

CLUB NEWS



Gene Crocker

Feb. 5, 2019 Monthly SAOS Meeting

By Janis Croft

Welcome and Thanks. President Tom Sullivan opened the meeting at 7:00 pm with a 67 attendees. He asked Rae to announce our four new members, Charlie Rowell, Anne O'Connor, Shanti Bjorkman, Larry McNally, and returning Jerry Fowler. Each received a free raffle ticket for joining this month. Tom thanked Dottie

and Jeanette for bringing in desserts and Jeanette for organizing the refreshments. He then reminded all to drop a dollar in the basket while enjoying their refreshments. Tom next informed all that the Best of Show voting would occur after the Show Table discussion and the silent auction would end before the presentation. He encouraged all to vote for their favorite orchid on the Show Table.

Club Business. Shows in Florida this Month - Greater Orlando, South Carolina, Boca Raton, Port St. Lucie and Naples Orchid Societies. Check out the website under [Calendar of Events](#) for details.

Ace Repotting Clinic will be on March 2, 2019

Catasetum Raffle – Sue brought in her catasetum plug that Fred Clarke donated for our club competition for the Best Grown, First Flowered and Best Flowering and reported that the plug is still dormant. She will continue to update us monthly on what to expect from the growers who won the plugs at the raffle table.

Supplies – email info@staugorchidsociety.org if you need supplies. The club will be re provisioning soon. Pre-ordered supplies are available on the side table along with fertilizer and potting mix.

2019 Dues are Due – see Membership Veep Linda and Treasurer Bill at side table to pay dues or use the PayPal link online. Keiki Club/Mentoring Program – Susan Smith invited all to the next Feb. 17 Keiki Club at her house where visitors will see her

winter growing area, review how to prepare your orchids for display and orchid shows and watch a demonstration on navigating the SAOS website to find answers to all of your questions and issues. She also announced that her husband Doug will be organizing a road trip to the Jacksonville Orchid Society Show.

Birthdays this Month - Our two February birthday people raised their hands for their free raffle tickets. Sunshine Coordinator and Membership VP Linda announced that if you know of anyone in need of a cheering up or get well card, let Linda know by emailing her at info@staugorchidsociety.org.

Library – Librarian Bea Orendorff brought in five books on Cattleyas for people to borrow. If you would like a book, send a request to info@staugorchidsociety.org and Bea will bring the item(s) to the next meeting. The library collection is listed on our [SAOS website](#).

Show Table. Courtney Hackney started the Show Table with one of his plants, C. Horace 'Maxima' which was first registered in 1938. It was quite popular in the '70s-'80s due to its big round shaped flower, and is used by hybridizers to improve form, such as with Blc. Goldenzelle. Next was his Lc. Mem. Jerry Rehfield that he grew from a seedling. He held up a well-grown Angraecum sesquipedale which is fragrant at night. Moving on to the very large plant, C. Sue Bottom 'St. Augustine', a cross made by John Stanton and named for Sue by Courtney that was awarded an AM/AOS. There were two Bl. Yellow Bird plants on the table that have B. nodosa in its lineage and the numerous small yellow speckled flowers. When grown in high light, the inflorescence stay smaller and make for a more compact display. Marv Ragan brought in Sophronitis coccinea, a difficult to grow species that is used in many hybrids due to its true red color and large flower on a compact plant. Courtney then held up a Lysudamuloa Red Jewel that is



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Upcoming Orchid Events

February

- 8-10 Greater Orlando Orchid Society Show
Riverbanks Zoo&Botanical Garden
Orlando Garden Club
- 8-10 South Carolina Orchid Society Show
Riverbanks Zoo&Botanical Garden
West Columbia, SC
- 9-10 Boca Raton Orchid Society Show
Safe Schools Institute
- 12 JOS Meeting, Growing Angraecums, 7 pm
Tom Kuligowski, Angraecum Blog
- 16 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.
- 16-17 Port Saint Lucie Orchid Society Show
Port St. Lucie Community Center
- 17 Keiki Club Get-Together, 1 pm
Growing Area Tour – Winterizing
Susan and Doug Smith's Home
148 Sarah Elizabeth Dr., St Johns 32259
- 23-24 Naples Orchid Society Show
Moorings Presbyterian Church

March

- 1-2 Englewood Area Orchid Society Show
Englewood Methodist Church
- 1-3 Martin County Orchid Society Show
Martin County Fairgrounds
- 2 SAOS at Ace Hardware, 9 am til 1 pm
3050 US 1 S in St. Augustine
- 2-3 Tampa Bay Orchid Society Show
Tampa Scottish Rite Masonic Center
- 5 SAOS Meeting, 7 pm
Tolumnias
Daryl Venables, Tezula Plants
- 8-10 Gulf Coast Alliance Orchid Society Show
North Collier Regional Park, Naples
- 8-10? Orchid Society of Coral Gables
Fairchild Botanic Garden

- 12 JOS Meeting, Show Preparation, 7 pm
JOS Show Committee
- 16 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.
- 16-17 Jacksonville Orchid Society Show
Garden Club of Jacksonville
Show Committee Update
- 16 Keiki Club, doors open at 9 am
Field Trip to Jax Orchid Society Show
1005 Riverside Dr, Jax 32204
If you want to carpool or caravan up:
email info@staugorchidsociety.org
- 23-24 Orchid Society of Highlands Cty Show
Jack Stroup Civic Center, Sebring
- 30-31 EPIC Celebration of Spring
Annual Flower and Garden Expo
St. Johns County Agricultural Center

St. Augustine Orchid Society Organization

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difficult to grow because they don't like the cold and hate hard water. Harry McElroy brought in several Cymbidiums in bloom including the beautiful Cym. Mimi Lucifer which had been photographed for the cover of the Dec. 2017 Orchid magazine. Check out the photos of our show table examples at the end of the newsletter and on the SAOS website.

