. Rarity can also be due to the plant being one of a kind. Cypripediums calceolus from North England was one he saw at a show. The entire plant was dug up including a huge earth ball surrounding it, brought to the show and had a 24 hour security guard protecting it. When the show was over, it was moved back to north England and replanted.

Next Arthur spoke about some unusual orchids which are difficult to grow. The Draculas need cool ventilation and can't overheat. He had one that died within a few hours after his fan stopped working. The Huntleya has 4" flowers that feel like plastic. The difficulty in growing them is that they tend to rot. They grow naturally where winds blow constantly so they dry out within an hour after getting wet. He advised growing them in front of a fan that runs non-stop. He then showed slides of several other unusual orchids and discussed their quirks for growing successfully.

Meeting Conclusion. Mary Ann Pearl announced the Member's Choice Award as Susan Smith's Den. Red Senator 'Maxim'. The evening concluded with the Raffle table. Thanks to the helpful hands that stayed to reset the tables and chairs and clean up the room.



CLUB NEWS

SAOS Offerings

Deep Slotted Orchid Pots. We have the real terra cotta orchid pots with the deep side slots for sale. They still have to be sterilized (bake at 425 for 2 hours, leave the windows open!). We are offering them to members: \$1 for a 3" pot, \$2 for a 4" pot, \$3 for a 5" pot and \$4 for a 6"; the larger sizes are almost gone. [Email us](#) if you want to reserve pots, to be picked up at Sue and Terry's.

Calendars. We have a few calendars featuring the Member's Choice orchids from the Show Table left. Calendars are \$15 each. We only have a few left.

Plant Tags. We have vinyl plant tags that can be written on both sides with pencil, they don't fade or crack. We are selling them in packs of 30 for \$5.

Potting Mixes. We blend up a coarse mix for cattleyas and dendrobiums (Orchiata, sponge rock, hydroton and charcoal, \$5 for a gallon bag) and a water retentive mix for phals (ProMix HP and sponge rock, \$3 for a gallon bag or two for \$5). [Email us](#) with your order and we'll bring to the meeting.

Fertilizers. We offer time released fertilizer in mayo jars and Purely Organic fertilizer in coffee jugs that we sell at the meetings for \$5 each.

February 16 Keiki Club

Winterizing Your Growing Area Road Trip – Growing Area Tour

Susan and Doug grow their orchids on a screened porch and under a pergola in summer, setting up portable greenhouses in winter. Winter is always a challenge for those without a greenhouse. See how others grow their orchids and meet the challenge of winter cold weather.

Where: Doug and Susan Smith's Home
148 Sarah Elizabeth Drive, St. Johns 32259
When: February 16, 1 to 3 pm

American Orchid Society Corner

[Webinars](#)

February 11, 8:30-9:30 pm, AOS Members Only
Large Flowered Cattleya Species--Art Chadwick
February 18, 8:30-9:30 pm, Everyone Invited
Greenhouse Chat Orchid, Q&A - Ron McHatton

[Orchids Magazine this month:](#)

Artificial Lighting – Ray Barkalow
Bulbophyllum beccarii – Jerry Lee Fisher
Catamodes Hybrids – Fred Clarke
Greenhouse Foundations – Jean Allen-Ikeson

[Photos of Latest AOS Awards](#)

Time to Pay Your 2020 Dues

We'll be collecting dues for 2020 from now through March. Dues are \$20 for an individual and \$30 for a family. You can mail your membership check to SAOS c/o Linda Stewart, 1812 Diana Drive, Palatka 32177. If you prefer to renew your membership online, you can use the PayPal link on our [website](#). Easy Peasy!

Beginners Culture Classes

We have been enjoying the culture class for beginners, now starting at 6:15 before the meeting. In February, we'll talk about how to stake your orchids for their best presentation. Send your suggestions for future topics to info@staugorchidsociety.org.

