St. Augustine Orchid Society NEWSLETTER
April 2021
Volume 16 Issue #4

Club News

April Monthly Meeting

By Sue Bottom

Welcome and Thanks. President Tom Sullivan opened the meeting at 6:45 pm with 42 attendees. Tom thanked Dianne Batchelder and Dottie Sullivan for the treats and coffee. He also thanked the team for Covid cleaning the room. This month we started a new experiment where we live stream part of the meeting via Zoom to our members who cannot be there in person. We had 21 members join us for the culture table and speaker presentation.

Club Business. Linda Stewart welcomed our new members Colm Kelly (St. Aug), Kathleen Overton (St. Aug), Joff Morgan (WA), Maolo Ono (MD), Barbara Knight (Penney Farms) and John Wlodarczyk (AL). Linda asked all with birthdays to raise their hands for their free raffle ticket. As our Sunshine Coordinator also, 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. Our membership renewal period runs through March. Linda will be updating the membership list and member's name tags this month. Do not let this be your last newsletter!

Picnic. Events Veep Dianne Batchelder talked about our picnic planned for Sunday April 18th from 4 to 6 at the pavilion behind the church. She got Tom Sullivan and Charlie Rowell to volunteer for barbecuing the hamburgers and hot dogs and sent around a sign up sheet for people to bring side dishes, ice, etc. Let her know if you plan to attend, her contact information is in the picnic article on the Club News page.

Repotting and Supplies. The repotting clinic will be held on Saturday, April 10th, from 9 until noon at the Memorial Lutheran Church Pavilion across from back parking lot (delayed a week because of Easter). Potting supplies will be available. If you need supplies brought to the meeting, email info@staugorchidsociety.org.

Florida Orchid Shows. The spring Apopka Orchid Festival is this weekend, Friday through Sunday, at Krull Smith's nursery. They are hosting quite an impressive list of vendors, including many of our favorites from Florida and California. Check out the flyer on the Club News page of the newsletter.

Library. Howard Cushnir brought Courtney's *American Cattleya* book along with a few others for members to borrow. He also had the April AOS *Orchids* magazine for anyone interested. He encouraged all to use the library collection listed on our SAOS website.

Culture Table. During the pandemic, we replaced our in-person review of the show table plants with a virtual show table presentation, and we plan to continue this format for the foreseeable future. This month we started a new approach to the in-house Show Table focusing on culture, how people grow their plants. Courtney showed some pictures of seedlings that suffered root death and leaf damage as a result of over-fertilization, in this case with 2 tsp of Purely Organic fertilizer per gallon applied weekly (based on the recommendation of working 2 tsp into the soil around a rose bush). Some of the components are very 'hot' containing quick release nitrogen which can burn the roots. He recommended trimming off the dead roots, dropping the plants into a clean pot and watering daily until new roots form.

There was a mounted *Leptotes bicolor* in bloom, one of the many ways to grow this small cattleya alliance plant. Always make sure to water from all directions with mounted orchids to ensure all roots get wetted. A *Cattleya aclandiae* was happily growing around the outside of a clay pot. Inside there was a second pot and lava rock. Courtney recommended turning the pot upside down and water jetting any organic matter from the center of the pot to ensure it doesn't rot and cause root problems. There was a vanda/phalaenopsis hybrid on the table that was colorful, but clearly the genes had a problem linking up because the branched flower spike and flowers were distorted. Brandon brought in a *Paphiopedilum delenatii* he grows under lights, as well as a summer blooming phalaenopsis that often have fragrant flowers. There was a big cattleya alliance

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Upcoming Orchid Events

April

9-11 Apopka Spring Int'l Orchid Festival
Krull Smith Nursery
2800 West Ponkan Rd, Apopka 3271

10 SAOS Repotting Clinic, 9 am til noon
Moved from 1st to 2nd Saturday
Behind the Memorial Lutheran Church

10 FL North-Central Judging,1 pm
Clermont Garden Center
849 West Ave

13 JOS Meeting - Oncidiums, 7 pm
Steve Hawkins

17-18 Tallahassee Orchid Society Show
Doyle Conner Agriculture Bldg
CANCELLED

18 SAOS Picnic and Orchid Sale, 4 to 6 pm
Memorial Lutheran Church
3375 US 1 South, St. Aug 32086

20 SAOS Virtual Show Table
Courtney Zooms into Cyberspace
Invitation Will be Sent by Email

23-24 Vero Beach Orchid Society Show
Riverside Park
CANCELLED

May

1 Repotting & Plant Clinic, 9 am til noon
Behind the Memorial Lutheran Church
3375 US1 South, St. Aug 32086

1-2 Platinum Coast Orchid Society Show
Kiwanis Island Park Gym, Merritt Island
CANCELLED