SAOS Program. Courtney Hackney introduced our speaker, Gene Crocker of Carter and Holmes Orchids, who presented his talk on *Cattleyas of the Andes*. Courtney could not remember when he first met Gene since it has been such a long time they have known each other but he did remember the relationship grew as he would lean on Gene for guidance when Courtney was writing his *American Cattleyas* book. Gene Crocker started growing orchids when he was 15 years old as a hobby for 30 years and Bill Carter (of Carter and Holmes) became his mentor. Then for the next 25 years he was employed at Carter and Holmes where he worked on developing many crosses and hybrids for the business along with Bill. He now is retired and continues to grow orchids at his home.

His slide show title was *Cattleyas of the Andes* (with one exception) and the first slide was a photo of the one exception, *Cattleya labiata*, that was discovered in 1818 in Brazil. Prof. Swainson was collecting plants and used a thick leathery leaf plant as packing material around his collected specimens. When he got back to Europe and unpacked the plants, he discarded the packing and William Cattley recognized it as an orchid and asked if he could have the discards. In the following fall, the plants bloomed to everyone's amazement and subsequently, the genus was named *Cattleya* after the grower who saved the plants from the trash. *C. labiata* has several color forms including *coerulea*, *semialba* and *alba*. Many of the *coerulea* cattleyas have *labiata* in their lineage.

The Andes mountain range in South American is 4300 miles long and 430 miles at its widest section running through Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile and Argentina. The average height is 13,000 ft with the tallest being 22,841 ft. Gene showed photos of orchids from Venezuela where he has visited more than once. The *Cattleya mossiae* is known as the Easter orchid because it always blooms in the spring and was used predominantly for Easter corsages. Since the plant grows very high in trees, the corsage industry almost destroyed the plant's existence. Many trees were cut down in order to harvest the plants from the treetops. Soon the Endangered Species Act arrived and the area was set aside as a national park. The young remaining plants survived and a recent visit proved



that the trees were again filled with orchids. Carter and Holmes would cut 6000 to 8000 blooms the week before Easter from their stock of *C. mossiae* and its hybrids.

Cattleya lueddemanniana is the national flower of Venezuela. It begins its growth in late winter and flowers on the new growth usually in the fall. *C. lueddemanniana* 'Stanley's Variety' is a famous clone from the early 1900's and he has one that is not virused which is highly unusual for such an old clone. If you cross *C. lueddemanniana* with *C. mossiae*, you get *C. Gravesiana*, a natural hybrid. Another Venezuelan native is *C. percivaliana* that grows on rocks and is a shorter and compact plant. It is known as the Christmas orchid because it blooms from Nov. to Dec.

Gene next showed some spectacular slides of *Cattleya dowiana* in the *Rosita* form which is native to Costa Rica and Panama and has heavy veining in the petals. When it is crossed with lavender cattleyas, one gets very intense colors ranging from deep purple to deep red. He then showed us the Andes version, *C. dowiana aurea* from Colombia that does not have red in its petals. When it is crossed with lavender cattleyas, one can get white with purple lip because the yellow is recessive. Many modern yellow cattleyas show the influence of *C. dowiana aurea* and he showed several slides of some beautiful examples.

Cattleya warscewiczii is the largest flowered of all *Cattleya* species and is found in the Colombian Andes. Some of the largest flowers are 13" wide. He showed a photo of *C. warscewiczii* 'Firmin Lambeau', an *alba* clone discovered by John Lager. He sold a plant in 1910 for \$5,000, which in today's market would be around \$100,000. He ended his presentation by showing slides of various and amazing hybrids made from these Andes orchids.

Meeting Conclusion. Sue Bottom announced the Member's Choice Award as Linda Stewart's *Lysudamuloa Red Jewel*. The evening concluded with the Silent Auction winners and Raffle table. Thanks to all the helpful hands that stayed to reset the tables and chairs and clean up the room.

Thanks to Watson Realty and
Jeanette Smith for the use of their
meeting space at
3505 US 1 South



CLUB NEWS

January Keiki Club Get Together

Meet Your Mentor

Sue and Terry Bottom's House



We kicked off the Mentoring Program for the 2019 Growing Season with more than two dozen intrepid souls who braved the wet and chilly weather. We talked about one of the many things that orchid growers are obsessed with, potting mixes. Then it was a free for all talking about challenges different people face and how to approach them. Linda talked about her rainwater collection system, and there was such interest that Linda has written an article for next month's newsletter on the design of her system. Stay tuned!