Catasetinae Competition Grow

Let sleeping dogs lie. Sometime this month, you may start to see the new green growth emerging at the base of the bulb. If it needs to be repotted, this is the time to do it, but if the mix is fresh, you can leave it in it for another year. Don't water until the new growth is about 5 inches tall.

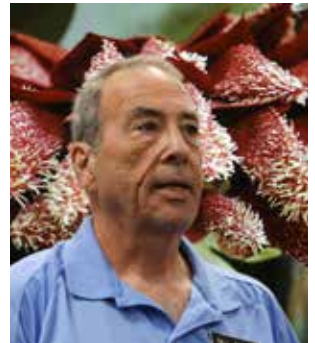
March 3 Monthly Meeting Growing and Showing Specimen Plants

Bill will talk about Growing and Showing Specimen Plants. Bill Thoms and his wife, Doris Dukes, have been growing orchids around Central Florida for 40 years and have received almost every award granted by the AOS as well as more Awards for Culture than anyone else in the world. His talks are spiced with funny stories and funny associations. Whether you grow thousands of orchids or only a few, you will have a wonderfully entertaining time and be able to grow anything better..

Bring your flowering orchids to exhibit on the Show Table. We will have our normal raffle at the end of the meeting. Friends and guests are always welcome!

When: Tuesday, March 3, 6:30 til 9 pm

Where: Memorial Lutheran Church
3375 US 1 South, St. Aug 32086



INSPIRATION



Bulb. medusae

© Terry Botta



CULTIVATION



Orchid Questions & Answers

by Sue Bottom,
sbottom15@gmail.com

Q1. Does the mini-dendrobium have thrip effects on it? Do I remove the infected stalks with deformed leaves and treat the rest of the plant? There are new leaves on the plant.



A1. The dendrobium looks like it has mite damage, not thrips, although it is hard to tell without seeing a close up of the upper and lower leaves. The new leaves look like they are being affected by mites too, so I would say the mites are still active. They seem to affect dendrobiums and thin leaved orchids much more than they do the thick leaved orchids like cattleyas. They also thrive in dry environments, so many indoor growers have to learn how to cope with them. You first have to kill the mites on this and possibly other plants. For starters, take them to the kitchen sink and spray them with a mixture of isopropyl alcohol and dish soap, lather 'em up and wash the leaves. Then get a spray bottle of isopropyl alcohol and spray the leaf surfaces top and bottom. Make it a weekly event, perhaps part of your watering routine. You might consider treating with one of the three in one insect, disease and mite control products containing the active ingredients Imidacloprid, Tau-Fluvalinate and Tebuconazole.

Q2. I was away for the weekend, and upon my return found a very sad white Phal. She had 2 very long leaves. As I was taking the pics, one just detached seemingly from the crown. Help!



A2. That looks like Collar Rot, also known as Southern Blight, one of the devastating stem rots. You can see the fungal bodies on the close up of the stem. Scroll down the SAOS website Disease page to the Collar Rot section to read about it. The plant is probably beyond saving. Your only possible hope, and a slim one, is to drench the pot with some fresh hydrogen peroxide (unless you have something like Pageant) and then keep the plant on the dry side and see if a basal keiki appears. However, the tissue from which the basal keiki would grow is what is infected with the fungus, so if it were my plant, I would discard it and remove the source of inoculum from the growing area.

Q3. This Mtssa. Chas. Marden Fitch looked like it was going to be a spike, but instead of flowers it looks like a new growth. The top of the pseudobulb also looks like it is sprouting another new growth. Any ideas?



A3. I have had oncidium alliance plants form keikis from the top of the pseudobulb on some occasions, but don't believe I've ever seen one form at the end of the flower spike like yours has and like often happens with Phalaenopsis orchids. It sounds like a teenager hopped up on hormones!



