

CLUB NEWS



Fred Clarke

November 2 Meeting

by Janis Croft

Welcome and Thanks.

President Tom Sullivan opened the meeting at 6:48 pm with 60 attendees. Tom thanked Dianne Batchelder and Dottie Sullivan for the treats and coffee. He then reminded all to remember to Drop a Dollar for the treats. Tom also informed all that the Silent Auction would end

after the presentation.

Club Business. Membership VP Linda Stewart welcomed our three visitors and introduced our new member Larry Robison who drove up from Melbourne. Linda asked those with birthdays this month to raise their hands for a free raffle ticket. 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.

Holiday Party and Auction. Dianne announced that our party will be held on our regular meeting night, Dec. 7 starting at 6:30 pm. It will be an Italian smorgasbord. She passed around a sign up sheet for side dishes and desserts. Contact Dianne if you plan on coming and weren't able to sign up to bring a dish at info@staugorchidsociety.org.

Orchid Shows in Florida this Month. The First International Vanda & Slipper Orchid Symposium will be held this weekend, Nov. 5-7 in Apopka, FL. Frank Smith will be hosting a concurrent Fall Orchid Festival at his Krull Smith nursery in Apopka. Both the Fort Pierce Orchid Society Annual Orchid Show & Sale and the Deerfield Beach Annual Show and Sale will be the next weekend, Nov. 13-14. Check website calendar for [details here](#).

Library. Librarian Howard Cushnir brought in "Miniature Orchids and How to Grow Them" and "Dendrobium and Its Relatives", both lavishly illustrated. He encouraged all to use the library collection listed on our [SAOS website](#). If you would like a book or magazine, send a request to info@staugorchidsociety.org



staugorchidsociety.org and he will bring the item(s) to the next meeting.

2022 Officers Election. The following agreed to being officers of the club and the membership approved: Tom Sullivan (President), Sue Bottom (VP Programs), Janis Croft (VP Communications), Dianne Batchelder (VP Events), Linda Stewart (VP Membership), Cathy Mayo (Treasurer), and Charlie Bridgham, Charlie Rowell and Leslie Brickell as Directors at Large.

Calendars, T-Shirts and Supplies. If you need supplies, email info@staugorchidsociety.org. We will be offering 2022 calendars at the Christmas party, \$20 each. We are only ordering 50 calendars, so drop us an email if you want to reserve one. SAOS T shirts are also available for \$20.

Show Table. Courtney Hackney reviewed the plants brought in by the membership. The first was a multiflora Brassovola Little Stars which becomes quite fragrant at night. There was a lovely Bulbophyllum mastersianum, one of the daisy chain varieties, and Courtney commented upon how many club members grow bulbophyllums well. There was a candy stripe Phalaenopsis as well as several gorgeous cattleyas. Remember to start bringing in your plants as we transition back to an in-house Show Table. Until then, we will continue our Courtney led Virtual Show Table via Zoom. The next one will be November 10, which is the 2nd Wednesday this month. This will be the last virtual show table for the year. Each month's Virtual Show Table is recorded and posted on our website.

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Upcoming Orchid Events

November

- 6-7 Vanda and Slipper Orchid Symposium
Highlands Manor, Apopka
- 9 JOS Meeting, Topic TBA, 6 pm
Fred Clarke, Sunset Valley Orchids
- 10 SAOS Virtual Show Table, 7:00 pm 13-616
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 13 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.
- 13-14 Deerfield Beach Orchid Society Show
Safe Schools Institute
- 13-14 Fort Pierce Orchid Society Show
Riverwalk Center

December

- 7 SAOS Christmas Auction, 6:30 pm
Memorial Lutheran Church
- 14 JOS Christmas Auction
Mandarin Garden Club