American Orchid Society Corner

February 13, 8:30-9:30 pm, AOS Members Only
Growing Cymbidiums– George Hatfield

February 26, 8:30-9:30 pm, Everyone Invited
Greenhouse Chat Orchid, Q&A - Ron McHatton

Orchids Magazine this month: [request free issue](#)
Fringe Festival, Tom Mirenda

For the Novice: Prepare Your Orchid for a Show
S Calif Orchid Road Trip, Kirkpatrick & Brodie
Orchid Society Speakers, Sue Bottom

[Photos of Latest AOS Awards](#)

Time to Pay Your 2019 Dues

Dues for 2019 are now due. Dues are \$20 for an individual and \$30 for a family. You can mail your membership check to SAOS c/o Bill Gourley, 807 Kalli Creek Lane, St. Augustine, FL 32080. If you prefer to renew your membership online, you can use the link on our website to pay using PayPal. Easy Peasy!

February 17 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

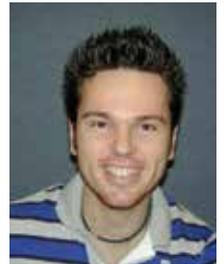
148 Sarah Elizabeth Drive, St. Johns 32259

When: February 17, 1 to 3 pm, extra parking by pool

March 5 Monthly SAOS Meeting

Tolumnias, the Equitant Oncidiums

Daryl Venables, [Tezula Plants](#)



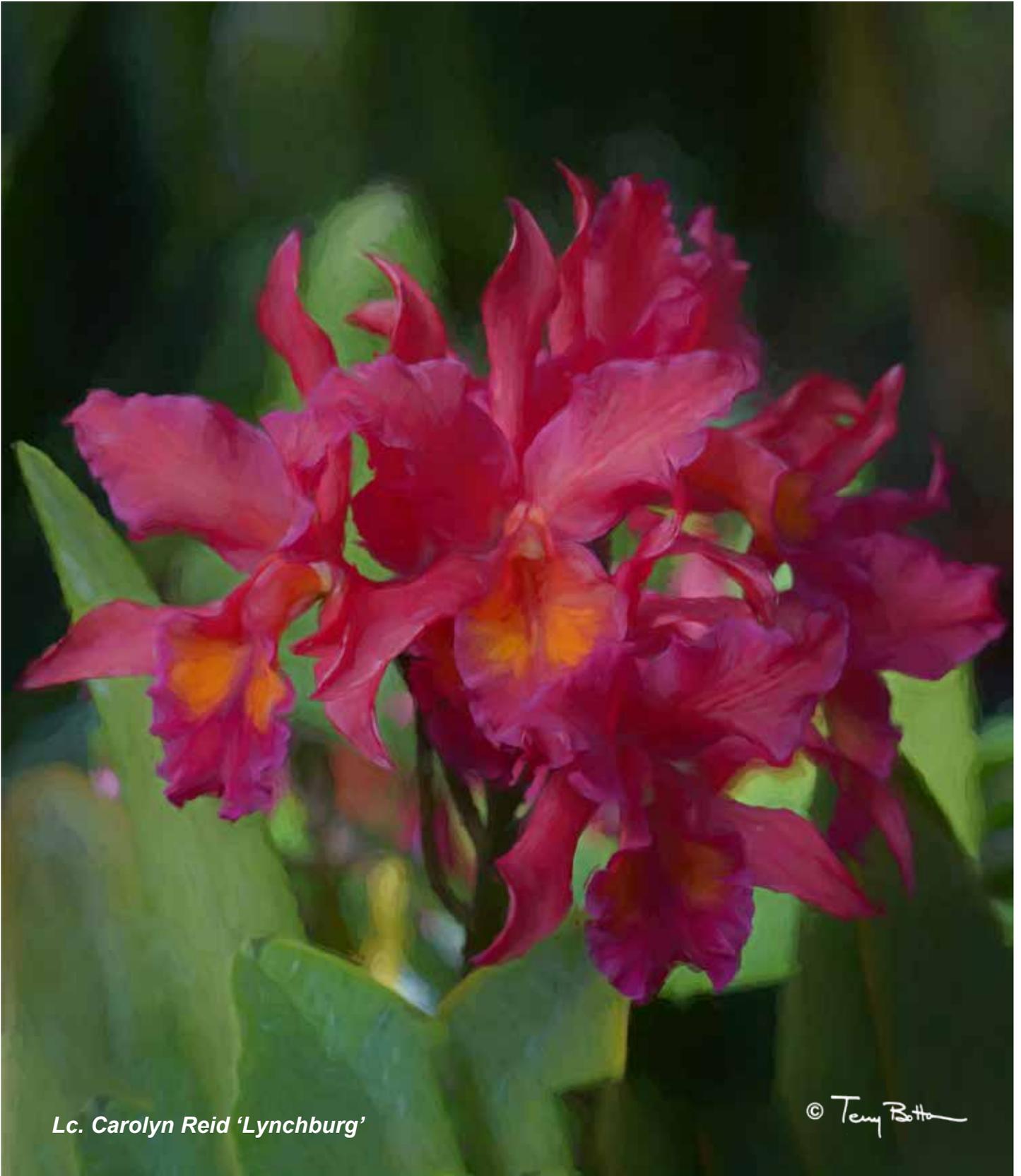
Daryl will talk to us about Tolumnias, those petite plants with brightly colored flowers that used to be called Equitant Oncidiums. The key to growing Tolumnias is understanding their natural habitat, growing on twigs where they are exposed to bright light and air movement. Moisture is provided by high humidity and by daily rain showers or heavy dews. Due to constant air movement by the trade winds, plants never remain wet for long.