CULTIVATION



My Favorite Cattleyas

by Courtney Hackney

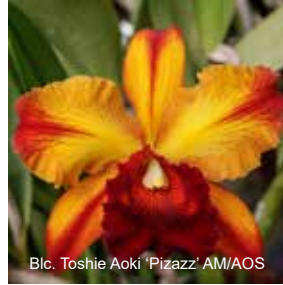
Last month's column was a list of my favorite orchids, but since cattleyas are my favorite group, I'm devoting a whole column to them. With over 500 mature cattleyas in my collection it is difficult to choose favorites. However, here is my short list.

My all time favorite is C Penang 'Black Caesar'. This hybrid between C bowringiana and C Nigrella is extremely vigorous and produces a large head of 3" deep purple flowers every fall with an extremely sweet fragrance. The fact that it is a 40+ year old hybrid is testament to the skill of hybridizers of the day. Another deep purple cattleya, but with very large flowers and a sweet fragrance, is Blc Chia Lin, a Blc Oconee hybrid. This is a more recent hybrid with a number of nice clones available as mericlones and is (in my opinion) the zenith of dark purple hybridizing.

Bright yellow cattleyas have always been my favorite, but are poor growers in my very hot, southern greenhouse. The exception is Blc Toshie Aoki, which originated in Hawaii. There are several different clones in my collection because I have not been able to decide which I like best. Some, like the clone 'Pokaii' have dark red-purple tips on their petals, while others are pure yellow with red lips. All are very fragrant, last a long time and grow extremely well and pass these traits to their offspring.

Semi-alba hybrids have always intrigued me because they have an unusual combination of genetic characteristics; no genes for pigment in sepals and petals, but also a colored lip. This color form of cattleya hybrid has lagged behind others, and few really good clones have come along with this color combination, good form, and relatively flat flowers. The exception is Lc Melody Fair 'Carol', a product of a cross with C Horace. Most of its siblings are light lavender. A second favorite in this type of cattleya is Lc Mildred Rives 'Orchidglade'. Anyone that has ever attended the Miami Orchid Show has seen many specimen-size plants of this hybrid.

While there are many spectacular white cattleyas, my favorites remain some of the first modern white hybrids, notably C Bow Bells and C Bob Betts, many clones of which are still available. One white species that will always be in my collection is C trianaei 'Aranka Germanske', not only because of its place in orchid history, but because it is such a vigorous and beautiful orchid. All of these cattleyas



Blc Toshie Aoki 'Pizazz' AM/AOS



Lc Melody Fair 'Carol' HCC/AOS

quickly make specimen plants and their fragrance fills the greenhouse when they are in bloom.

There are many lavender cattleyas in my greenhouse. One of my favorites is C Horace 'Maxima' along with its hybrids. However, in this color form it is the cattleya species that I love most. C trianaei 'A.C. Burrage' and 'The President' are equivalent to most hybrids and grace the greenhouse all winter, while clones of C mossiae do the same in spring. There are more clones of C schroederiae in my collection so it must qualify as a favorite. The delicate, light pink color, as well as a distinctive, pleasant fragrance distinguish this species from other better known species. Flowers appear delicate, almost paper thin, yet last 6 or 7 weeks.

Summer in my greenhouse is dominated by large-growing bifoliate cattleyas most notably C leopoldii. This sweet-smelling species alone would be enough for me to maintain a greenhouse no matter what the cost.

Finally, my one favorite small-statured cattleya is Slc Final Touch 'Mendenhall'. Even though it has little fragrance, it has large, flat flowers of apricot-orange. Best of all, it flowers several times a year and the color of its flowers vary slightly depending on temperature. Thus, it is like having several different orchids in the space of one.

The key to developing any orchid collection is to learn about the many kinds of orchids found in nature, and how they grow. Discover the hybridizers' art in creating unique combinations and decide what you like best and can grow. Ultimately, your orchid collection is unique to your senses and reflects what you like and appreciate.

Note: Dr. Courtney Hackney wrote a monthly column of his orchid growing tips for about 20 years; we are reprinting some you might have missed, this one from February 2007.



