



## CLUB NEWS



### December Party and Auction

President Tom Sullivan welcomed 28 members to the December party and auction at 7 pm. He commented on the unusual year we have just lived through and how thankful he is for all our members and behind the scenes volunteers that make events such as this possible.



Dianne arranged for our sandwiches and salads from LaTaza as well as our Christmas cookies, and Mary brought cupcakes for dessert. We enjoyed the

meal and some liquid libations with our orchid friends. Sue had a few remarks, talking about the roller coaster ride that 2020 has been and what we might expect in 2021. We have no way of knowing how pandemic restrictions will continue in the new year so we have scheduled speakers and events for 2021. Then, we should all be prepared to make adjustments through the year to accommodate facts on the ground.

We opened the auction with a nice selection of plants from Ben Oliveros of Orchid Eros, George Hausermann of

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# CLUB NEWS



## Upcoming Orchid Events

### December

- 1 SAOS Christmas Auction, 6:30 pm  
Memorial Lutheran Church  
3375 US 1 South, St. Aug 32086
- 5-6 Fort Pierce Orchid Society Show  
River Walk Center  
CANCELLED
- 8 JOS Christmas Auction, 6 pm  
Mandarin Garden Club
- 12 Florida North-Central AOS Judging, 1 pm  
Clermont Judging Ctr, 849 West Ave.

### January 2020

- 2-3 Sarasota Orchid Society Show  
Sarasota Municipal Auditorium
- 5 SAOS Meeting, 6:30 pm  
Brandon Silvester and Charlie Rowell  
Home and Backyard Orchid Growing
- 8-10 Fort Lauderdale Orchid Society Show  
War Memorial Auditorium
- 9 Florida North-Central AOS Judging, 1 pm  
Clermont Judging Ctr, 849 West Ave.
- 12 JOS Meeting, Topic TBA, 7 pm  
Speaker TBA  
Mandarin Garden Club
- 15-17 Tamiami International Orchid Festival  
Dade County Fair Expo Center  
POSTPONED TIL OCTOBER
- 30-31 Florida West Coast Orchid Society Show  
Seminole Recreation Division

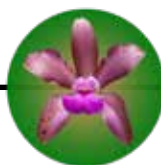
### February

- 2 SAOS Meeting, 6:30 pm  
Jim Roberts, Florida SunCoast Orchids  
Encyclias and their Hybrids
- 6 SAOS Repotting Clinic, 9 am til noon  
Behind the Memorial Lutheran Church  
3375 US 1 South, St. Aug 32086
- 6-7 Venice Area Orchid Society Show?  
Venice Community Center  
CANCELLED

- 9 JOS Meeting, Topic TBA, 7 pm  
Speaker TBA  
Mandarin Garden Club
- 12-13 South Carolina Orchid Society Show?  
Riverbanks Zoo&Botanical Garden  
West Columbia, SC
- 12-14 Port Saint Lucie Orchid Society Show  
Port St. Lucie Community Center  
CANCELLED
- 13 Florida North-Central AOS Judging, 1 pm  
Clermont Judging Ctr, 849 West Ave.
- 13-14 Boca Raton Orchid Society Show  
Safe Schools Institute  
CANCELLED
- 27-28 Orchid Society of Highlands County Show/  
Agri-Civic Center, Sebring
- 27-28 Naples Orchid Society Show?  
Moorings Presbyterian Church

### St. Augustine Orchid Society Organization

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EFG Orchids and Sue Bottom's greenhouse. There was lively bidding on the unbloomed seedlings and livelier bidding on the blooming ones! The auction proceeds paid for the party, with a little extra in the kitty for our speakers next year.

Thanks to all our volunteers that planned the event and made the auction a success, even in these difficult times. Perhaps once we have had a chance to bid the virus adieu, we should think about having a midyear auction for those that were not able to attend. Maybe an Independence Day auction, commemorating the day we reclaim our lives from this pandemic!



Link to photos from meeting: <https://flic.kr/s/aHsmSwz2Se>



# CLUB NEWS

## 2021 Calendars

Terry prepares a SAOS calendar each year featuring the Member's Choice orchids from the Show Table. Here's a [link](#) showing the featured orchids. 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](mailto:info@StAugOrchidSociety.org) or use the PayPal link on the website. Calendars are \$15 each if paid by cash or check. We'll be glad to mail the calendar to you for an extra \$5 in postage.



## January 5 Monthly Meeting

### Growing Orchids in St. Augustine

SAOS Growers Brandon Silvester and Charlie Rowell will share their orchid growing tips at the January meeting. Brandon grows his entire collection indoors under lights. He will talk about the basics of lighting, with special emphasis on those that are interested in providing supplemental light to their orchids in their winter homes. Charlie grows his orchids outdoors. He will talk about growing orchids on mounts, sharing his tips for the unusual mounts he makes for his orchids. Learn their tricks!