January 2022

- 4 SAOS Meeting, 6:30 pm
Charles Wilson, Orchid Hobbyist
Bulbophyllums
- 8 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.
- 8-9 Sarasota Orchid Society Show
Sarasota Municipal Auditorium
- 11 JOS Meeting, Topic TBA, 7 pm
Speaker TBA
Mandarin Garden Club
- 12 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 14-16 Tamiami International Orchid Festival
Dade County Fair Expo Center
- 21-23 Fort Lauderdale Orchid Society Show
Fort Lauderdale/Broward Convention Ctr
- 29-30 Florida West Coast Orchid Society Show
Seminole Recreation Division

February

- 1 SAOS Meeting, 6:30 pm
Thanh Nguyen, Springwater Orchids
Multifloral Paphiopedilums
- 5 SAOS Repotting Clinic, 9 am til noon
Behind the Memorial Lutheran Church
3375 US 1 South, St. Aug 32086
- 5-6 Venice Area Orchid Society Show
Venice Community Center
- 9 JOS Meeting, Topic TBA, 7 pm
Art Chadwick, Chadwick Orchids
Mandarin Garden Club
- 10 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 11-13 Greater Orlando Orchid Society Show
Orlando Garden Club

St. Augustine Orchid Society Organization

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CLUB NEWS

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SAOS Program. Our guest speaker was the innovative hybridizer, Fred Clarke of [Sunset Valley Orchids](#), Vista CA. Fred's talk was about a trip he took to Venezuela to study the country's national flower, the beautiful *Cattleya mossiae*. He showed amazing pictures of thousands of flowers covering large trees growing in the wild. The *C. mossiae* can be grown into a specimen plant in just a few years and it always blooms around Mothers Day. The plant was first discovered in 1836, and considering the patriarchal times, was unusually named after a woman, Mrs. Moss. The plant with its large flowers became quite popular during the 1940-50s in the cut flower trade for Easter and Mothers Day. Because of its many color forms and floriferousness it was used often in hybridizing. It was originally growing in the upper Andes Mountains running through Venezuela and ending near Caracas. Ships would sail in and load up with *C. mossiae* for delivery around the world. Unfortunately most of the naturally growing population shrank to just a small section of mountainous terrain around Guanare where Fred and friends toured.

Their guide drove them through the mountains and they were able to see huge growths just from the side of the road. They stopped at one area where the guide thought the tree was 200 to 300 years old and Fred identified a hybrid swarm of *C. mossiae* in many shades of pink. His guide said he thought this was the best flowering he had seen. Fred also noticed that most plants had 6 to 7 flowers per stem but their bulbs were shriveled from the droughty conditions. He took that knowledge back home and started watering his plants less in winter. This did result in higher number of flowers.

As they traveled, he noticed some plants growing at eye level which is unusual. They got out to investigate and realized it wasn't naturally occurring. Someone was taking plants from a dying tree or dropped tree limb and tying them on to an orange tree.

In its wild form, coffee trees grow in the forest understory. Many of the coffee growers in South America grew coffee trees under the shade of a tree canopy, and those trees are hosts to orchids, bromeliads and other epiphytes. Newer, higher yielding varieties of coffee can be grown in full sun, so many of these orchid bearing trees are being felled. Since *C. mossiae* is the national flower and used religiously at Easter, people grow them on their porches and property. Hopefully, *C. mossiae* will continue to grow in the wild as well as on Venezuelan's properties.

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



CLUB NEWS

Vern Bloch

Sep. 5, 1937 – Oct. 8, 2021

Vern Bloch departed this earth on October 8th after a mercifully short bout with a rare form of Parkinson's Disease. Vern spent 20 years as a Navy pilot, 15 of them at sea on aircraft. After 28 years of service, he retired in 1987 at the rank of captain. Two years later, Vern, and his wife Helen became owners of the Palm Bay Orchid Range and participated in many orchid shows around the state. They sold the nursery in 2004 but continued to grow orchids and participate in the orchid world. Vern and Helen visited our club many times giving us interesting presentations and always bringing wonderful plants. Vern used the clonal name 'HEB' to honor his beloved wife Helen. Whenever you see that name on your plant tag, give a little nod to Vern for a life well lived.



December 7 Christmas Auction

We are looking forward to our Christmas party and auction where we get to kick back, have fun and spread holiday cheer with our orchid buddies... and come home with orchids. Hope to see you there!