2 JOS Picnic, 12 pm
3611 Richmond Street, Jax 32205

4 SAOS Meeting, 6:30 pm
African Orchids
Daryl Venables, Tezula Plants

8-9 Volusia County Orchid Society Show
Hester Exhibit Hall, Volusia Fairgrounds

8 FL North-Central Judging, 1 pm
Clermont Garden Center, 849 West Ave

14-16 Redland International Orchid Festival
CANCELLED

18 SAOS Virtual Show Table
Courtney Zooms into Cyberspace
Invitation Will be Sent by Email

June

1 SAOS Meeting, 6:30 pm
Water Quality and Orchids
Sue Bottom and Courtney Hackney

5 Repotting & Plant Clinic, 9 am til noon
Behind the Memorial Lutheran Church
3375 US1 South, St. Aug 32086

8 JOS Meeting, Mounting Orchids, 7 pm
Lorraine Conover, Lois Rasmussen

St. Augustine Orchid Society Organization

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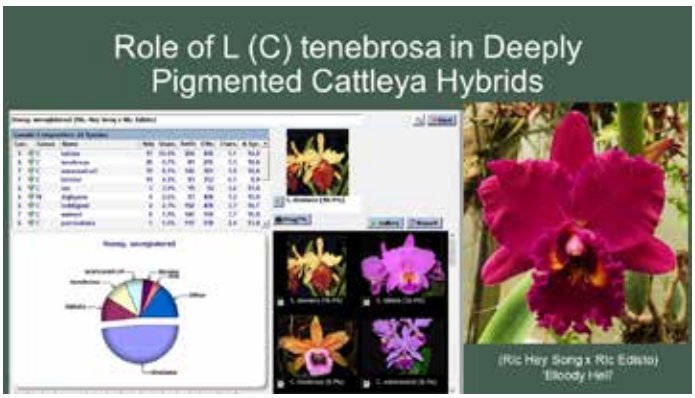
plant happily growing in a wooden basket with lots of wine corks, and another cattleya blooming in a wooden basket that is probably not long for this world. That is the problem with the wooden baskets, a problem that can be avoided if you can find plastic baskets such as the mesh baskets they use for water lilies. The last plant was Slc. Jewel Box with black leaf blemishes on many leaves and smallish flowers. Courtney felt the leaves and remarked they felt sticky, as if from plant sap and he surmised the problem might be mites that can really suck the vitality out of a plant. Some varieties of mites are so small that you cannot see them with a magnifier, and they tend to proliferate during periods of low humidity such as we have now.

SAOS Program. Crowd favorite Courtney Hackney gave an excellent program, the Unappreciated but Important Species in the Background of Modern Cattleya Hybrids. He started with a refresher course in genetics. Most discussions about orchid hybridizing talk about genes, and there are many thousands of genes that contain the code that tells the plant how to grow. These genes, which can be thought of as recipes, are all located on chromosomes, which can be thought of as cookbooks. Cattleyas typically have 20 pairs of chromosomes, each different from the others. Desirable genes, such as for color, can only be inherited if the chromosome on which the gene is located is inherited. That same chromosome can contain undesirable genes, such as for flower form. A good example of this can be found in aquinii form of *Cattleya intermedia*. This



dominant trait causes the lip color to express itself on the petals, producing splash petals in several generations of its hybrids. However, the undesirable trait of cuppiness is also carried forth in these hybrids, rather than the preferred flat flower form.

The Royal Horticultural Society maintains a database of all the orchid hybrids, so you can trace the geneology of hybrids back to the species building blocks simply using a program such as OrchidWiz. Courtney shared some of the screenshots showing the percentages of this or that species present in a hybrid. For one of the splash petal hybrids four generations removed from the aquinii parent, OrchidWiz says there is only 6% *C. intermedia* present, and yet that dominant characteristic is still carried by some percent of its offspring. Of course, you have to remember that the percentages apply to the whole population of the hybrid, say a bench of 200 plants the hybridizer might have kept. Of that 200 plants, perhaps only an eighth of them had the desirable splash petals, and those are the ones the hybridizer selected, photographed, and used in future breeding efforts.

