



CLUB NEWS



Thanh Nguyen

August Meeting

by Janis Croft

Welcome and Thanks.

Tom Sullivan opened the meeting at 6:50 pm with 62 attendees. He then thanked Dianne, Dottie and Roberta for the treats and reminded all to remember to "Drop a Dollar" if you enjoyed them. Tom then announced the passing of Mike Heinz who was an early SAOS member and past president.

Tom reminded all to bring any plant of concern to the next potting clinic. Susan Lane and Ellen Fay donated plants to the raffle table. The spring orchid shows are over, but the fall show season begins next month.

Club Business. Membership VP Linda Stewart welcomed our guests, returning member Sara Bruinooge, and new members Kathy and Charles Summa and Rita White. Linda announced that Maria Sands will now be our Sunshine Coordinator. 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. Linda asked the August birthday celebrants to raise their hands for their free raffle ticket.

Members Choice Voting. Christine asked members to vote for their favorite blooming orchid on the show table. The ballots should be dropped in the ballot box before the speaker program begins.

Virtual Show Table. Courtney Hackney will conduct the Virtual Show Table starting at 7 pm on Thursday, August 8. An email invitation will be sent with link and details.

Supplies. Supplies for growing orchids were available at the back table. Preorder ahead of time at info@staugorchidsociety.org.



Show Table Review. Courtney (with Sue's helping hands) started the Show Table. He advised all to watch the upcoming Virtual Show Table that has quite a few varieties of bifoliate cattleyas which are in full bloom



now. Bc. Star Ruby grown by Steve Hawkins reminded Courtney of one he had over 40 years ago and has not seen many around recently. Steve said he has had his for around 20 years. Next was C. Lulu 'Hot Pink', which, of course, has a brilliant pink color with lots of spots. The classic C. Maximum Lust was next and Courtney explained that it was a primary hybrid and if you look closely, you will see the center stripe from maxima in the lip. Vanda Junior Scott was a huge, well-grown example, with showy large purple, spotted flowers. There was also V. Kultana Fragrance with its orange yellow flowers showing Ascocenda in the background. The last Vanda was Nopporn Golden Dream that Courtney noted has an unusual peachy to yellow color. The unique Dyakia hendersoniana is a mini-vandaceous plant with petite pinkish-red flowers. Dendrobium sanderae was an impressive white flowering orchid with a green throat. Courtney then showed a Bulb. lepidum with its wonderful fan of flowers from numerous inflorescences. He then added that Bulbophyllum is the largest genera and only one found worldwide.

SAOS Program. Sue introduced our guest speaker and SAOS longtime friend, Thanh Nguyen who operates Springwater Orchids in Melbourne, FL. He worked for many years as an engineer but retired two years ago. He has been collecting and growing orchids for over 50 years and now sells on the internet and at orchid shows. Tonight Thanh talked about deciding whether 'To Mount or not to Mount' one's orchid based on plant growth and rooting habit. His first slide was of Dendrophylax lindenii, aka

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Upcoming Orchid Events

August

- 8 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 10 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.
- 13 JOS Meeting, Orchid Culture, 6:30 pm
Ron McHatton, AOS
- 16-17 Int'l Phalaenopsis Alliance Symposium
Apopka

September

- 3 SAOS Meeting, 6:30 pm
Setting Up Your Growing Area
Jeff Adkins, Adkins Orchids
- 7 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 10 JOS Meeting, Topic TBA
Speaker TBA
- 12 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email
- 14-15 Fall JOS Orchid Festival
Mandarin Garden Club, Jax 32223
- 14 Florida North-Central AOS Judging, 10 am
Clermont Judging Ctr, 849 West Ave.
- 28-29 Ridge Orchid Society Show
United Women's Club, Lakeland

October

- 1 SAOS Meeting, Angraecoid Orchids, 6:30
Edgar Stehli, Windswept in Time Orchids
- 5 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 5-6 Tampa Orchid Club Expo
USF Botanical Gardens
- 8 JOS Meeting, Paphiopedilums
James Arnold, JOS Member
- 10 SAOS Virtual Show Table, 7:00 pm
Courtney Zooms into Cyberspace
An Invitation Will be Sent by Email