C Penang 'Black Caesar' AM/AOS



C Bow Bells 'Elzada' AM/AOS



CULTIVATION

Growing Masdevallias in the Florida Heat

by Carolyn Robinson, Gainesville Orchid Society



The author's Masdevallia mejiana happily growing and flowering. Note the clay pot which helps to keep the plant's roots cooler and, along with the gravel and glass container, help to provide the higher humidity these plants need to thrive.

I was babysitting a friend's orchids while she went on a trip. Some of them were masdevallias. During that time, one of them, a *Masdevallia herradurae*, burst into full bloom. It looked like a ball of big red, angry ants. That plant set me off on a new challenge. I wanted to grow masdevallias.

Living in Florida is wonderful for growing most orchids, and I am blessed with a sunny greenhouse. But in the summer heat, the interior of the greenhouse can reach 94°F most days. I love growing miniatures, but some of the most beautiful ones need to be in a cool environment, that becomes a challenge.

My friend and I ordered bare root plants at the Redland Orchid Festival and I was on my way. As you might expect, *Masd. herradurae* was in that shipment! I potted mine in sphagnum moss and put them in my greenhouse window for the summer. This window faces south, and I protect it from the sun with a layer of shade cloth over it. The plants did great, but when winter came and the sun shifted, that window got really bright and I added more shade cloth on the top and sides.

I began reading on the Internet about the culture of masdevallias. The articles tell you that they want pure water and up until then, I had been watering with well water, which contains lots of minerals and lime. So I switched to distilled water.

Masdevallias also thrive with high humidity. Because I was growing them in an air-conditioned and heated house, that posed a problem. I had heard about pebble trays, so I set out for the thrift stores and found many 3- and 4-inch-

deep glass bowls that proved perfect for my needs. I use a layer of small rocks about 1½-inch deep in each bowl. That way, the water level in the bowls will not touch the pots sitting on them.

I use clay pots, which helps keep the plants cooler. I switched from potting in pure sphagnum, which I felt allowed the plants to stay too wet, to a mixture of sphagnum, broken tree fern, seedling bark and some sponge rock. I use a little more sphagnum than the other ingredients. All my masdevallias are doing very well with this mixture.

I fertilize the plants every other week with a weak solution, being careful to make sure that their mixture is not bone dry when I do so. I use a 20-20-20 formulation, mixed ½ teaspoon to a gallon of distilled water. This is then diluted again, mixing ⅓ cup of the fertilizer water with enough distilled water to make 2 cups total. Because air movement is also critical, I keep a small fan running in the growing area at all times.

My kitchen window has exploded with flowering plants, so I have now expanded my growing area to growing some under lights in a spare room as well. For this setup, I have a 2-foot fixture with a single, 24-watt T5 fluorescent bulb. The light is about 14 inches above the plants. I leave the lights on for 10 hours a day. These plants are thriving too.

Do your research to find out which masdevallia species and hybrids are intermediate- to warm-growing. Some good choices to start with include *Masdevallia floribunda*, *Masd. herradurae* and *Masd. mejiana*. Take the plunge and try these beautiful miniatures because it is a great day to grow masdies!



South Facing Kitchen Window

This article appeared in the American Orchid Society Orchids magazine in December 2019 (Vol.88:12, p 960), reprinted with permission.



CULTIVATION

Virus Testing

Do You Really Want to Know

by Sue Bottom

There are different philosophies on testing orchids for virus. Approaches range from the person who simply does not want to know to the person who wants a virus free collection. Whether or not to test your orchids is a very personal decision that each grower will ultimately have to make.

Most people simply do not want to know if their plant is virused. Denial is a temptress. We all want to believe that life is fair and only good things happen to good people. It is perfectly fine to assume all your orchids are virus and disease free, as long as you hedge your bets and act as if all your plants are virused so you follow stringent sanitary practices when handling any of your plants. If you find plants that are potentially diseased or exhibit the symptoms of virus, you have to be brutal and simply discard any and all questionable plants.