The Rupicolous Laelias are star shaped flowers that impart flatness to flowers along with their intense coloration. They have a reputation for being difficult to grow because these rock dwellers like to be rootbound and they can only be repotted when roots are growing. Species like *briegeri, cinnabarina, harpophylla, milleri* and others can be several percent of the species background, but still influence the progeny.

The yellow colored cattleyas have been developed largely through trial and error. *Cattleya dowiana* var. aurea and var. rosita act very differently in hydridizing, The aura form cancels color when combined with lavender labiate cattleyas, while dowiana enhances color. *Laelia tenebrosa* is often in the background of the intensely pigmented dark purple cattleyas. *Cattleya bicolor* tends to yield flat flowers, good substance and good stems, but also a spade or isthmus lip. More desirable lips are often found in second generation bicolor crosses.

Courtney talked about desirable characteristics, like flat flowers, wide floral segments, thick flower stems and good flower arrangement on a stem. These are floral elements the good hybridizer tries to maximize. The true potential of any orchid can only be realized when the orchid is mature. A first bloom seedling gives you an idea of what the flower might be like, but never discard a plant after a single blooming. The best blooming will occur once the plant has the maximum root system possible in culture, usually when roots fill the pot and new growths are growing out of the pot. It also has to be exposed to the maximum light it can use without leaf damage. Temperature is also important, day time temperature should allow for maximum photosynthesis without water stress, i.e., 60-70% humidity. Cooler night temperatures, ideally between 55 and 65 F, allow the plant to store up energy reserves for blooming.

Meeting Conclusion. The evening concluded with the Silent Auction and Raffle Table. Thanks to the helpful hands that stayed to Covid clean the tables, chairs and room.

Link to photos from meeting: https://flic.kr/s/aHsmVgk51U

Club News

April 18 Picnic and Orchid Swap

Our annual SAOS picnic and orchid sale/swap is scheduled for April 18th.m We will be grilling hamburgers and hot dogs for all. Feel free to bring a side dish and adult beverage, and join the fun. Please let Events Veep Dianne Batchelder know if you plan on attending (954-560-6470, ladydi9907@aol.com) to assure there is a hamburger and/or hot dog for you.

Bring any extra plants or goodies you would like to swap with other members. If you do not have plants to barter with, cash works too! We may have some silent auction plants too!

Where: Memorial Lutheran Church
3375 US 1 South, St. Aug 32086
When: April 18, 4 to 6 pm

American Orchid Society Corner

Webinars
April 8, 8:30 pm, Everyone Invited
Greenhouse Chat Orchid, Q&A - Ron McHatton
April 20, 8:30 pm, AOS Members Only
Deflasking and Potting up – George Hatfield

***Orchids* Magazine this month**:
2019 Year End Special Awards – Nile Dusdieker
2020 FCC Awards – Carol Klonowski
Spring Migration – Sue Bottom

Photos of Latest AOS Awards

2021 Membership Roster

We will be updating our membership roster, newsletter distribution list and the name badge box this month. If you haven't had a chance to rejoin, 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. Don't let this be your last newsletter!

April 10 Repotting Clinic

This month we'll have the repotting clinic on the 2nd Tuesday, April 10th, because of the Easter Egg Hunt planned at the church. See ya there!

May 4 Monthly Meeting

African Orchids
Daryl Venables, Tezula Plants

Daryl will talk to us about African Orchids. Daryl moved from South Africa to Miami in his late teens. His passion for orchids began at the age of seven when his parents took him to his first orchid show. He says it was love at first sniff! For many years his passion was African Orchids, those angraecoids that often have a long white spur to accommodate their moth pollinators. Daryl will share his cultural hints and tips with us.

When: Tuesday, May 4, 6:30 til 9 pm
Where: Memorial Lutheran Church
3375 US 1 South, St. Aug 32086

Inspiration

Orchid Questions & Answers

by Sue Bottom,
sbottom15@gmail.com

Q1. I think this damage on my phal is due to mealy bugs but I never see any critters. I see white stuff on the under side of leaves and in crotches. Could it be something else?