Our Christmas orchid auction is on our normal first Tuesday meeting night. Drive around to the back, closest to the hall entrance. We'll be there setting up around 5:30.

We'll start our social hour at 6:30 pm. This will give us a chance to exchange holiday cheer before we hit the vittles. Bring your beverage of choice. The club will provide the low octane water, iced tea and coffee, but if you enjoy a cuppa with your meal, feel free!

One thing you can always count on is all the good food. Lady Di is planning an Italian smorgasbord this year, featuring lasagna, eggplant parmesan and chicken marsala prepared by SAOS Board members. Bring a dish to round out the meal. Salads, pasta and vegetable side dishes and desserts have been big favorites in years gone by.

We'll have 2022 calendars and orchid plants for sale. We'll finish up the evening with an orchid auction where you can bid on a nice variety of different types of orchids.

When: Tuesday, December 7, 6:30 til 9 pm

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

Shop Smile.Amazon

If you are going to do your Christmas shopping on Amazon, be sure to designate the St. Augustine Orchid Society as your favorite charity. Click this [Smile.Amazon link](#) to select the St. Augustine Orchid Society as your charity. Be sure to shop through the [Smile.Amazon](#) link!



2022 Calendars

Terry prepares a SAOS calendar each year featuring the Member's Choice orchids from the Show Table. These calendars are high quality, printed on premium glossy card stock. They are great for Christmas gifts. You can order by Emailing us at info@StAugOrchidSociety.org or use the PayPal link on the website. Calendars are \$20 each if paid by cash or check. We'll be glad to mail the calendar to you for an extra \$5 in postage.



American Orchid Society Corner

Webinars

November 9, 8:30 pm, AOS Members Only
Huntington Orchid Tour– Brandon Tam
November 17, 8:30 pm, Everyone Invited
Greenhouse Chat Orchid, Q&A - Ron McHatton

Orchids Magazine this Month:

Spectrum and Photoperiod – Kelly McCracken
Growing Spaces – Carlos Macku
The Genus Calanthe – Charles Wilson
Barkeria Hybrids – Marsh and Szeszko
[Photos of Latest AOS Awards](#)



INSPIRATION



Cattleya mossiae coerulea

Terry Botto



CULTIVATION



Orchid Questions & Answers

by Sue Bottom,
sbottom15@gmail.com

Q1. Is this a developing seed pod on this *Epi. nocturnum*? If so, shouldn't I cut it off to conserve plant energy? Odd thing is the flower never had a chance to open because the petals/sepals were stuck

together with honeydew, yet it still got pollinated.



A1. It sure looks like a seed pod, I always remove them unless we wielded the toothpick to make a hybrid. Courtney says sometimes he spritzes the buds with water to wash some of the sugar away to help the flowers open.

Q2. My *catasetums* seem to get rot all times of year, even if they winter under cover dry with no water. Is the rot from the bottom up or the top down, and what causes it?

A2. I have had that soft, slowly moving rot in *catasetums* before. I'm not sure what the causative agent is. I don't think it is *Erwinia* because *Erwinia* is a bacteria that moves very quickly. Ditto for the water molds, they are very fast moving. I think it is a fungal rot because it takes so long to move within the pseudobulb. This *catasetum* is toast, having rotted from the roots/pseudobulb base upward. If you catch it early enough in your other *catasetums*, cut away all the affected tissue and then drench what is left



with one of the fungicides effective for the root, stem and bulb rots, like Pagaent. Here's a link to an article about [rots in *catasetums*](#).

Q3. This orchid was repotted at your repotting clinic about a month ago. Would you tell me in what way I mistreated it?

A3. The plant was placed deeper in the pot so new roots would grow into the mix. Hopefully we told you those two lower leaves were going to yellow and die as the plant gets established. You should start seeing the new roots growing into the mix and the plant will reestablish itself nicely. You haven't mistreated it at all, it is just recovering from the transplant shock and it's going to be fine.