- 12 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave
- 19-20 Gainesville Orchid Society Show
Kanapaha Gardens
- 19-20 Delray Beach Orchid Society Show
Fieldhouse at Old School Square

November

- 1-3 Fall Orchid Festival
Krull Smith Orchids, Apopka
- 2-3 Vanda and Slipper Symposium
NW Orange Cty Improvement Assoc
4253 W. Ponkan Rd, Apopka 32798
- 5 SAOS Meeting, Orchid Bingo, 6:30
Join the Fun on Election Night
- 9 Florida North-Central AOS Judging, 1 pm
Clermont Judging Ctr, 849 West Ave.

St. Augustine Orchid Society Organization

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Ghost Orchid, in situ and on a mount. These orchids grow in swampy conditions in south Florida, which makes them hard to mount and keep alive. He then showed several slides of orchids growing in the wild, including *Encyclia tampensis*, *Brassavola perinii*, *Brassavola nodosa*, *Paph. henryanum*, *Paph. hirsutissimum*, *Neof. falcata*, *Mystacidium venosum*, and *Angraecum cucullatum*. All images showed thriving, large flowering examples. Thanh said that all of these images show that "orchids growing in the wild are not stupid." They all tend to grow 30' above ground and face the East. Most grow on trees but some grow on limestone or other rock surfaces. He advised that if you change anything in the way the orchid grows, you must do it slowly to allow the plant to adapt to the change.

After we viewed these large, multi-blooming orchid images growing out in nature, the question was "Why Mount?" Thanh suggested that it is the most natural way of growing your plants. It allows one to observe, spot and treat any problems that might arise and it is easier to take care of your plants. You also cannot over water a plant that is mounted. Mounts can give a more artistic look to your plant and it also saves growing space since you are growing vertically. Growers can use rolling racks so if bad weather arrives, you can easily roll the plants inside. Growing mounted helps the plant develop stronger root system to keep the plant sturdy and healthy. One can also see the whole plant since there is no hidden part of the plant inside a pot. Thanh likes that you can enjoy the blooms naturally and not have to stake the spike! Usually the plant can stay on the mount longer than in a pot so you don't have to repot as often. He stated that for all of our plants, that we should only repot when there is new growth AND new roots.

Next he moved on to mounting materials he uses which includes cork, cypress, cedar slab/baskets (cedar has natural insect repellent), hardwood cuttings, driftwood and fern slabs/baskets. Driftwood should be kept out in the rain for five years or so to wash out any salt from our Florida waters. The tools he uses for mounting include a drill, pliers, wire cutters, galvanized or stainless steel wire, fishing line, panty hose, twist ties, elastic string/rope and glue. If one needs padding, he suggests osmunda, sphagnum, coconut fiber, small amounts of Spanish moss and live moss. He doesn't use any padding.

He then provided a list of types that are good to mount, including leafless orchids, most miniatures/small/compact epiphytic species, mini Cattleyas and Brassavolas types, *Encyclias*, small vandaceous orchids, most small/compact *Dendrobiums* and most small/compact *Bulbophyllums*. Miniature to small orchids are good types to mount as are orchids that have a creeping growth habit such as *Bulbophyllums*. Orchids that produce lots of flowers and

have a downward growth habit with cascading flowers are also grown well mounted. He showed a slide of *Oncidium klotzschianum* as a prime example. When you bring a plant home to mount, don't do anything for a few days. Isolate the plant to be sure it is healthy and let the plant acclimate to your environment. Then spray with fungicide before mounting.

How do you decide when "not to mount?" First Thanh said if you grow indoors, don't mount. Don't mount a majority of the *Paphiopediliums* or *Phalaenopsis* because they like moist bases. In addition, large, vertical and tall plants as well as non-epiphytic (terrestrials) orchids don't work well.

According to Thanh, mounted orchids require more watering; particularly when first mounted until they have adapted to the mount. Try not to use wood that is very soft as it will deteriorate more quickly. You only want to remount/repot when absolutely necessary. You should also avoid the plant growing on top of itself, which can hide insects and rot. When you pick out your mount, plan for growth of the plant. It might be a big piece at first but the plant will grow into the size. His next slide showed a variety of objects that can be used for mounts including shells, pinecones, old shoes, and his favorite, cypress knees. Thanh ended his presentation with slides of some beautiful successes he has had mounting orchids.