A1. Those are definitely mealybugs, and your phal has them bad. Drench them with the imidacloprid product, which means pour the solution through the pot to wet the roots, which will take up the chemical and move it to where the mealybugs are feeding. At a concentration of 1.47%, the label rate is 6 teaspoons per gallon, you might even consider using it double strength the first time to knock out the infestation. You might also consider drenching all your surrounding plants in case the mealybugs have moved into them.

Q2. I have noticed yellowing spots on my cattleya orchids recently along with a few spots on the back of some leaves. Does this look like scale to you? I have a systemic insect control liquid that I use on other plants with the active ingredient acephate. Can I use this on scale?

A2. That is scale alright. Acephate is the active ingredient in Orthene, and can be used on your orchids to control scale. Good luck!

Q3. These are leaves from a Blc. Lily Marie Almas a bifoliate cattleya. It receives various fungicides throughout the year but I am concerned it is a fungus. The marks are not as dark as they appear in the photos as I was trying to highlight them with backlighting so you could see the areas better. Please let me know if I should remove any leaves or treat with any chemicals.

A3. It's hard to tell, but my best guess would be it is bacterial rather than fungal, particularly if it happened quickly. The longitudinal streaking makes me think of bacterial brown spot, which in younger, tender cattleya leaves looks like that. The backlit photo really shows the infection well. If you have some copper, you can spray the leaves, although the bacterial problem is inside the leaf. As long as the discoloration doesn't get larger, the leaves will still help support the plant. On the other hand, if you don't want to look at that discoloration anymore, you can remove the leaf. The plant looks nice and healthy, it should be a minor setback.

Repotting Cattleyas
by Dr. Courtney Hackney

In case you were not paying attention, the equinox has come and gone, which means that days are now more than 12 hours long. Indoor growers need to adjust lights now so that their orchids will begin preparing for next year's flowers. One of the most frequent misconceptions among indoor growers is that their lights should match the day length outside. If you remember that most orchids we grow are either tropical species or have tropical ancestors, it will be obvious that day length should not be as long in summer as in the temperate zone, nor should nights be as long in winter.

A good pattern is to provide 13 ½ hours of light during midsummer and 13 ½ hours of dark in mid-winter. The key is to change the length of day or night with the season, which requires a three-hour change every six months. Most timers are in 15-minute increments, so increase the time by 30 minutes every month from December to June. Then subtract 30 minutes each month thereafter until December.

Many orchids will flower in response to increases or decreases in day length, so flowering can be controlled to some extent with many orchids. Remember though, there may be other important cues as well. The growth cycle is also dependent on day length. This is most critical for growth and survival of roots as growth may only occur during one time of year. If an orchid is repotted after root growth is completed, there may not be enough roots remaining to bloom well. Cattleyas are especially susceptible to poorly timed repotting. Old geezers (like me) pay close attention to when new roots are produced.

There are essentially three patterns, 1) new roots are produced before flowering, 2) new roots are produced after flowering, and finally 3) species that are each a little different. Most species and hybrids fall into one of the first two groups. For many unifoliate cattleya species, such as mossiae, trianaei, percivaliana, and schroederae, rooting occurs as the pseudobulbs grow with flowering following soon after. Some bifoliates, including C aurantiaca, bowringiana, intermedia, and skinneri follow the same pattern. Flowers usually are produced during winter-spring. Repotting in winter or early spring means that new roots fill the pot before flowering. This "root before blooming" group and hybrids with the same characteristic are generally considered easier to grow.

A second pattern is the "root after blooming" group. These have the reputation of being hard to bloom and flower, but that is largely because of the time when most growers repot. In this type, new leads emerge in the late winter, spring or summer and bloom as the bulb matures. Only after flowering does the plant get new roots. Repotting as the new growth begins deprives the new bulb of the nutrients required to grow and bloom because there are no new roots produced until after blooming. If repotted, cattleyas in this group will often forgo flowering and grow new roots instead.

The root after blooming group contains a number of unifoliate Cattleya species with a hard-to-grow reputation such as dowiana, lueddemanniana, warscewiczii, and warneri. Bifoliate cattleyas in this group have the added problem of producing only a few thick roots with each growth, so repotting at the wrong time often leads to a slow decline and ultimate death in species such as schilleriana, leopoldii, bicolor, and granulosa. Better timing of repotting often solves the undeserved reputation of being hard to grow.