Daryl will share all his cultural hints and tips with us. Daryl's 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, but that all changed when he encountered a rather odd-looking 'Equitant Oncidium' at a local show. He was convinced it had to have been misnamed, as it had no pseudobulbs, didn't look like an Oncidium, and the flower was pink! He has acquired quite a large collection and he will have many offerings for us from his breeding efforts.

Daryl will have plants for sale at the meeting, and you are invited to preorder plants from his website for delivery at the meeting. There will also be plants available on the raffle table.



INSPIRATION



Lc. Carolyn Reid 'Lynchburg'

© Terry Botto



CULTIVATION



Orchid Questions & Answers

by Sue Bottom,
sbottom15@gmail.com

Q1. When we are told to repot cattleyas when you see new roots, does that mean green tips and a bit of growth? The green tips are getting a bit brighter and larger but no outward growth yet.

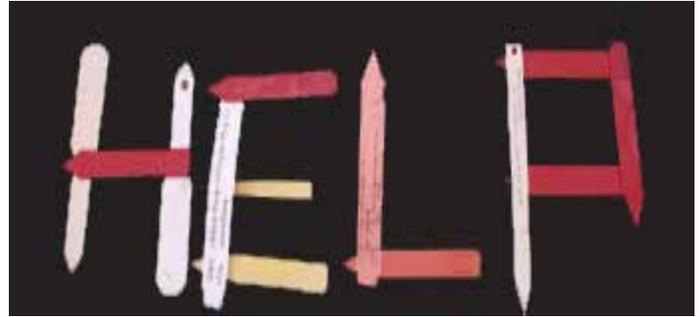


A1. The ideal time to repot cattleyas is right before they form roots, when you see the little nubs beginning to form. That way you can repot without worrying about damaging the tender new roots so they will grow quickly into the new mix. This one could have been repotted a week or two ago, repot immediately!

Q2 What is wrong with this phal? It's next to a window with other phals, but it's the only one with a problem.? There have been no major changes in light or watering.



A2. On first glance, it looks like edema, a blistering of the leaf that occurs when the leaf can't transpire moisture fast enough, such as when you water late in the day and the night turns cool. This looks like the damage occurred a while ago.



Q3. We received this orchid a week ago as a gift. It had beautiful dark pink flowers. I promptly put it on my kitchen windowsill, and I'm afraid it might have gotten too cold there?



A3. Those flowers have blasted. Bud blast happens for a whole host of reasons, it could be from being moved, from being too dry, or too cold. If it happened very suddenly, as in overnight, it is very likely it was too close to the window on a cold night.

The good news is the plant looks fine, and though it won't bloom again this year, you should be able to bring it into bloom next year.



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January Observations

Courtney's Growing Tips

It can't be winter without at least one month's column about Phalaenopsis. Phals are now the most popular orchid in the world thanks to the mass production of this group as a pot plant. The growing of Phals has been left to the commercial growers by most that enjoy their flowers, but there are still a few of us that prefer to

grow our own. Opinions as to the best media in for growing Phals is about as changing as the weather.

Many growers attempt to use the same media as pot plant growers. If you have had success or not with these media, remember that commercial growers have the luxury of discarding plants that do not grow and are able to carefully control water and fertilizer to maximize growth. At the slightest hint of disease, plants are given a potent treatment. One of the most important elements of commercial culture is the ability to get plants into and out of a specific pot size in months instead of years. This allows the grower to use media that degrade quickly, especially when high levels of fertilizer are used; media such as ProMix and other peat based mixes.

For many years a wide variety of media have been used on Phals in my greenhouse with varying degrees of success. Each year has included an evaluation of what worked and new ideas for next year's efforts. This year there will be very little new media experimentation because my Phals seem to have maximized both flowering and growth with my present media, fertilizer, and light regimen. For those still searching for the right media here is my current technique that has worked well in a greenhouse with no summer cooling and high heat. It has even done well during this year's drought when well water was used. What is my reason for stopping and not doing additional experiments? Plants as now as large as I have ever obtained, with more, larger flowers coupled with almost no rot problems for the entire year.

Species are all grown differently. Hybrids with Phal violacea and Phal lueddemanniana-like species are grown in baskets or mounted. Phal schilleriana hybrids are grown in higher light and allowed to dry thoroughly before watering. They are also grown in 50% coconut chips and 50% sponge rock. Phal gigantea and its hybrids are grown even drier and brighter receiving light levels designated for Cattleyas. They are potted in clay pots with bottom 1/3 of the pot filled with lava rock and the remaining part filled with a mix of half lava rock and half coconut chips. Plants are



allowed to dry thoroughly before watering. Phal amabilis and other large flowered species are grown as hybrids except they have extra sponge rock in their mix.