Meeting Conclusion. The Members Choice went to Laura Kisse for her Vanda Junior Scott. The evening concluded with the Raffle table. Thanks to the helpful hands that stayed to help clean and restore the tables, chairs and room.



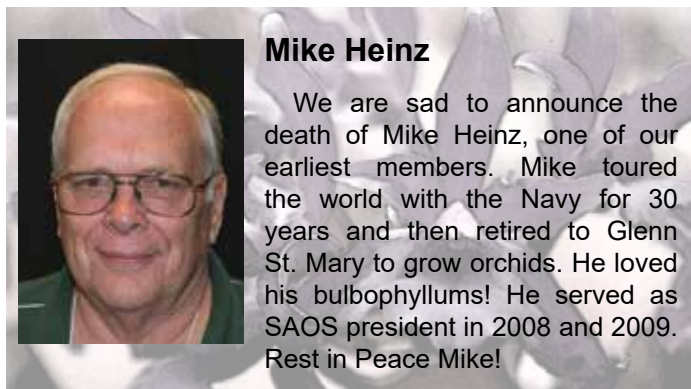
CLUB NEWS



Culture Notes

August in St. Augustine

August is the hottest month so be prepared to work diligently to ensure sufficient air circulation around your plants. Continue watering and using a dilute fertilizer. The warm temperatures cause fungal and bacterial problems as well as an increase in insect populations. Observe your plants carefully.



American Orchid Society Corner

Webinars

[During the Summer Hiatus, Explore the Recorded Webinars](#)

Orchids Magazine this Month

Ansellia africana – Charles Wilson

Dendrobium section Platycaulon - Jim Cootes

Phragmipedium schlimii - Frank Cervera

September 3 Meeting

Setting Up Your Growing Area, Jeff Adkins

Jeff's topic this month is setting up your growing area. He'll talk about how to make your growing area the perfect orchid habitat.

Jeff is a third generation orchid grower, following in the footsteps of his mother and grandmother who both grew exceptional orchids. He began his professional career in orchids by working for the famous Jones and Scully Nursery in Miami. After Jones and Scully closed from hurricane damage, he started his own business, Adkins Orchids. During this time he also became an AOS Judge, and has now been a grower and judge for over 30 years. Adkins Orchids specializes in the big, showy types of Cattleyas, Vanda and Dendrobiums. He will be bringing plants for sale, don't forget your wallets and checkbooks! Come and learn what makes a quality collection.



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

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



INSPIRATION



Chysis Maritza Bielecki

© Terry Botta



CULTIVATION



Orchid Questions & Answers

by Sue Bottom,
sbottom15@hotmail.com

Q1. Are these mites on our cattleya?

A1. That is scale, and a pretty serious infection. You can water blast it off, spray with alcohol and wipe it off, etc. But,

you won't get all of it off. You'll have to spray or drench with a suitable pesticide afterwards. Good luck!



show this disease until they start to mature and then it comes on full bore. They all have bloomed without fail and with no virus streaking. I have checked the orchids and there are no white flies, mealy bugs or red spider mites. The roots are healthy. Do I just throw everything out and start again or will the spraying do its thing eventually.



Q2. Can you tell me if I should worry about this Aliceara that I just received as a gift from Palmer? These brown spots on the leaf tip are new.

A2. I wouldn't worry, but I'd cut the leaf off about an inch below the discoloration. If it was sent through the mail, it could be heat damage, or perhaps something bacterial, but in any case, sanitize the plant by removing that portion of the leaf. Then, you don't have to look at it and you don't have to worry if something is going to spread from that area to the rest of the plant.



A3. Those leaves look really rough. My worst fear would be that the damage on the phals is caused by Orchid Fleck Virus (OFV), which is spread by tiny little mites in the Brevipalpus genus (Tenuipalpidae). Here's a [link to Hark Orkideen](#) that shows images of OFV on phals remarkably similar to the pics you sent. I'm not aware of any lab in the US that can test for OFV, and of course, there is no cure. Neem oil and physan will likely have little effect on this problem, you need a miticide. Not all miticides can control this type of mite, probably the most inexpensive of those that do is Avid, with the active ingredient abamectin. With the way it has spread, I think you should get some miticide effective for this type of mite and spray your entire collection, top and bottom leaves, and repeat at 2- week intervals, following all label instructions.