Culling Your Orchids

by Dr. Courtney Hackney

Real cold arrives this month requiring those that grow outside all summer to take some permanent action. Windows, enclosed porches, and every possible location suitable are filled with orchids of all kinds. If you grow under lights, you too were likely tempted to put a few of your larger plants outside under the

trees. Lest those growing inside feel lonely, many of us with greenhouses also succumbed to the temptation to let the orchids “run free” all summer. The coming months will be trying for both orchid and orchid grower as we attempt to find space.

Now is the time to make some hard decisions about the orchids you want to enjoy next year. If you were lucky, your orchids have grown and perhaps multiplied since going outside. The problem is that there is not enough space for them all. Most of us also found it necessary to add a few new plants to the collection making a bad situation worse. There are few hobbyists that do not have a space problem this time of year in the Carolinas. Failure to take a few simple steps now will result in problems next spring that may take a whole year to solve.

Go through each orchid and decide whether it was worth the effort having it in your collection. Did it flower last year? Were you happy with the flower quality, color, size, etc. If the plant was mature then you should be getting the best of what the plant has to offer. You may have to wait a few years to see the potential in a seedling as first flowers may be less than their full potential. Is there an orchid that has never grown well for you? Or one that always seems to be in the midst of a scale outbreak? Once your collection has filled your available space, you may find growing orchids much more enjoyable if these plants go in the garbage. This is especially true for those that are diseased or badly damaged by insects.

There are also orchids that, because of their parentage, are not suited to your growing conditions. One famous Cattleya parent, Blc Fortune, has produced some of the most beautiful hybrids ever made, such as Blc Goldenzelle. In general, hybrids made with Blc Fortune or even hybrids with this hybrid as a grandparent do poorly under my growing conditions. These, I reluctantly discard. Some paphs also seem to have continuous problems with

bacterial rot, which is treatable, but is tiring. These have been discarded and replaced by similar hybrids that are not as susceptible to rot.

Hopefully, repotting has yielded divisions of your favorite plants. Keep one for yourself and give, trade, or sell the others. If something happens to your plant there is a good chance it will be around and you can get a division back. A friend of mine in California lets her large Cattleyas grow out of the pot and cuts off the lead 4 or 5 bulbs. She fastens them in a pot with some crock in the bottom and gradually adds media through the summer. If the new division is doing well at the end of the summer she puts the mother plant on the raffle table. Her orchids are magnificent because she discards those that do not grow rapidly enough to grow out of the pot within the 2-3 year life span of her media. Perhaps without realizing it, she has also selected for plants that do well under her growing conditions.

During the past two years I attempted to eliminate orchids infected by virus and at the same time make space in my greenhouse. It was a great plan. The surprise has been that orchids that grow poorly are not always infected with one of the viruses that can be detected, while some that grow like weeds are infected. Contrary to popular opinion and many books, orchids can be infected by viruses and continue to grow and flower well. Imagine, however, how well they might grow without virus. Virused plant should be discarded unless they are special old clones. These I hold until I find a virus free division. Orchids that have tested virus-free, but grow poorly may simply be infected by one of the many viruses for which there are no tests so discard them if they grow poorly and save yourself the cost of the test.

Most hobbyists are aware that viruses have been detected in cattleyas, cymbidiums, and odontoglossoms. Other genera probably carry viruses too. Many older phal clones obtained as stem props exhibit the same slow growth problems as other orchids with viruses. While there may be other causes, they should be treated as any other underperforming orchid if they meet the criteria above. Having a few special orchids in a collection that require extra care is OK, as long as most are relatively trouble free. Space and time are two of your most important assets so avoid wasting both and discard orchids that you do not like, those that do not grow or flower well, and those that continually become diseased.

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 November 2002.