Hybrids in 4" pots or less are potted in 50% ProMix and 50% #3 sponge rock and put in plastic pots. All larger plants are placed in standard clay pots. Air and water can move through clay pots preventing stagnation of the media. In each clay pot, the bottom one inch is covered with lava rock. After the plant is placed in the pot, roots are covered with the same 50/50 ProMix sponge rock combination as above, but not all the way to the final level. The final 1/2 to 1 inch is covered with either medium fir bark or coconut chips. The presence of bark or coconut at the surface facilitates the entry of roots into the media and prevents the ProMix from being splashed out. Phals in 4" pots must be repotted within a year, usually by the end of nine months, even if they are not ready for larger pots. When plants in 4" pots stop growing repot, even if it is less than nine months. ProMix has a good dose of fertilizer that lasts 6-9 months under these conditions.

Phals in larger pots can go longer without repotting. Roots were still in good shape after 15 months when they were repotted. Most of the ProMix washes through after a year leaving just sponge rock and bark from above. Most of these plants were repotted last spring, but a few just had additional bark added on top to determine if they could go another year without repotting.

Large plants benefit greatly from the extra drainage of both the lava rock and sponge rock, but like the extra moisture and fertilizer in the ProMix as they grow new roots. The bark at the surface seems to allow the whole pot to dry at about the same time, even when the pot size was 10". Best of all, the weight of the clay pot and lava rock kept the pot from falling over when in full flower. When repotted, Phal roots were tangled all around the lava rock indicating that roots were living and growing all the way to the bottom of the pot.

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 2002.



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Great Cattleya Species of The Cut Flower Era

by Art Chadwick, courtesy of the American Orchid Society



Anyone who grew up during the 1940s, as I did, was invariably caught up in the excitement of the cattleya cut-flower mania. Cattleyas were the flower of fashion and they went to high school dances with wide-eyed teenagers like me, and to state dinners with the wives of diplomats, businessmen, and presidents. It was all very grand.

The fashion for cattleya corsages grew so rapidly that there was no time for commercial growers to raise a crop of *Cattleya* hybrids to meet the demand. Growers needed thousands of producing plants and they needed them right away. *Cattleya* hybrids took seven years to bloom from seed which was no help at all. The only immediate source for plants was the large-flowered *Cattleya* species that grew wild in the jungles of Venezuela, Colombia and Brazil, so growers began importing the species in a big way. Soon so many were being imported that you could see them everywhere. You could find whole greenhouses full of each of the major species throughout the year in facilities that were just around the corner or in your own neighborhood. Even everyday housewives knew what a *Cattleya trianaei* or a *Cattleya mossiae* flower looked like and they often ordered them by name from their florist.

Having grown up in this effervescent environment, you can imagine my surprise when a member of an orchid society today asks me what a good *C. trianaei* or *C. mossiae* looks like. I just assume every orchid hobbyist knows that. Then I realize it has been over 50 years since the large-flowered *Cattleya* species dominated the floral world. The cattleya plants most people remember now are the hybrids that came after them as the cut-flower market matured. So I thought it would be interesting to take a broad-brush tour of the large-flowered species that made the cattleya cut-flower era possible and created the fashion itself. The best way to do this is to view the species the way commercial growers back then viewed them – by their flowering season.

All the large-flowered *Cattleya* species were used as cut-flowers at one time or another, but eight of them were the real workhorses. Without these eight species, there would have been no supply of flowers to meet the early consumer demand for cut-flowers. These species were the most plentiful in the jungle and had the necessary qualities to fit the market.

As soon as the summer vacation season ended in early September, the social season began and cut cattleyas were in demand for all the important events from vase arrangements for private parties to corsages for women to wear to a new play, the opera, for cocktails or a fancy reception. A woman wasn't really properly dressed in those days unless she wore a cattleya corsage to many of these affairs. A woman at a dance without a cattleya corsage was like a woman without her shoes.

Cattleya labiata was the first large-flowered *Cattleya* species to flower as the social season opened in September and it was in-season for most of the autumn months. It made a great cut-flower because the flowers were large, the petals were upright and the species had a wide range of color forms from pale lavender to dark purple so no woman was embarrassed at an affair by finding another woman wearing the exact same flower. *C. labiata* flowers also lasted well. The flowers were cut on Tuesday or Wednesday and shipped to wholesalers to arrive at florists on Thursday. The florists made them into corsages for weekend events and the flowers still looked bright and fresh even when they arrived at their final destination as late as Sunday afternoon. The flowers usually lost their delicious fragrance by the second day after being cut and refrigerated, so the customer was seldom aware the flowers had fragrance, but that didn't matter because the flowers were so large and beautiful in their lavender gowns with their delicate, feminine appearance and everyone loved them.

C. labiata was "light controllable" which meant you could bring it into flower earlier or later than its normal season depending on how you manipulated the length of daylight in the greenhouse with shade cloth or lights. *C. labiata* flowers usually disappeared from the market by late November, however, and another species was needed to provide cut-flowers in December.

The December species was *Cattleya percivaliana*. Some varieties of *C. percivaliana* began flowering in late November and the rest came along right up to Christmas. *C. percivaliana*'s rich purple flowers with their orange and yellow tones in the lips, fit well in a Christmas tapestry, a wreath or an arrangement of evergreens and pine cones. Florists were not always happy with *C. percivaliana*, however, despite its Christmas colors because the flowers were much smaller in size than *C. labiata* and they had a spicy fragrance that not everyone liked. Some varieties of *C. percivaliana*, however, were as large as *C. labiata* and made good corsages. Lager & Hurrell's clone 'Summit' was one of these and Lager had over 200 plants of the clone for Christmas cut-flowers when I visited them during the 1950s. *C. percivaliana* was also sold as a pot plant for Christmas during the 1940s because it was relatively small and compact and produced a beautiful display of flowers in a modest 5 inch pot.