It's also possible it is some sort of fungal issue, like fusarium. Waypoint Analytical in Anaheim, California can test a sample for around \$150, you might try and [contact them](#) if you decide to try to quantify the issue. I would say my top suspicion is OFV, with fusarium or one of the bulb/stem/root rots as a distant second.

Q3. In the last year or two, my Phals have been devastated with some kind of problem. Even brand-new orchids bought in develop this issue eventually. I have been spraying now for 2 months with Neem Oil and Physan. New leaves don't





Summer Orchid Care by Dr. Courtney Hackney

An acquaintance recently asked me what I found so intriguing about orchids that made me continue growing them for over 40 years. As I thought about the question, I realized that there were several answers. Mostly, the unending variety of species and hybrids offer a challenge to even the most accomplished

horticulturalist. Most long-term orchid hobbyists began with a relatively easy-to-grow orchid and after we mastered growing that one, wanted more of a challenge. Learning to provide the environment for an exotic species from another part of the world must be a rewarding experience for those of us engaged in this hobby because we continue to do it.

Most remarkable is the fact that each year the challenge is a little different because it is hotter, colder, or new pests show up. This year's pest du jour for me is the juvenile stage of crickets. These appear as pale versions of the adult. They leave damage that looks like slugs, but they also really like new roots. After several nights of looking, I decided to un-pot a damaged plant or two. There were two or three of the little beasts. Once I knew what to look for, I found them on my new phal leaves and on cattleya roots in the dark of night.

These little beasts are quick, and difficult to catch. Several readers have asked about similar damage on orchids they were growing outside in summer and I suggested that the damage was done by slugs. It is not clear if very dry weather promotes this pest or my conversion to large lava rock for a medium. Lava rock provides large spaces where the juvenile crickets retreat during the daylight and makes killing them by hand difficult. Apparently, my small army of frogs that feed at night has not been able to control these pests and I will soon have to resort to liquid Sevin.

Sevin is an old pesticide widely used in gardens, but not usually for orchids. Most scale, the primary insect pest in orchids, are resistant to Sevin, but it works well on other insect pests. Just follow the directions and drench the pot. This kills most insects hiding in pots and seems to also be disliked by bush snails and slugs as well.

I never experienced many insect pests, except scale, until recently. My suspicion is that pesticides, such as



Orthene, previously used to kill scale, also killed these other pests. Now that I control scale with an infrequent application of a hormonal pesticide, crickets and other insects have appeared.

Most standard cattleya pseudobulbs are maturing now, which means it's time to cease fertilizing heavily. Smaller cattleyas with lots of sophronitis in their background can grow all year long and bloom several times a year. This type of cattleya, popular among windowsill growers, can be fertilized all year long.

It seems that many orchid growers in the area now use Dynamite (also known as Nutricote) slow-release fertilizer [13-13-13] and had lots of flowers last winter and spring. I first saw this product in seedlings I purchased from Carter & Holmes a few years ago and after trying it I was hooked. It provides an even dose of fertilizer for 6 months. This is ideal for hobbyists since mixing fertilizer is time consuming and typically results in over-fertilizing. Use about a half teaspoon for a 5" pot.

Last year a new formulation appeared alongside the standard 13-13-13 formula. While available for some time in bulk, it is now being sold under the trade name Dynamite at Home Depot. It has also appeared from time to time in Big Lots stores at a reduced price. The chemical formula is higher in Nitrogen [18-6-8] and contains minor nutrients as well. It is labeled "All Purpose", comes in a green tube, and provides nutrients for nine months. It delivered too much Nitrogen for cattleyas, but was great for phalaenopsis and paphiopedilums, which are faster growers. About ½ teaspoon per 5" pot worked well. Apply the fertilizer when the orchids begin to grow in winter. There is enough residual fertilizer incorporated into the medium to provide the orchid with nutrients for an entire year.