There are Cattleya species that produce new growths and roots several times during the year, such as C. aclandiae and walkeriana. These species produce new growths and then new roots almost immediately.

If you are interested in learning more about Cattleya culture, including the details of each species and their rooting cycle, consult the article by William Rogerson in issue 4 of the Orchid Digest in 2004. Rogerson grows his cattleyas to perfection because he understands the growth cycle of his cattleyas.

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 April 2005.

Blooming Characteristics of Cattleya Species

By R.E. Post, Jr., courtesy of the AOS

There can certainly be nothing more rewarding to the serious "dyed in-the-wool" Cattleya grower than to see the culmination of his efforts represented by the magnificent blooms that crown his modem, complex hybrids. By like token, there is nothing which will assure that each plant will produce flowers representative of its highest capabilities and potential more than good culture, and good culture demands that we understand the particular characteristics of the separate species used to build our present-day hybrids. For this reason, we should pause long enough in our consideration of the Cattleya species to delve more intimately into the separate lives and habits of these plants.

Occasionally there appear in literature references to certain plants of the Cattleya species as behaving like plants of the *"mossiae* group" or *"warscewiczii* group." These statements represent no idle grouping afforded them, as nearly every one of the species do exhibit growth or flowering characteristics similar to other plants which fall into one or the other of these so-called "groups." Many phases of culture. such as probable bloom time, best repotting time, etc., can better be understood if we are thoroughly familiar with the peculiarities and characteristics common to the plants.

First, let us consider the plants exhibiting behavior which likens their culture to the *"warscewiczii* group." The species which more nearly fit into this grouping are: *C. warscewiczii, C. gaskelliana, C. skinneri, C. dowiana. C. intermedia, C. warneri, C. dowiana aurea, C. loddigesii* and *C. granulosa.* These plants exhibit one or more of the following characteristics or habits:

C. warscewiczii var. alba 'Leo Holguin' FCC/AOS
The warscewiczii group roots after blooming. The new lead grows, matures and flowers and only then do new roots emerge. Repot immediately after they bloom.

C. mossiae 'Alayon'
The mossiae group roots before blooming. Roots emerge as a new lead grows and blooming occurs after the new lead and roots are mature. Repot when they begin to send up new growths.

1. These plants are usually long-day bloomers, producing their blooms in the late spring or summer months. Most require long days with maximum light to bloom.

2. They are usually dormant after blooming and remain so during the late summer and fall months.

3. The new lead breaks in the winter. (Under ideal conditions, new leads sometimes break after short rest periods, following the blooms.)

4. If there are multiple growths, each blooms independently of the others, with buds appearing shortly after the lead matures.

5. Once buds are initiated, they develop very rapidly and appear sometimes even before the new lead is quite mature.

6. Roots appear either simultaneously with blooms or shortly after blooming. (Repotting should be done at first appearance of roots!)

7. At time of bloom, the outer sheath of the pseudobulb is still alive and green.

8. Bloom time may vary somewhat from year to year, depending on the general condition and health of the plant.

Probably one of the most important things to remember when dealing with plants in this grouping is that the flowering lead is not yet rooted. Therefore, if repotting is done after the roots are established on the recently flowered lead, the plant must go through the complete growth and bloom cycle on a root system which has not become well established.

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This can be disastrous to the plant, even to the point of causing its death. (The first shipment of *C. dowiana* plants brought to English greenhouses are said to have been lost directly by having been repotted at the wrong time.)

Now let us consider some of the habits of Cattleya species which exhibit behavior similar to what we might call, for these purposes, the "*mossiae* group." The plants *C. schroederae, C. labiata, C. mendelii, C. trianaei*, and *C. percivaliana.* The distinguishing characteristics of the plants in this group are:

1. These plants bloom, or their buds are initiated, during the short days of fall.

2. New leads break shortly after flowering, with very little or no dormant period.

3. Plants develop several new leads during the growing season: each one roots as growth is about half matured.

4. Buds, once initiated (whether by photoperiodism or temperature), develop very slowly. Flowering time can be controlled rather precisely either by day-length or by temperature manipulation. (Buds can be made to develop more quickly at higher temperatures or held back with lower temperatures.)

5. All leads which have grown during the year flower at the same time. Plants of this group have a consistent natural bloom period year after year.