As the New Year arrived, so did *Cattleya trianaei*. The earliest varieties began blooming in late December and the last ones opened the end of February. *C. trianaei* was a great favorite of orchid hobbyists because many varieties had large, well-shaped flowers that made them great exhibition plants. Florists also liked *C. trianaei* because its flowers had such lovely pastel shades of lavender and the species was very long lasting. *C. trianaei* also had a thin, delicate substance that oozed femininity. *C. trianaei* produced only two flowers on a spike, but it made two growths in succession each season and both growths flowered at the same time, so the species made money for growers.

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Commercial growers vigorously divided and multiplied the best varieties of their large-flowered *Cattleya* species and you could often find blocks of 20 or 30 plants of the same clone in many greenhouses. This happened frequently with *C. trianaei*. The word “best” applied not only to plants with the largest and nicest shaped flowers, but also to plants that bloomed for high volume holidays like Thanksgiving, Christmas, Easter and Mother’s Day. The reliability in the blooming dates of individual clones of the species is legendary and, as an example, *Cattleya mossiae* ‘Mrs J. T. Butterworth’ flowered faithfully for me on Mother’s Day for 50 years. *C. percivaliana* alba ‘Christmas Cheer’ always flowered on Christmas and *C. trianaei* ‘Party Time’ always flowered for New Years.

In late February, *Cattleya schroederiae* made its appearance with the same long-lasting qualities as *C. trianaei*. *C. schroederiae* was more floriferous than *C. trianaei* so growers liked it. *C. schroederiae* had the same good shape as *C. trianaei*, but most flowers were very light lavender without a lot of variation in color which limited their usefulness. *C. schroederiae* extended the *C. trianaei* season long enough to give it a permanent place in the flow of cut-flowers.

As spring approached in the month of March, the greatest of the cut-flower species, *Cattleya mossiae*, began flowering. *C. mossiae* produced large flowers up to 8 inches across and as many as five on a flower stem. It was easy to grow and flower and was such a heavy bloomer it sometimes flowered itself to death. *C. mossiae* had a long season that lasted from early March through the end of May. A few varieties even began flowering in February, and a commercial friend of mine had one variety that always flowered in June. *C. mossiae* was in bloom for all the flower shows and spring social functions. It was often referred to as “the Easter orchid” because it was always in bloom for Easter no matter what date Easter came on. Although it had petals that did not stand up straight but drooped slightly downward, the petals were wide and florists could make just as good corsages with them as they could with *C. labiata* or *C. trianaei*. *C. mossiae* was so popular as a cut flower because of its beautiful shades of bright rose-lavender. The color actually came to be called “orchid color” by the general public. *C. mossiae*’s biggest asset, of course, was its flowering season. It bloomed when demand was greatest for cut-cattleyas. Since demand was highest at Easter, growers actually worked out a way to bring the plants into bloom the week before Easter. 22 weeks before Easter they would drop the temperature to 52 F at night in their *C. mossiae* house for 4 weeks. The temperature was then raised to 60 F at night to let the plants set buds, and a month before Easter, the temperature was raised to 65 F and all the plants bloomed for Easter.

As *C. mossiae* flowers began to diminish in number in mid-May, *Cattleya gaskelliana* began to bloom and continued to flower into mid-June. *C. gaskelliana* was a mixed blessing for commercial growers. It was the only large-flowered species that was available in quantity to fill the late-May to early-June period, so growers had to have it. The flowers were fairly large, but under the intense heat of a June greenhouse, *C. gaskelliana* was often short-lived, lasting only two weeks in bloom compared with *C. mossiae* that lasted 3 or 4 weeks and *C. trianaei* that lasted 5 or 6. *C. gaskelliana* also had a narrower range of color forms than the other *Cattleya*



species. Most varieties were a light to medium lavender with few exciting lip patterns. Although a few dark clones existed in private collections, there were no dark varieties available for cut-flowers.

In mid-June, the imperialis varieties of *Cattleya warscewiczii* began flowering. The species was only known to commercial growers by its common name *Cattleya gigas* (pronounced gl’ gus). Although *C. gigas* had large beautiful dark purple lips, the petals were generally narrow and the flower did not make as good a corsage as *C. mossiae* or *C. trianaei*. The plants were in plentiful supply, however, and were an important cut-flower because June was the wedding month and even lavender flowers were needed at times for weddings. *C. gigas* had better lasting qualities than *C. gaskelliana* under hot summer conditions and, except for its narrower petals, *C. gigas* was a great cut-flower. With both the imperialis and sanderiana forms of *C. gigas*, the species was usually available through the end of July.

By the 1960s most of the large-flowered *Cattleya* species had been replaced by larger, more richly colored and better shaped hybrids and, except for *C. mossiae*, the species disappeared from the commercial cut-flower market. The sad thing about this story is that as *Cattleya* hybrids replaced the large-flowered *Cattleya* species, the species were just discarded, usually thrown out on the commercial grower’s dump to die. Back in the 1940s you could buy a well-established, good variety of *Cattleya trianaei* in an 8 inch pot with several flowering-size leads for \$3, and you could import a few thousand large plants for \$1.50 each. Today a four-bulb division costs from \$50 to \$75 and you might have trouble even finding one. Fortunately orchid hobbyists still actively grow *C. trianaei* and all the other large-flowered species despite the problems of acquiring them.