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 August 2009.



CULTIVATION

Mounting Orchids

by Greg Allikas



Cattleya mossiae growing in situ on a tree near Guanare, Venezuela. Note how the roots extend outward from the plant, photo by Greg Allikas.

In nature, epiphytic orchids grow “mounted” on the limb or trunk of a tree or, less commonly, on rocks. Their roots are fully exposed to the air, or partially covered by moss, lichen and detritus. We grow orchids in pots only as a matter of convenience; it is easier to provide sufficient moisture and potted plants are far easier to display than mounted ones. There are, however, certain orchids that prefer growing on a mount, and some will actually perish in a pot. When determining whether or not to mount an orchid, there are two criteria we should look at, the moisture requirements of the plant and its physical characteristics. Twig epiphytes such as *tolumnias* need to dry out quickly after being watered. There are orchids that grow in near xerophytic conditions for all or part of the year such as



Cattleya forbesii, grown and photographed by Leslie Brickell, has a rambling growth habit that makes it well suited to a mount.

Cattleya nobilior and *Barkeria skinneri*. Cooler growing orchids can sometimes be successfully grown in warm areas if their roots are exposed. Because of their cultural requirements, these orchids would all be good candidates for growing on a mount. Orchids with long rhizomes like *bulbophyllums* can be nearly impossible to keep in a pot. Pendent orchids such as *Seidenfadenia mitrata*, *Scuticaria steelei*, *Paraphalaenopsis labukensis* and numerous *dendrobiums* are awkward in a pot. The creeping, matlike growth of some *epidendrums*, *dendrobiums* and *maxillarias* is not at all suited to pot culture. Because of their physical characteristics, it would be better to grow these orchids on a mount. Obviously, the first place to look for information on whether or not to mount a certain orchid is the person from whom you got the plant. Keep in mind that nearly any epiphytic orchid will grow on a mount provided that you can meet its moisture requirements.



Types of mounting material, top to bottom cypress slab, cork and tree fern, photo by Greg Allikas

The best time to mount an orchid is when the root tips are just beginning to show at the base of a new lead. If the roots are too long, it can be difficult to get the plant seated properly without breaking them. If there are no active root tips at all, the plant may be reluctant to establish on the mount. We like to place newly acquired bare-root plants and divisions in an empty clay pot in a shady spot in our growing area until they break new growth. The cool humidity of evaporating moisture from the clay pot seems to encourage growth. Preparing an orchid for mount culture is much the same as preparing an orchid for repotting. Cut away any dead roots or pseudobulbs and do a general cleanup and inspection of the plant. Scrubbing away old sheaths with a toothbrush and some rubbing alcohol is a good opportunity to be sure that the plant is pest free. Be careful not to damage any new leads or root tips.

Almost any material that does not deteriorate rapidly or contain noxious substances can be used as a substrate for growing orchids. I have seen people growing *cattleyas*

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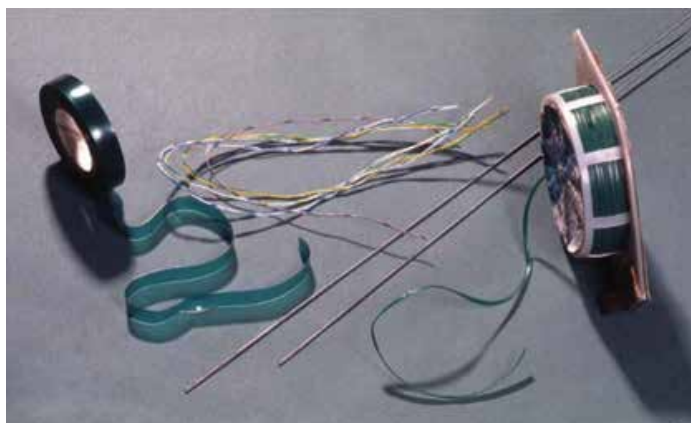
on slabs of Styrofoam and cedar shingles. The most commonly used commercial orchid materials are cork slabs, cypress slabs and tree fern slabs and totems. The cork slabs stay the driest and the tree fern materials retains the most moisture; cypress falls between the two for moisture retention. Use those characteristics to meet the requirements of the orchid you will be mounting. Branches of locally available hardwood trees are also frequently used for growing orchids. Here in South Florida, buttonwood has always been popular and will outlast most other materials. Driftwood may be used as long as it is not saturated with any toxic salts. Soaking and then rinsing with copious amounts of fresh water can remove any dangerous accumulations of these salts, but proceed with caution. Sometimes the unknown nature of a piece of driftwood will harbor a resinous wood to which orchids just refuse to attach their roots. An orchid will usually tell you whether or not it likes the substrate on which you have mounted it. If the root lips consistently dry up as soon as they reach the