CULTIVATION

Cattleya mossiae

Queen of Springtime

by Art Chadwick, [Chadwick Orchids](#)



Cattleya mossiae 'R E. Patterson' is a major breeder of spring lavender-flowered cattleyas. This *C. mossiae* has petals that are more upright than normal and a unique lip pattern where the dense lavender splashing extends to the edge of the lip, photo courtesy of WT Chiu

One of the wonderful things about *Cattleya* species is that there is always one in bloom every day of the year and you come to associate each with a particular season. So when the days begin to lengthen and the sun grows stronger, you know the greenhouse or sun porch will soon be filled with one of the brightest, largest and loveliest rose-lavender cattleyas in nature's storehouse, *Cattleya mossiae*. Springtime is *Cattleya mossiae* time.

Since *C. mossiae* blooms in abundance during the months of March, April and May, it is in bloom for Easter, Mother's Day, all the spring dances and graduations and most of the spring flower shows. It is no wonder, then, that it was the darling of the commercial cut-flower industry in the 1940s and 1950s, and that it was still grown for cut flowers long after the other *Cattleya* species had given way to fancier hybrids.

Cattleya mossiae was the second unifoliate *Cattleya* species discovered after *Cattleya labiata*, and it caused a sensation when it was introduced into the horticultural world in Europe in 1836. Unlike *C. labiata*, which was scarce or unavailable, *C. mossiae* plants were plentiful and anyone who had money to spend, could buy them.

Cattleya mossiae also had large, showy flowers with four or five flowers per spike and multiple leads, so a single plant in a 10-inch pot could produce 20 or more flowers. They were ideal for exhibition at flower shows where everyone saw them. Between 1865 and 1913, the Royal Horticultural Society gave its coveted awards, including 37 Awards of Merit and 16 First Class Certificates, to 53 *C. mossiae*

clones. The number of named clones of *C. mossiae* is almost endless and there were already more than 150 recorded in the literature by 1900.

Much loved in its native Venezuela, *C. mossiae* was given the honor of being named the country's national flower. This was quite an accomplishment, as Venezuela lays claims to eight *Cattleya* species including the impressive unifoliate, *Cattleya leuddemanni*, *Cattleya percivaliana*, *Cattleya gaskelliana* and *Cattleya jenmanii*, and it speaks volumes for the people's love of *C. mossiae*.

For the hobbyist, *C. mossiae* has all the qualities to make it a true treasure. It is the easiest *Cattleya* species to grow, the easiest to flower, and it adapts well to more adverse growing conditions than any other species in the genus. For this reason, it is often recommended as a beginner's orchid. Yet, its enduring qualities keep it high on the list of favorites of longtime orchid growers. When a friend of mine gave up his large orchid collection because he could no longer take care of his greenhouses, the only plants he kept to grow in his solarium, were his four plants of *C. mossiae*, because, as he put it, "they are as much a part of spring as the daffodils and you can always count on them."

Growing *Cattleya mossiae*. Because it flowers in the spring, *C. mossiae* does not begin growing until midsummer, well after such species as *C. labiata* and *Cattleya trianaei* have completed their growths. *Cattleya mossiae* often does not complete its growth until October and then it usually sends out a flush of new roots from the new growth. It can be repotted at this time and still produce a strong flower spike in the spring.

Like other cattleyas, *C. mossiae* should only be repotted when it begins sending out new roots from the lead pseudobulb. *Cattleya mossiae* should be given lots of water while actively growing in the summer and early autumn, and then watered sparingly during the cold winter months when it is dormant. *Cattleya mossiae* grows best if you allow it to dry out thoroughly before watering it again. When you do water, give it a thorough watering that wets all



Cattleya mossiae var. *alba*,
photo courtesy of Ken and Judy Russ



Cattleya mossiae var. *semialba*
is widely used to breed spring-flowering *semialba* hybrids,
photo courtesy of Mauro Rosim.

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the roots in the container.

Cattleya mossiae requires plenty of sun and air, and will give more flowers the more sun it receives. It is receiving too much sun, however, if the leaves feel warm to the touch. *Cattleya mossiae* requires a normal cattleya temperature of 58 F at night and up to 85F during the day.



Cattleya mossiae 'Ed Patterson', AM/AOS, photo courtesy of Gene Crocker.