Some of my friends like to speculate now and then on whether the public will someday rekindle their interest in wearing cattleya corsages. Fashions do change, they argue, and cattleya corsages could come back when enough time has passed. They may be correct in this, but if the fashion for cattleya cut-flowers should suddenly reappear, it will be interesting to see how commercial growers handle the problem of supplying the flowers needed to make it work. It still takes 7 years to grow *Cattleya* hybrids from seed to flowering, and there are relatively few of these hybrids left in cultivation compared with the number that supplied the market in the 1950s and 1960s. The supply of jungle plants is now so badly depleted that the *Cattleya* species are simply not available for export from their native countries in any meaningful quantities. A more probable conclusion says that the cattleya cut-flower era was a one-time event in orchid history – memorable, but like a great wave, it rose, crested, and disappeared forever in the endless ocean of time.

This article was abbreviated from a longer one that appeared in the AOS Orchids magazine, in December 2005 (Vol. 74:12, pp 910-917), reprinted with permission.



Selecting New Plants

by Sue Bottom, sbottom15@hotmail.com



You hear all kinds of suggestions for how to select an orchid to bring home. Buy the largest plant you can afford, only buy blooming plants, buy a blooming plant each month to have flowers year-round, and on and on. There are so many different approaches to buying orchids, but which is best for you.

Some orchid growers love species, finding perfection in nature's beauty. Hobbyists and commercial growers line breed: self, sib and outcross species to change flower size, form, stem arrangement and other desirable qualities. Seedlings of species available today are often better, with respect to judging standards, than those found in the wild. Purists, however, believe these line-bred species are more accurately called hybrids.

Technically, hybrids are produced when two different species or hybrids are used to produce seedlings. Each seedling contains a unique combination of genes, so each seedlings produced is, to some degree, unique, with variable growth habits and flowers. No one can predict exactly what the flowers on a new hybrid will look like, but experienced hybridizers have a goal for each hybrid and usually provide a range of expectations for seedlings of a new hybrid. Blooming a seedling for the first time is one of the great pleasures of growing orchids.

Sometimes a flower is so extraordinary, that it is cloned to

produce an exact genetic replica, a mericlone. Mericlones are often given a cultivar name that follows the hybrid name within single quotation marks. Awards to the clone follow the clone name. Many clones in orchid shows are unavailable or extremely expensive, but a mericlone of that exact plant may be available and relatively inexpensive.

Tetraploids, denoted as 4n on the plant tag, have twice the number of chromosomes that Nature intended. Tetraploids are desirable because even though they may grow a little more slowly, the flowers are larger, have more substance and deeper color saturation than their 2N counterparts. Hybridizers use tetraploid parents in their breeding program for specific purposes. When only one parent is tetraploid, the progeny will have two sets of that parent's genes vs. one set from the 2N diploid parent. The tetraploid parent asserts double the influence. When both parents are tetraploid, the offspring will all be tetraploids, and more uniform.

Mature Plants. New growers are often told to buy blooming sized plants, because it is easier to keep a mature plant healthy than it is to raise a seedling to blooming size. Plus, you know exactly what to expect when it reblooms next year. This is easier if your new orchid is healthy, particularly if you are just learning how to take care of orchids. Once you have decided on the plant with irresistible flowers, it is time to ignore the flower and inspect the plant to make sure it will not require any special attention in the near term. Be aware that plants in flower as well as seedlings are often ready to be repotted. Repotting is a major expense for commercial growers, so expect many orchids for sale to require repotting within a year.

Well Rooted. Your new plant should be established in the pot, with healthy roots. You should be able to lift the plant up by its leaves, pot and all. If the plant is wobbly in the pot, you might suspect it was either recently repotted and the roots have not yet recovered, or the potting mix is starting to break down and the roots are suffocating. A good root system is critical for your plant to thrive and provide you with future blooms. If you decide you want to rehab an ailing plant, accept the possibility that this may push the next blooming date back by a year or two. Many experienced hobbyists repot all orchids they purchase. This ensures that a new plant is in the medium that works best for the grower and eliminates any uncertainty about root health.

Clean and Green Leaves. Healthy orchid leaves are green, occasionally with purplish freckling, and some have natural silvery markings. Beware of brown and black markings, brown leaf tips, yellow chlorotic spots or soft and sunken

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areas. These blemishes are danger signs. Leaves should be thick and turgid. Do not buy plants with wilted leaves, which can be a sign of abuse, root damage or disease.

Plump Pseudobulbs. The pseudobulbs or canes should be full and hard, without soft spots. On many orchids, including cattleyas, you might notice brown papery sheaths on the outside of the pseudobulb. These are protective tissues that protect emerging growth as it develops. These brown to black tissues should be dry. If the tissue looks wet, rot could be a problem, so make sure the underlying tissue is hard.

Plant Tags. Make sure there is an identifying plant tag in the pot – one that you can read! That ugly little plant label tells you the plant's name, from which you can learn many things. The plant name includes the type of orchid you have, so you can determine how best to care for it. From a plant name you can find its parents, grandparents, etc. dating back to the early days of orchid hybridizing.