mount surface and refuse to attach themselves, it's best to try another material. Asking other growers in your area which materials have been most successful for their plants will usually produce a list of winners. Although cork slabs will last nearly indefinitely, tree fern slabs will eventually break down. When they do start to deteriorate, you can simply wire them to a new piece of tree fern or cork bark.

Mounting orchids successfully is as much ingenuity and engineering as it is following specific techniques. Each orchid presents its own special challenge. The objective is to attach the plant securely enough to the substrate until the roots can take over the job of holding it in place. Any method you can use to achieve this goal is acceptable as long as it does not injure the plant. Using an inconspicuous method will help create an attractive mount. The fastening materials can always be removed after the plant has established itself, but most of us leave them in place, especially if they are not too obvious. Inventiveness and ingenuity go a long way when mounting orchids. Typically we will use galvanized wire, twist tie material or monofilament fishing line to attach an orchid to a mount, but saws, electric drills, ice picks, hot glue guns and pantyhose all have their place in an orchid mounting toolbox. Although every plant is unique, the basic steps of mounting an orchid are the same:



Cork has natural crevasses that make mounting an orchid easy, photo by Greg Allikas.



Left to right, vinyl florist ribbon, telephone wire, galvanized wire and twist tie roll, photo by Greg Allikas

- Prepare the plant as you would prepare any orchid for repotting: cut away dead roots, leaves and pseudobulbs. Inspect and treat the plant for any pest or disease problems. Ideally, root tips should just be showing at the base of the new lead.
- Select a mount on which to attach the orchid. Cut the mount to an appropriate size for the plant, if necessary, and attach a wire hanger.
- Examine the plant and its relationship to the mount and test fit. Cork slabs have crevasses that can offer more secure mounting opportunities. Branches

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of hardwood trees may have stubs that will allow you to anchor the orchid more securely. Tie leaves and pseudobulbs together if needed to make a more compact plant.

- Place sympodial orchids near the bottom of the mount with the newest growth facing upward.
- Using an appropriate attachment method, secure the orchid to the mount. Use a pad of osmunda or sphagnum to provide additional moisture if desired.
- Attach a name tag and you are done

Frequently misting a recently mounted orchid will help keep it from desiccating until it produces ample roots to sustain itself. Mounted orchids in general will require more water than potted orchids, sometimes daily during warm, dry conditions. It is probably a good idea to keep all of your mounted orchids together to make watering them easier

If you grow more than a few orchids of varied genera you will eventually have an orchid that will prefer being mounted. Mounting skills are as much a part of growing orchids as are an understanding of water, light and temperature.



Tolumnia 'Tequila Sunrise'
Grown and photographed by Suzanne Susko

This article appeared in the American Orchid Society Orchids magazine in September 2015 (Vol. 84:9, pp 540-545), reprinted with permission.

The Species Behind Standard Cattleyas, Part 4 by Don Herman



Cattleya percivaliana 'Summit' FCC/AOS
Grown and photographed by Leslie Brickell

Cattleya percivaliana was called Flor de Libertador by the natives of Venezuela, because of the South American hero Simon Bolivar's fascination with the beauty of the plant. It was obtained for the Sander's firm by their collector Arnold, in 1882. Reportedly, it grew at altitudes up to 4,000 feet in the mountains near Lake Maracaibo. The species was named for an amateur orchidist M.R. Percival. Coloration is usually a vibrant rose-lavender with a darker lavender lip and distinctive orange veining in the throat. The lip is usually fringed with lighter rose color. There are various color forms including white, semi-alba and blue. The finest lavender form is probably 'Summit' AM-FCC/AOS, which has a musty fragrance and flowers in winter. Hybridizers like its floriferousness and compact growth habit, though its flowers tend to be slightly smaller than the other standard-flowered cattleyas.