6. Flowering growths are well rooted. (Repotting can be done when new lead breaks, as roots will soon appear.)

7. The outer sheath of the flowering pseudobulb is dead and dry at bloom time. Often the bloom sheath is dry also, but this does not necessarily mean the blooms are lost.

8. The plants of this group lend themselves to bloom-time control and are thus extremely important economically, as commercial growers can bring whole blocks into bloom at times when the flowers are in highest demand.

Many times, hybrids between these groups will exhibit some characteristics of both groups. Some will bloom two or more times a year. Plants with natural fall blooming periods can be made to delay the bloom time by breeding them with plants of the *mossiae*-type behavior, or blooms may be delayed till late spring or summer when bred to those of *warscewiczii* behavior.

When Cattleya species or hybrids are bred with the Brassavolas, particularly *B. digbyana,* the characteristics appear to be intermediate between the two Cattleya groups in many respects. One particular characteristic worth noting is that the new lead matures, then the roots appear, then the bloom follows after roots are established. This allows for repotting shortly after the new lead mature«.

Logical use of our knowledge concerning the characteristics of the Cattleya species, plus systematic and careful observation of the resultant hybrids, will help us to attain the level of culture which assures the grower of the ultimate enjoyment as a result of his efforts.

This article appeared in the American Orchid Society Orchids magazine in July 1965 (Vol.34:7, pp.593-596). A more comprehensive list of the cattleya species rooting and blooming habits was compiled by Bill Rogerson and is available on the Culture by Genus page of the SAOS website.

Growth and Flowering Cycles of the Cattleya "Groups"*

Spring	*Summer*	*Fall*	*Winter*
warscewicziii Group			
New lead continues to grow	New lead matures Buds initiate	Blooms appear	New lead roots after blooming (Desirable repotting time)
Rest or dormant period, or plant may break new lead and bloom again	New lead breaks in late winter or early spring		
mossiae Group			
Year's growths mature Plant soon will or has already flowered	New leads begin to break	Roots appear on half mature lead (Desirable repotting time)	Leads all matured and roots established
Buds initiate and form slowly; blooms a month or two off			
Brassocattleyas (Bloom season can vary, but growth and flowering cycle are in the same sequence.)			
New lead breaks	Lead matures and roots appear (Desirable repotting time)	Buds develop on mature newly rooted lead.	Blooms appear
Dormant or rest period			

*These represent typical cycles. Individual plants could possibly vary somewhat, but all will generally follow these typical patterns.

Rots In Catasetums

by Sue Bottom

Catasetum repotting begins in the winter, after they have spent weeks to months in a dry dormant state. The new year begins when the new green growths begin to emerge at the base of the youngest pseudobulbs in late winter to early spring. This is a great time to repot them, because you know the new green roots will form soon and grow into the fresh mix.

During the weekly inspection for new growths, it was apparent that many of the catasetums had developed isolated rots. The rot was always in the older pseudobulbs, and ranged from a complete collapse of the tissue into a withered husk of a bulb, to a softer wilted bulb with brown discoloration, sometimes black near the rhizome. The newest pseudobulbs remained green and the tissue healthy, with no soft spots on them. Thinking back to last summer, there had been isolated rots on catasetums in the shade house that had been attributed to the very rainy summer we had. But these plants were kept dry all winter long, how had so many of the plants developed rots?

Time to consult with Fred Clarke, and it turned out to be an hour well spent as he had some astute observations and suggestions. Fred talked about how catasetums as a group are good at walling off diseases and problems from the healthy tissue. In nature, you often find big clumps of catasetums with healthy new growths and then when you look closer, you see the back bulbs are bent over and rotten. Plant pathologists call this the hypersensitive response, a localized death of cells at the site of infection because of the plant cells recognizing the invading pathogen and committing suicide to thwart it. The dead cells wall off the pathogen and this necrotic barrier prevents the transmission of the pathogen through the plant. You often see this in Cycnoches, where the youngest growth is hard and healthy and the older growths rot and die, so many times there is only a single bulb in the pot.

But why was there so much more rot this year than I had ever seen before. Fred recounted the parable of the frog and the boiling water. As the story goes, if you put a frog in a pan of boiling water, the frog will quickly jump out. On the other hand, if you put a frog in cold water and slowly bring the water to a boil, the frog will boil to death, slowly without realizing or noticing he is fading away. This fable teaches us how our failure to notice gradual changes can result in huge problems down the road. When you see a problem in your growing area, like I did with the increase in rots during the summer, address the problem.