George Hausermann of EFG Orchids will be joining us, hosting the sales table. He will be selling plants as well as providing raffle plants. We will have our normal raffle at the end of the meeting. Friends and guests are always welcome!

**When:** Tuesday, January 5, 6:30 til 9 pm

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

## American Orchid Society Corner

### Webinars

December 2, 8:30 pm, Everyone Invited  
Greenhouse Chat Orchid, Q&A - Ron McHatton  
December 16, 8:30 pm, AOS Members Only  
Conservation Projects – Lawrence Zettler

### Orchids Magazine this month:

Laelia anceps and Some Hybrids - Fred Clarke  
Cattleya walkeriana - Judith Rapacz-  
Orchids Magazine Archives - Jean Allen-Ikeson  
Paphiopedilum rungsuriyanum by Olaf Gruss

### Photos of Latest AOS Awards

## Orchid Digest Diamond Awards

We have honored the service of some of our volunteers at the Holiday Party by bestowing the Orchid Digest's [Diamond Award of Excellence](#). The awards were published in the October issue of the Orchid Digest. Congrats to Bob and Bill!

### ORCHID DIGEST DIAMOND AWARD RECIPIENTS

**Bob Schimmel**  
**The St. Augustine Orchid Society**

The St. Augustine Orchid Society is honored to present the Orchid Digest Diamond Award of Excellence to Bob Schimmel. Bob has been a great ambassador for the society. As President of the Club for the past five years, he has led the growth of our active membership. Bob has been actively involved in our outreach programs, including giving talks to local Garden Clubs. He is a fixture at the monthly repotting clinics where members of the club and the general public bring in their orchids for a little tender loving care and growing advice. Bob and his wife Yvonne host a Keiki Club meeting each year, where beginners gather to see how others grow their orchids. He hosts the spring picnic and Christmas party at his church, where members have fun swapping and auctioning orchids. We look forward to Bob's continued contributions to the St. Augustine Orchid Society and thank him for his five-year tenure as President.

**Bill Gourley**  
**The St. Augustine Orchid Society**

The St. Augustine Orchid Society is honored to present the Orchid Digest Diamond Award of Excellence to Bill Gourley. Bill became our treasurer in 2008, a short time after the club was formed. He brought order from disorder by establishing financial controls and fiscal discipline, all with a friendly smile on his face. He guided the club through the federal not-for-profit process and set up the record keeping system to document compliance with state and federal requirements. Bill oversaw the risk management analysis, and made recommendations to ensure the Society, its officers and committees were protected. Annual audits of the books resulted in laudatory compliments about his performance as treasurer. Bill and his wife, Karen, have moved but Bill will continue as our long-distance treasurer, assuming the role of CPA and Auditor.



# CLUB NEWS

## Programs Scheduled for 2021



**January 5 – Home Orchid Growing**  
Brandon Silvester,  
Growing Under Lights  
Charlie Rowell,  
Growing Orchids on Mounts



**July 6 – Giant World of Miniature Orchids**  
Tomas Bajza,  
[Tarzane Group](#) (tentative)  
Focus on simple setups  
for growing minis



**February 2 – Encyclias and Their Hybrids**, Jim Roberts  
[Florida SunCoast Orchids](#)  
Learn about the charming epiccatts



**August 3 – Gadget Night**  
St. Augustine Orchid Society  
Bring in a special trick  
or gadget to share



**March 2 – Grooming Orchids for Exhibition**  
David Genovese,  
Orchid Hobbyist (tentative)  
Preparations for the  
best floral display



**September 7 – You Bred What?**  
Dave Off, [Waldor Orchids](#)  
Try making your own hybrids

**April 6 – Growing Award Winning Cattleyas**  
Keith Davis, [Keith Davis Orchids](#)  
Practical tips for growing cattleyas



**October 5 – Fragrant Phalaenopsis**  
Mike Mims, Orchid  
Hobbyist (tentative)  
Learn how to grow and show  
these beauties



**May 4 – African Orchids**  
Daryl Venables,  
[Tezula Plants](#)  
Learn about angraecoids  
from a South African



**November 3 – Cattleya mossiae**  
Fred Clarke,  
[Sunset Valley Orchids](#)  
Venezuela's national  
flower, in the wild

**June 1 – Water Quality and Orchids**  
Courtney, Sue and SAOS  
Members Good water helps  
orchids grow better



**December 7 - Christmas Orchid Auction**  
Spread holiday cheer with  
orchid friends



# CULTIVATION



## Orchid Questions & Answers

by Sue Bottom,  
sbottom15@gmail.com

**Q1.** Do you know what could be producing the sediment looking grains you see in the picture? I have found them in and around the roots of a few of my more established mounted plants. I went after them with

the hose but saw they reappeared after a couple of weeks.