Fertilizer is not needed to produce good growth or flowers, but can benefit plants grown in bark mixes. One-quarter teaspoonful per gallon of water of a soluble 20-20-20 given weekly during active growth in August and September is recommended. Use a cupful of this solution per plant per watering. Never use slow-release fertilizers. These may release nitrogen when the plant is dormant and this could cause injury to the plant.

Hybridizing. Without *C. mossiae*, spring hybrids would be few and far between. Virtually all of our good spring cattleya hybrids today have *C. mossiae* in their background. The most famous of *C. mossiae* spring hybrids is the semialba form of *Laeliocattleya Canhamiana*, which is a primary hybrid with semialba *Laelia purpurata*. This hybrid so dominated the June cut-flower market at one time that it was known as the bridal orchid. Thomas Young, in Bound Brook, New Jersey, grew more than 10,000 semialba *Lc. Canhamiana* plants in 8-inch and 10-inch pots (150,000 flowers), yet still could not meet the demand.

There are more alba forms of *C. mossiae* than any other *Cattleya* species, probably because of its abundance. One of the first white forms of *C. mossiae* to be exhibited was awarded an FCC by the Royal Horticultural Society in 1885. The exhibitor, Sander's, gave it the clonal name 'Wagneri' and the name 'Wagneri' came into common usage for many years to mean an alba form of *C. mossiae*. You still see

C. mossiae plants with labels that read "*Cattleya mossiae* wagneri variety Easter" or wagneri variety this or that. Similarly, the first form of *C. mossiae* to receive an FCC from the Royal Horticultural Society in 1871 was given the varietal name 'Reineckiana'. The plant was reproduced as a plate in the famous orchid book, *Reichenbachia* and the name "Reineckiana" came to mean a white *C. mossiae* with a lavender lip. One of the most famous breeding semialba *C. mossiae* of all time, *C. mossiae* reineckiana 'Young's variety' still carries this descriptive name.

Most of the famous old cultivars of *C. mossiae* have the classic *mossiae* shape, where the broad petals tend to fall forward. This unique shape distinguishes *C. mossiae* from most of the other species of *Cattleya*. The only FCC awarded by the American Orchid Society to this species, *C. mossiae* 'Mrs. J. T. Butterworth', has petals that fall forward in the typical fashion. *Cattleya mossiae* is apparently so proud of this shape that it passes it on to its hybrids.

The lavender forms of *C. mossiae* present a wide range of color in the sepals and petals, from pale rose to dark purple. Most *C. mossiae* have the typical lip pattern where the purple has a splashed appearance but there are also a few varieties without this pattern. One of the most famous lavender-breeding *C. mossiae* is the cultivar 'R.E. Patterson' (not to be confused with 'Ed Patterson', which is a different variety). 'R.E. Patterson' has unusually large flowers and a shape where the petals are upright instead of falling forward. Its shape is the main reason it was so widely used in breeding, but it also has a unique lip pattern where the dense lavender splashing goes all the way to the edge of the lip. There are also several tetraploid cultivars like Patterson's famous 'Orchidhaven'.

It is difficult to praise *C. mossiae* too much. The word magnificent has been used by many authors to describe it, and in this respect, William Hooker, in his original description of the species said it best. He described *Cattleya mossiae* as simply "the most magnificent of all orchideous plants."



Laeliocattleya Canhamiana, the June bridal orchid of the 1940s and 1950s, is a primary hybrid between *C. mossiae* and *Laelia purpurata*. A semialba form of *Lc. Canhamiana* is shown here, photo courtesy of Terry Bottom.

This article appeared in the *American Orchid Society Orchids* magazine, in March 1998 (Vol. 67:3, pp 246-251 and the Chadwick Orchids website, <https://www.chadwickorchids.com/content/cattleya-mossiae>, reprinted with permission.