Cattleya percivaliana
var. *alba 'Sonia'*
Grown and
photographed by
Courtney Hackney

Extracted from an article that appeared in the American Orchid Society Orchids magazine in March 1997 (Vol. 66:3, pp 234-243), reprinted with permission.



CULTIVATION

Buying Seedlings

Sue Bottom, sbottom15@hotmail.com



How do you decide which or how many seedlings to bring home?

Some people only buy orchids in bloom so they can choose which orchid flower they like best. These plants are usually older and so are more expensive and mature enough to flower. If I see a drop-dead gorgeous flower, I may throw my Scotch heritage to the winds and buy the flowering plant, but more often than not, I can be found at the seedling sales tables where small plants in 2 or 3 inch pots are being offered.

Buying seedlings in small pots is a cost-effective way of expanding your collection. Additionally, a seedling grown under your conditions becomes adapted to the environment you are providing your orchids. Sometimes, a newly purchased mature orchid in flower may take several years before it flowers again as it adjusts to your culture and environment. Of course, you must grow your new seedling into a mature plant before it will flower well for you. This is contrary to the instant gratification we often seek. But, there is something special about growing a small plant into a large plant and seeing the buds form and the flowers open for the first time. Additionally, each seedling is unique unless it is a mericlone, an exact replica of a special orchid that has been cloned.

It is easy to be overwhelmed by trays of seedlings. Which variety should you buy? Which is the best plant? Some reflexively buy one of each seedling offered. Seedlings from two hybrid parents may be highly variable with respect to color, shape, etc. Seedlings from two different cultivars of a species will be less variable as are seedlings of primary hybrids where each parent is a different species. If you want a plant that is exactly like a photo you need to purchase a mericlone but few orchids have been cloned. Hybridizers can provide some guidance on what the flowers of a new hybrid will look like but it is impossible to know exactly. The thrill of seeing a seedling bloom for the first time is special and usually worth the wait. Many savvy hobbyists buy multiples of a hybrid that promises the spectrum of flower colors, sizes, and shapes they like and then select the best ones to keep in their collection after they all flower.

When shopping benches of seedlings ask which plants are mericlones. These will be exactly like associated photos. If you see a tray of mericlones you like, look for a healthy, vigorously growing seedling that you can bring home. You only need to buy one.

In nature, pollinators visit flowers that attract them without regard to floral characteristics that would attract the orchid hobbyist. Nurseries wishing to improve a species to conform to what hobbyists want combine select forms to improve on Mother Nature. If you see a tray of a species propagated from seed, check whether it is a selfing (mom and dad the same clone), a sibbing (brother and sister parents) or an outcross (distant relatives are parents).

If it is a sib cross, the hybridizer was likely trying to improve some aspect of shape, form, size, color, etc. while maintaining vigorous growers. Expect a relatively uniform group of progeny hopefully with a few that have improved floral characteristics superior to the parents. Sibbing can produce dramatic forms of a species but be aware that unwanted characteristics can be concentrated as well.



*Ctsm. fimbriatum 'Golden Horizon',
photo by Fred Clarke*



*Ctsm. saccatum 'Dark Wonder',
photo by Fred Clarke*



*Ctsm. Dragon's Teeth 'SVO' AM/AOS, photo by
David Nickerson*

You can see the open hairy lip from the Ctsm. fimbriatum and the wide sepals from the saccatum in the primary hybrid Ctsm. Dragon's Teeth

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Better flowers are always found in cultivars that grow well so look for seedlings with a vigorous growth habit. You might just select one from the tray, or if you really like the species, maybe a few to bloom out and select the one you like best.

If it is a selfing, where the pollen from a plant is placed on its own stigma to form seeds, either the hybridizer only had one clone to produce more, or the hybridizer is trying to tease out some recessive traits from the parent plant by concentrating genes. Be sure to select vigorously growing seedlings if you are buying selfings. You might just get lucky and find a rare alba or coerulea flower.