At the other end of the spectrum are those that want a virus free collection. This group might include orchid hybridizers, who do not want to transmit virus to their new hybrids. A virused plant should not be used as the pollen parent because the virus would be transmitted to the offspring, but a virused plant can be used as the pod parent as long as the seed from the mature, dried capsule is properly sterilized. Of course, the hybridizer must know which, if any, of his plants are virused so the proper precautions are taken. Hobbyists may want a virus free collection so they do not have to worry about virused plants infecting the rest of their or their friends' collection. They are willing to go to the considerable expense of testing each and every plant and discarding any plant that is virused. Then, in order to maintain a virus free collection, every new plant purchased is tested to prior to adding it to their collection.

My Sainted Mother told me to never ask a question I did not want to know the answer to. Too bad my evil sister-in-law did not learn that lesson before asking what I thought of her. So it is with virus testing. If you decide to move forward with virus testing, think the whole process through in advance and be prepared for some heartbreak. My approach was to start testing the most at risk plants, those that are in 8 inch pots and have been through the division process multiple times so they have the highest potential



Often Cymbidium Mosaic Virus causes black blotches on the leaves that result in a really ugly plant, although there are other diseases that can result in black splotching besides virus.

to be virused from contaminated cutting tools and potting surfaces.

Easy Decisions. Any plant that exhibits the symptoms of virus is either simply discarded, or discarded after testing confirms the presence of virus. Plants with the blotchy black necrotic spotting may have Cymbidium Mosaic Virus (CyMV), and those with angular V shaped markings may have Odontoglossum Ringspot Virus (ORSV). Once the symptoms of virus are visible in the leaves, the plant is simply too ugly to keep in the greenhouse. Even worse are flowers that exhibit virus symptoms. ORSV causes color break. CyMV does not usually express itself in the flowers, but when it does, it causes blossom brown necrotic streak (some say a dual infection with CyMV and ORSV is required for the necrosis to occur). In any case, any plant that is obviously infected with a virus is discarded because it is simply too ugly to remain in the greenhouse.

Difficult Decisions. The tough decisions arise when you decide to test your entire orchid collection for virus, even those that don't exhibit any symptoms. You have a plant that is growing well, has no leaf discolorations, no flower blighting, but it tests positive for virus.

- If the vigor is compromised or the flower is nothing special, it is discarded knowing there are many new seedlings growing up that will be glad to take its place.
- If this asymptomatic plant tests positive for ORSV, it is discarded to avoid potentially spreading the

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disease to other plants. ORSV is the primary flower blighting virus, and to avoid spread to other plants, infected plants are discarded.

- If it tests positive for CyMV, it is evaluated on the basis of its growth vigor and flower quality. Vigorously growing otherwise healthy plants with drop dead gorgeous flowers are moved to a virused bench, to isolate them to some extent from other plants. Here, extraordinary sanitary precautions are taken to prevent spreading the disease.

We became familiar with the five stages of grief at Chez Bottom during virus testing:

- Denying the existence of virus (you use strict hygiene procedures... but what about the early days?)
- Being angry with the vendor (but the plant has been in your care for all these years)
- Bargaining with the orchid gods (how can you get the plant to outgrow the virus?),
- Being depressed (what a failure you are at orchid growing), and finally
- Accepting facts as they are (guess this means you'll have to buy lots of new plants and be more careful going forward).

Virus Testing. The test involves cutting a small sample of tissue from the plant, mashing it in a buffer solution and inserting the test strip to wait for the results to appear. If you decide to start a virus testing program, be exceedingly careful to not spread the disease during the testing program. Put on fresh gloves to test each new plant, use newspaper or butcher paper to provide a clean working surface, changing it between plants. Use single use double edge razor blades to make your cuts.