CULTIVATION

Sprays vs. Drenches

by Sue Bottom

Other things being equal, it is preferable to drench a plant with a chemical to treat a problem rather than spray the plant. Drenching is easy, you simply mix up the chemical at the desired concentration and pour it through the pot so it can be absorbed by the roots and drawn into the plant protecting it from the inside out. Your potential for exposure to inhaled aerosols and overspray is less when drenching, where gloves and boots protect you from exposure. These type products are often described as being systemic or xylem mobile, as opposed to contact chemicals. Contact chemicals are effective if they come into physical contact with the offender, so good coverage of all plant surfaces is essential. There are a few products that are described as being locally systemic, which means they can penetrate the leaf surface and move through the leaf so you don't have to have complete coverage of both upper and lower leaf surfaces for them to be effective.

If you have only a few plants, you can mix up a batch of chemicals in a gallon jug and just pour it through the pot, just enough for the water to begin to drain from the pot. This should allow all roots to be wet so they can absorb the chemical. A little fertilizer added to the drench will help with uptake. If you use a sprayer to water and fertilize your orchids, you can just direct the sprayer to the potting media surface to wet the roots. If you use a siphonex or dosatron, you can add the chemical to your concentrate bucket. An aquarium aerator or frequent mixing of the concentrate bucket help keep the chemicals in suspension.



Thrips feed on your flowers while they are still in the bud. Periodic Orthene drenches can prevent floral damage, and help control scale.

are taken up by the root system and translocated upward throughout the plant. When applied as a foliar spray, they are translaminar providing locally systemic control of foliar pests.

There are many products containing the active ingredient imidacloprid on the market, and these products are generally available at local nurseries and big box stores. The imidacloprid concentration varies widely among products, but the one labelled Tree and Shrub has 1.47% imidacloprid (and even more concentrated specialty chemicals like Merit are available). There is a granular product often used by the rose growers that contains 0.5% imidacloprid, sold as Criterion, Zenith, Grub-Away, and others. This can be very handy for a small infestation, where you just sprinkle some on top of the plant media and water it in.

The Insect Growth Regulator Distance will not kill scale, but it will keep the scale from maturing so it can be used in conjunction with a scale pesticide to provide long term control. Distance has strong translaminar activity, so when applied to the upper leaf surface it will penetrate the leaf cuticle, and can subsequently be ingested by immature and adult insects feeding on the lower leaf surface. While Distance is used as a spray, I apply it in combination with Safari as a sloppy drench, or sprench, in which the entire plant, leaves and potting mix are wetted with the chemical combo. Another possible advantage is that any thrips developing in the potting mix can be controlled with the insect growth regulator.

Thrips. Systemic control of thrips using drenches is possible using products containing the active ingredients acephate (Orthene) and dinotefuran (Safari). Raymond Cloyd's article on [Control of Thrips with Systemic Insecticides](#) suggests that the more water soluble systemics are more rapidly absorbed by the roots and translocated throughout the plant:



If you grow cattleyas, scale is your nemesis. The combination of Safari and Distance can eliminate scale from your collection.

Scale and Mealybugs. For scale and mealybugs, products containing imidacloprid (Merit, different Bayer Products) and dinotefuran (Safari) are both systemic products that

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Here's one example of how water solubility influences the uptake and efficacy of systemic insecticides. Imidacloprid (Marathon), which has a water solubility of 0.51 g/L or 500 ppm, tends to be less effective against flower- and pollen-feeding insect pests including Western Flower Thrips (WFT). Research has shown that acephate, which has a water solubility of 790 g/L or approximately 79,000 ppm, is converted into the metabolite methamidophos and actually moves into flowers, protecting them from WFT feeding injury. It may provide systemic protection to flower buds, which allows plants to flower and minimizes feeding injury resulting in good flower quality.

We have found Orthene drenches to be very effective at controlling floral damage to Cattleya flowers. Safari is about half as water soluble as Orthene. Besides flowers, thrips feed on the foliage of soft leaved orchids like Catasetums whereas they don't do much damage to waxy Cattleya leaves. If leaf feeding is a concern in your growing area as it is in many ornamental greenhouses, Cloyd's article states

Spray applications of systemic insecticides tend to be more effective than soil/growing medium applications because they are being primarily used as contact or translaminar sprays, and not so much for any systemic activity.