Seedlings. As you become more confident in your growing skills, you may find you are attracted to seedlings. They are less expensive, take up less space, and you will be the first to see it bloom, unless it is a mericlone. Some people buy multiples of seedlings of the same hybrid, so they can see how much variation there is in a cross. They keep their favorites and give others to friends or their club's raffle table.

If you are at an orchid show or club meeting, you will often see a whole tray of seedlings offered for sale. Which one should you select? Pick out the one you think best, and then, if the sales booth is not too busy, ask the vendor which one they think you should buy. Then ask why, some of the interesting insights I have heard include:

Strong Growths. Find one with strong new growths or leaves. You may gravitate to plants with lots of new growths, but a plant with multi-lead growths may tend to put its energy into vegetative growth rather than blooms. For cattleyas, a better plan is to look for single or double lead growths, where each new growth is substantially larger than the older growth. These vigorous growers mature more quickly and bloom sooner than one with clusters of small growths.

Healthy Runt. Select one of the runts, as long as it looks healthy. It may be one of the slower growing tetraploids that will have larger flowers and more substance once it finally matures.

Wide Leaves. Look for wide and thick leaves. Greater leaf

surface area means these will be able to generate more energy reserves than one with narrow leaves. Wider and thicker leaves may also suggest a tetraploid. When there is a lot of variation in the leaf morphology, choose a few plants that have different characteristics to see the range of variation that might be exhibited in some of the more complex hybrids.

Unbloomed. Buy one that has not yet bloomed. You might end up with an incredible flower or a seedling that the grower might have discarded. Of course, previously bloomed seedlings can also be a sign of floriferousness or the flowers might all be of uniform good quality. Ask the vendor if he has bloomed any of the plants and what they looked like.

Vendors. Get to know your vendors. Some growers have stellar reputations for healthy, well grown plants, making high quality hybrids or having unusual plants. You will meet them at your local Society and at Orchid Shows. Ask questions when you purchase a plant. When they are not busy, try to get some insight into their hybridizing or growing conditions. Learn the type of orchid for which they specialize, whether they do their own hybridizing and growing or purchase stock for resale. If you find a vendor whose plants grow and bloom well for you, patronize their sales booth. If they also sell on eBay, you can be comfortable making on-line purchases because you know the quality of their material.

Overseas vendors often bring bare root plants for sale at Orchid Shows. These plants are often unusual, tempting the orchid hobbyist to purchase them. They can be a greater growing challenge, having just lost most of their root system. If they are from the southern hemisphere and you buy in July, the plant thinks it is winter. It can take a year or two to adjust to seasons in the northern hemisphere. Perhaps southern hemisphere plants are better purchased in January and February, so they will go through a double summer while they are adapting. This is particularly true of winter dormant plants like the *Catasetinae*.

My approach to orchid buying these days is simple. Mericlones are bought when young and less expensive, as I know what flowers will look like. Seedlings of desirable hybrids are bought, often in multiples, and bloomed. Wait for the second bloom before deciding if a plant is a keeper. Form often improves with a little age. Look at the sales booths of all vendors, but normally buy from your favorite vendors. The ones who have a great eye for hybridizing and whose plants have healthy root systems. Always be on the lookout for some new alley to go down, whether it is trying new genera, collecting different color forms of a favorite species or just love at first sight.

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1. Vandas with their vibrant colors are almost irresistible. The best grown plants have leaves all the way down the stem and lots of thick white roots.



2. Orchid shows are a great place to find seedlings and blooming sized plants from a variety of vendors, offering plants not seen in the big box stores.



3. Make sure the plants you buy are healthy and well established as well as having beautiful flower



4. Look for wider, bigger leaves on phalaenopsis, with no signs of wrinkling or dehydration.



5. Imported plants may have to be pampered to recover from the trauma of root loss, treatments required when they enter the U.S. and the radical change in season if from the southern hemisphere.



6. Healthy catasetums will have a thick firm pseudobulb that is larger than the older growth, indicating plenty of energy reserves for flowering.

Citations and Additional Reading:

Clarke, Fred. 2012. Choosing a Healthy Plant. *Orchids*, 81(4): 200.
Gripp, Paul. 1965. Brief Look at Polyploidy. *Orchids*, 34(): 135-138.



SHOW TABLE



Grower Harry & Celia McElroy
Cym. Honey Bunny 'Sugar Candy'



Grower Harry & Celia McElroy
Cym. Nut



Grower Sue Bottom
Epilaelia (Epl.) Dark Star



Grower Bob & Yvonne Schimmel
Den. Ise 4n



Grower Debra Brandt & Jim Woodward
Phal. amboinensis



Grower Courtney Hackney
Lc. memoria Jerry Rehfield



Grower Steve Hawkins
Bl. Yellow Bird



SHOW TABLE



Grower Courtney Hackney
C. trianae 'Aranka Germanske'



Grower Linda Stewart
Lysudamuloa Red Jewel



Grower Sue Bottom
Fredclarkeara After Dark 'B'



Grower Harry & Celia McElroy
Cym. Memoria Dick Swain



Grower Sue Bottom
C. Sue Bottom 'St. Augustine' AM/AOS



Grower Tom & Dottie Sullivan
Blc. Keith Kettner

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