Very little is written about exactly where to obtain the sample. Some like to sample an almost spent flower, some sample the roots, and others the leaves; but, which leaves? I have always sampled the older symptomatic leaves under the assumption that these had the most time for the virus to replicate inside. The Good Doctor Hackney says he always tests a leaf from the youngest mature growth because that is where the virus will be most concentrated. Per Randall and Ogle:

When the virus reaches the vascular tissue, it is distributed rapidly through the plant via the phloem and becomes systemic. Viruses generally move first to the roots and top leaves before infecting the remaining leaves from the top of the plants downwards.



Sometimes Odontoglossum Ringspot Virus causes circular to angular patterns on the leaves with the discoloration ranging from yellowish to reddish to brownish in color.

The phloem, which transports sugars and carbohydrates throughout the plant and fuels the growth of newly developing tissue, also carries the viral particles concentrating them in the new growths. It is possible for the virus present in the older parts to become dormant and test negative, even though the virus is present in the plant.

To get the best flowering, you need a vigorously growing plant that has enough energy in reserve to bloom to perfection. The corollary of this is a poorly growing plant will never have the wow factor. It may grow poorly as a result of a disease from which it can recover, or from a virus from which it will ultimately fade away, and possibly infect other plants along the way. In that the greenhouse is not a hospital for sick orchids, plants that have unexplained poor growth are simply discarded. If you find this too painful, keep a small inventory of test strips on hand so that you can test suspect plants and make an informed decision as to whether you want to discard the virused plant, isolate the virused plant or try to nurse the non-virused plant back to health.

Continued on page 11



CULTIVATION

Continued from page 10



Blossom brown necrotic streak from CyMV (generally thought to be in combination with ORSV) shows up 5 to 10 days after the flower opens, resulting in unsightly discoloration on the floral segments



Color break from ORSV is an irregular, nonsymmetrical marking on the flower. You might simply discard the plant with apparent color break, but thrips and chemicals can cause similar blemishes on the flower.

Citations

Randles J, Ogle H. 1997. Viruses and viroids as agents of plant disease. In: Brown JF, Ogle HJ, eds. Plant pathogens and plant diseases . Australia: Rockvale Publications, 104–126.



ORCHID ADVENTURES



Tamiami International Orchid Festival

It was like old home week in Tamiami where orchid fiends can spend all their Christmas money on orchids from all over the world. We visited with all our vendors and came home with, you guessed it, lots of new seedlings! We'll be seeing some at our meetings later in the year, including Dave Off from Waldor in September and Fred Clarke from Sunset Valley Orchids in November. If you missed Tamiami, there is always the Redland Festival in May to look forward to!



SHOW TABLE



Grower P. Halyburton & M. Rourke
Paph. Hung Shen Spice



Grower John Van Brocklin
Phrag. QF Walter Scheeren



Grower Glo MacDonald
Onc. Tsiku Marguerite



Grower Courtney Hackney
B. glauca 'Pale Jade' AM/AOS



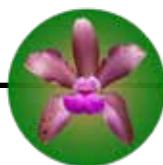
Grower Leslie Brickell
Ornithocephalus gladiatus



Grower Sue Bottom
Pot. Great Hero 'Black Hole'



Grower Penny Halyburton & Michael Rourke
Cym. Evening Star 'Twilight' HCC/AOS



SHOW TABLE



Terry Bottom

Grower Leslie Brickell
Dendrochilum uncatum



Terry Bottom

Grower Susan Smith
Den. Red Senator 'Maxim'



Terry Bottom

Grower Larry McNally
Blc. Love Sound 'Dogashima' AM/AOS



Terry Bottom

Grower Walter Muller
Lc. Lilac Dream



Terry Bottom

Grower Courtney Hackney
Blc. Dr. Joe Walker 'Cotton Candy'



Terry Bottom

Grower Glo MacDonald
Angraecum leonis

Link to all Pictures. <https://flic.kr/s/aHsmLd5i6j>