Miticides. Kontos is the only systemic miticide for use as a drench, but the label does not recommend its use on orchids. For mites, look for locally systemic products with translaminar activity that can be sprayed, like Avid that contains the active ingredient abamectin. In his article [All Mites are Not Created Equal](#), Raymond Cloyd states:

Avid is a contact and translaminar miticide. Translaminar is a term that refers to insecticides/miticides that penetrate the leaf tissue and form a reservoir of active ingredient within the leaf. Avid generally provides up to 28 days of residual activity. The label rate for all mite species is 4 fl oz per 100 gal. Avid is active on the mobile life stages of mites, with no activity on eggs. Although the insecticide/miticide is slow acting, treated mites are immobilized after exposure.

Fungicides. Most of the commonly available fungicides like chlorothalonil (Daconil) for leaf spotting fungi and botrytis and bactericides containing copper (Kocide, liquid copper and others) are applied as sprays. The specialty fungicides used to protect against the water molds and bulb, root and stem rots are often applied as drenches, although they can be sprayed to protect the aerial part of the plant. There are many different products on the market and many of them are quite expensive. They all have a limited shelf life, particularly the liquids and slurries.



Our hot humid summers create the conditions conducive for black rot to infect our cattleyas. Cultural controls together with specialty chemicals can help prevent black rot.

Some of these products are effective on only one type of disease. For example, Aliette and Subdue are often recommended for controlling black rot in Cattleyas caused by the water molds (Pythium and Phytophthora). If this is a persistent problem for you, you may want to invest the \$100 to \$200 to use these products. There are also broad spectrum products like Banrot, Heritage and Pageant that are labeled as effective for water molds, leaf stem and root rots (like Rhizoctonia and Fusarium) as well as leaf spotting fungi (like Cercosporoids and Anthracnose) and can be used as both drenches and sprays. While Banrot is not as effective as Aliette for black rot, it can be used to provide control of other diseases.

Before spending your hard earned money on chemicals, make sure you do your research. First and foremost you have to diagnose the problem you are trying to solve. Then identify which chemicals will provide thorough and lasting control. Systemic products that can be applied as drenches should be high on your list. The SAOS website has lists of different [pesticides](#) and [fungicides](#) that can be used on your orchids, identifying which products are effective for the various problems that can afflict your orchids. Read and understand the label instructions before buying or using any chemical.



Anthracnose is caused by leaf spotting fungi. Remove the spores from your growing area and use protective chemicals to prevent the fungus from getting a foothold in your growing area.



CULTIVATION



Orchtoberfest at EFG

We always enjoy the Orchtoberfest at EFG. It's good to see George, Paula, Dad and Quinn at the nursery, with all the fantastic tropical, succulents, carnivorous plants and orchids. There were crowds of people enjoying the sights and filling their shopping carts.

George is putting the finishing touches on his potting supply sales area. It's a fantastically designed area reminiscent of a rain forest, filled with a variety of potting supplies and gadgets. Should be ready by Christmas!



SHOW TABLE



Grower Steve Dorsey
Aerangis brachycarpa



Grower Courtney Hackney
Pot. Teruo Nagai



Grower Sheila Nathanson
Ctsm. Orchidglade 'Davies Ranches' AM/AOS



Grower Sue Broussard
Pot. Regal Red 'Paradise'



Grower Leslie Brickell
Bulb. Great Googa Mooga



Grower Sue Bottom
Smbc. Henrique Romero Graf



Grower Courtney Hackney
Pot. Teruo Nagai



SHOW TABLE



Grower Steve Dorsey
Bulb. guttulatum



Grower Allen Black
C. wallisii rubra (syn. eldorado)



Grower Suzanne Susko
Blc. Hawaii Stars 'Pink Lace'



Grower Sue Bottom
B. Little Stars



Grower Janis Croft
Phal. Kuntrarti Rarashati 'Copperstate' HCC/AOS



Grower Allen Black
Lc. Callistoglossa 'XOXO'

Link to all Pictures. <https://flic.kr/s/aHsmX3QZ7F>