With hybrids, the degree of variation depends on the parents. Primary hybrids are the product of two species so the offspring get half the genes from the pod parent and half from the pollen parent. Primary hybrid seedlings typically look similar, with only a little variation. In many cases one species dominates. In others, hybrid characteristics may be intermediate between the two species. Typically, primary hybrids exhibit hybrid vigor and are easier to grow than either of their parents. Species have often evolved to thrive in a unique ecological niche, so meshing genes from two species often results in plants that can tolerate a broader range of climatic conditions than either parent species.

If one of the primary hybrid's parents is a tetraploid (usually denoted as 4n on the plant tag), it will contribute twice the number of chromosomes as the other diploid (2n) parent and have a greater influence on offspring, with offspring looking more like the tetraploid parent.

If the primary hybrid is then crossed with another cultivar of the same primary hybrid in a sib cross, there will be a lot more variation in offspring as compared to the initial primary hybrid between the two species but still carry the same name as the original cross. In such cases individual have varying proportions of chromosomes from the two initial species producing more variable seedlings. As Courtney explains in American Cattleyas:

The only hybrids that always contain a specific proportion of chromosomes from one parent are primary hybrids, a cross between two species. They inherit one set from each parent. If two siblings of a primary cross are used to make a hybrid, individual seedlings may contain any combination of chromosomes that originated with either grandparent species from 100% to 0% although the probability for such an extreme event is rare.

If you decide to buy more than one plant, you might select your seedlings based on plant morphology, selecting one having the widest leaves, one having the tallest growth

habit, or one having lots of red pigment showing in the leaves if looking for dark colored flowers or no pigment if looking for an alba.

When primary hybrids are crossed with different species or hybrids, the progeny are known as complex hybrids. The goal of most hybridizing is to blend the desirable characteristics of each species in the ancestry to produce a plant with flowers that are an improvement over either parent. The hybridizer might be trying to combine the flower size from one parent with the flower color of the other parent. After several generations of breeding and cross breeding, it can be difficult to see the contributions of the various species in its ancestry.

The more complex the hybrid, the more variation you expect to see in the progeny. When you find a seedling you think might be interesting, ask the vendor how variable he or she expects the seedlings to be. You might consider buying multiples from a tray of seedlings that strikes your fancy, so you can enjoy the variety imparted by different genes inherited from the species in its background.



Ctsm. Red Dragon is a hybrid between Dragon's Teeth and Susan Fuchs, and only contains the genes from four species, but look at all the variety in the seedlings. If you only bought one of these seedlings, what are the odds that you would have been lucky enough to bring home your favorite?

Photos by Terry Bottom

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References:

Batchelor, Stephen. 1982. Beginner Series Orchid Culture 11, Nomenclature, and Seedlings "Versus" Mericlones. Am. Orchid Soc. Bull. 51(1): 7-10.

Hackney, C.T. 2004. American Cattleyas: Species and Outstanding Clones That Define American Hybridizing. Wilmington, NC: pp. 123-127.

Slump, Ken. 2006. Hybrid Hype, Orchids. 72(4): 498-50



SHOW TABLE



Grower Leasa Codner
Lys. Red Jewel 'Sweet Baby' AM/AOS



Grower Steve Dorsey
Corallorhiza mertensiana var. alba



Grower Sue Bottom
Bulb. Jersey



Grower Suzanne Susko
Dtps. Tying Shin Blue Jay



Grower Courtney Hackney
C. forbesii 'IRO' AM/AOS



Grower Allen Black
Bepi. Alex Hawkes



Grower Leasa Codner
C. Princess (1899)



SHOW TABLE



Grower Courtney Hackney
Blc. Serengeti Sands 'Cherry Glow'



Grower Sheila Nathanson
Bc. Aussie Wedding Charm



Grower Sue Bottom
Stan. Suncoast Louie



Grower Steve Dorsey
Bc. Hippodamia



Grower Keith Davis
C. loddigesii var. coerulea 'Blue Sky' x self '#3'



Grower Janis Croft
C. Rhythm and Blues

Link to all Submissions: <https://flic.kr/s/aHBqjBCfgw>