**A1.** That looks like frass from dry wood termites. Take a hose and water blast all the loose stuff away and look for little pinholes in the wood, they are the holes the termites make to push the frass out.

There are plenty of chemicals to kill termites, but the strength recommended for termites is at least 20 times stronger than that which is recommended for orchids. For example, the 21.4% imidacloprid product is used at a rate of about 0.5 mL/gal for orchids and 8 to 16 mL/gal for treating foundations for termites. Perhaps a better plan is to pretreat wooden mounts/baskets for termites prior to use. Alternatively, try soaking the mounts in a strong imidacloprid solution for an hour.

**Q2.** This cattleya hybrid has some dark spots but it seems to be just a discoloration? They are flat, part of the leaf, you can't feel anything to the touch. It does not seem to hurt the plant. Any idea what it is??

**A2.** That looks like some bacterial blighting that occurred as the leaf was forming. I'm guessing water was cupped by the papery sheath around the emerging leaves and bacteria attacked the soft new leaf tissue. You can try to gently pull



down the sheathing so water can drain freely to prevent it from happening in the future.

**Q3.** I repotted this Dendrobium about a year ago. Someone commented that Dendrobiums like a lot of water, so I watered it often. This past spring it appeared to have developed a new cane with little green leaves at the base which shriveled and disappeared. On one of the remaining viable canes there are two keikis which looked robust when they first appeared maybe a couple of months ago that are now turning brown. Have I killed this plant by over watering?



**A3.** Perhaps. When they told you Dendrobiums like lots of water, they should have also told you they like to be potted in extremely small pots. The canes grow so closely together, they can happily grow in a seemingly too small pot for many years. So, if you had used a small pot with maybe an inch or so to grow new canes, you could have watered it a lot and still the roots would have had enough air around them to grow happily. It was the combination of a too large pot and the copious watering that may have done your dendrobium in. Whether the keikis were a normal growth pattern or perhaps the plant's last gasp at survival is anyone's guess. It is quite possible the keikis were trying to grow even though the main plant was doomed. I am guessing that had the plant been potted in a pot half the size it was, it would still be growing happily today.





## Winter Orchid Care

by Dr. Courtney Hackney

No matter how many years one has been growing Orchids, each year is a little different and this year has been no exception. Fall in the Carolinas has been extremely dry with wonderful bright days and few clouds. This is similar to the weather in Southern California where there were once many

Orchid nurseries. Typically, short winter days and low light lead to over watering, but not this year.

Aquifers and rivers are at record low levels and this can mean a change in the quality of water coming out of the tap. Hobbyists along the Coast that obtain water from home wells should be especially wary of changes in the taste of water, as salt intrusion can occur. Your Orchids will notice before you do. Community water systems, even those obtaining water from well systems, must monitor water quality. If you have a question about the quality of the water from your tap the local water system can provide you with the level of dissolved solids in the water or you can purchase an instrument that will provide this for around \$50. These Conductivity instruments are also handy when you fertilize because you can measure the quantity of fertilizer you are adding to your water.

This time of year there is little need to fertilize Orchids as they are not generally in a high growth mode. There is always a little residual fertilizer bound to the bark, pot, and other parts of the media, which is usually enough for the plant's needs during winter. Because of the lower light and heat levels, Orchids require less water. It is a good idea to wait an extra day after you are sure the plant is ready for water before watering. The only downside to letting your Orchids get a little drier than usual is that any fertilizer or salts in the water bound to the media can be concentrated by extra drying. To counter this phenomenon, water plants very thoroughly when you do water. This is best accomplished by wetting the plant and pot thoroughly the first time around and after you finish all plants, water thoroughly again. This allows salts bound to media to dissolve and then be flushed from the pot.

It is surprising how much salt can accumulate each year in a pot and media if proper watering is not done. Most novice growers ask how often to water, but do not realize that the nature of Orchid roots and the media they are grown in makes them different than most house plants whose

roots take up water almost immediately. Orchid roots must be wet for at least a few minutes before they shift from a water conservation to water uptake mode. You can observe the phenomenon in Orchids in baskets as roots turn green and get thick after watering a few minutes. This is the point where water is absorbed.

As Cattleyas and Dendrobiums finish flowering keep them on the dry side. That means watering less and keeping lots of air moving around them. It is OK for the bulbs to shrivel a little over winter, but not to the point where leaves shrivel. Do not apply the same process to miniature Cattleyas as they do not need a rest period and do not appreciate drying out.

Some Paphs need attention this time of year, namely the smallish Brachys and Parvis. Give them a little more light and a little less water to avoid rots. While they do not have pseudobulbs, they store water in their thickened leaves, so watch for leaf shriveling as an indication that they have dried more than need be. If you do this, plants will have good root systems and can quickly soak up water when you next water them.