Then Fred talked about the disease triangle. Three factors must be present at the same time for a plant disease to occur, a susceptible host, a disease organism and a suitable environment. If any one of the three factors is missing, plant disease does not occur. Clearly, the catasetums are susceptible to this form of rot, but what organism caused the rot? It is not one of the water molds that cause the fast moving black rot in cattleyas. This is a more slowly moving disease, like one of the bulb rots caused by Fusarium or Rhizoctonia. Or, could it have been some exotic disease blown in with the Saharan dust during one of our tropical storms or a contaminant present in the Purely Organic fertilizer? Fred recommended a testing lab to see if we can identify the pathogen, Waypoint Analytical in California. He also mentioned that he drenches his plants in the fall with a combination of Subdue and Terrachlor to lower the disease pressure. That's step one in minimizing the impact on one leg of the disease triangle.

So what environmental conditions were favorable to rot formation? The wet summer and tropical storm season surely contributed to the problem. The plants grow out under the shade house that is covered only by shade cloth so they get wet when it rains. Anticipating this, the plants are potted so that the bottom third to half the pot is filled with Styrofoam chunks and then the top of the pot is sphagnum moss. During the growing season, they are watered every other day when it does not rain. So when

Last year's growths are happy and healthy, but the older growths are wilted and rotting.

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the rainy season begins, perhaps one change that should be made is let them go to a harder dry between storms. Allow 3 or 4 days between waterings instead of watering every day. Particularly after the main growing season is over, in the early fall, extend the time between watering even further.

You learn a lot about your plant culture when you repot your orchids. If your plants grew well, you can tell by the healthy roots and growths on your plant. The rots on many of the catasetums told a different story. The older growths were all cut away and discarded during the repotting process. This is the one sure fire way to remove disease pathogens from your growing area, sometimes referred to as 'sanitizing' your plants in the orchid books. Then, they were potted up in preparation for their move out to the shade structure later in the year. Once watering begins in the spring, they will be given a Terrachlor/Subdue drench, as will the cattleyas to protect against their nemesis, Black Rot. After the new growths mature in the summer, we'll be more careful with watering, watering every third or fourth day instead of every second day. In the fall, before dormancy begins, they will be given a second chemical drench. We want our frogs by the hot tub to stay healthy and happy!

The base of the bulb has a brown dry rot, like you might see with Rhizoctonia.

Is that reddish purple ring around the rhizome suggestive of Fusarium?

Jacksonville Orchid Society Show

The weather wasn't very cooperative, but it didn't deter an onslaught of people from going to the Jacksonville Orchid Society's show at their new location at the Mandarin Garden Club. The vendors were all outside in gray, breezy weather but sales were brisk so no one minded. Some had to return to their nurseries to restock the sales benches. The exhibits were inside the building, all table tops. The interior tables allowed you to walk around the entire exhibit and you could really see all the beautiful flowers. The kitchen crew did a remarkable job with the galley kitchen making sandwiches and to go boxes for vendors and AOS judges. Speaking of judging, there were quite a few awards given in addition to all the ribbons!

Show Table

Grower Courtney Hackney
C. intermedia coerulea aquinii

Grower Linda Stewart
Epi. Pacific Sunglow

Grower Sherrie Jenkins
Paph. Shin-Yi's Pride

Grower Steve Dorsey
Max. cucullata

Grower Leslie Brickell
Gastrochilus calceolaris

Grower Sue Bottom
Trichopilia tortilis

Grower Linda Stewart
Bulb. mastersianum 'Yong's Adoribil Gift' AM/AOS

SHOW TABLE

Grower Leslie Brickell
Den. aggregatum

Grower Janis Croft
Ludisia discolor

Grower Sue Bottom
Den. Love Memory 'Fit'

Grower Steve Dorsey
C. Green Emerald 'Orchid Queen' AM/AOS

Grower Sheila Nathanson
Vf. Blaupunkt 'Sweet Thang'

Grower Suzanne Susko
Dtps. Sogo Vivien 'Golden Leaves'

Link to all submitted Pictures. https://flic.kr/s/aHsmVgjw9x