Phalaenopsis spikes should be staked if that has not been done yet. If spikes tend to go in another direction besides up, it will be necessary to straighten them so that the spike is vertical. It may be impossible to straighten the base of the spike, but a longer piece of tie wire attached to the base of the stake will secure the lower part of the spike as the upper portion is pulled closer to the stake. Do not tie spikes tightly against the stake until the spike is mature and the first bud has opened. At this time the spike will not lengthen and the spike can be firmly secured to the stake. For standard Phals, the last tie should be just above either the last node before the first flower or just above the second node before the first flower depending on your preference. There are also those that prefer to tie the entire spike upright, although this is not looked upon favorably by AOS judges.

Once Phals have set spikes they need a minimum of 65°F at night to avoid rots. Keep lots of air moving around both leaves and flowers to avoid those tiny spots from Botrytis that destroy flowers. Flowers should be clearly moving to avoid this problem. Remove dead flowers and other decaying materials from benches to limit the number of Botrytis spores.

*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 December 2001.*



# CULTIVATION

## Orchid Plant Forms

### Beginners Department - 8

by Rebecca Tyson Northen

Orchid plants, like their less aristocratic brethren, consist of roots, stems and leaves. The roots serve to anchor the plant and to absorb water and minerals. The stems hold the leaves displayed to the light. The leaves are foodmaking organs, that is, they manufacture sugar, the energy food of plants. A twoway conducting system runs throughout the plant, built of two sets of specialized cells. One set carries water and dissolved minerals from the roots up through the stems and into the leaves, while the other set carries sugars from the leaves to all other parts of the plant. The systems run parallel to each other and together form what are called vascular bundles. These are seen as veins in leaves and as dots of dense tissue in the cut end of a stem.

Orchid plants come in many shapes and sizes, almost as bewildering as the variety shown by the flowers. Some are tiny plants an inch or so in height, others are taller than a man; some are stout and compact, others are vine-like. In general growth habit, they fall into two groups, those which grow only from the tip of the original stem year after year, and those which make new growths from the base of the plant each season. The former are called monopodial and the latter sympodial.



*A sympodial orchid has a rhizome from which roots grow down into the potting medium, and from which new growths are made every season. Each growth develops from a bud on the rhizome to produce this season's growth.*

Vanda and Phalaenopsis are examples of monopodial growth. Vanda grows tall rapidly, with a long stem and many alternate leaves. Phalaenopsis grows but slowly, acquiring only one or two leaves a year, three at the most. Some of the monopodial orchids send out branches from the main stem, and these branches continue to grow from their tips in the same manner as the main stem.

Sympodial orchids possess a rhizome, or ground stem, much like that of some Irises, from which new seasonal growths are produced. Each new growth comes from a bud on the rhizome and terminates its growth in one season. The growth is in the form of a jointed stem, bearing at the joints leaves and buds from which new growths will come. As a vegetative bud "breaks" and elongates, the stem curves upward. The basal part usually consists of several joints, or nodes, with a short distance between each one. The stem between the joints or nodes is called an internode. This basal part becomes a new section of the rhizome. It makes its own set of roots, and new vegetative growths usually come from buds at its nodes. The joints on the upper part of the stem may be few or many. In Cattleyas there is some variety. In the labiata group what we think of as a pseudobulb consists of a few nodes and internodes, small at the base and with the last internode much enlarged. In the bifoliate Cattleyas the stem above the rhizome may have many nodes and internodes. Dendrobiums typically have many-jointed stems, and Vanilla has jointed stems that reach great lengths. Cypripedium has a short stem which you never see unless you dissect a plant because it remains at or below ground level, deep within the heart of the leaves. Other sympodial orchids with which we are familiar are Cymbidium, Epidendrum, Laelia, Coelogyne, Oncidium, Odontoglossum, Miltonia, Pleurothallis and Stanhopea, to name but a few.



*Cyrtorchis Hendrik van der Hoven, an Angraecoid, is a monopodial type that grows steadily taller every year from the tip of the stem. Roots are produced along the stem.*

In the monopodial plants there is only one stem axis and this is upright and above the ground. The terminal bud, or the growing tip of the stem, produces more stem and more leaves continuously so that the plant increases in height from year to year. Roots are produced along the stem. At the base of the plant these roots penetrate the growing medium or cling to the basket or pot. Roots produced at higher levels on the stem may find nothing to cling to.

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Through evolutionary processes many orchid plants have developed the habit of living above the ground, in some location away from a constant water supply such as that furnished by the soil. We call these plants epiphytes. The prefix -epi means on or above, and -phyte means plant. They may find a foothold on a tree or on a nearly bare rock surface, wherever they happen to find a pocket of humus to furnish the necessary minerals and other conditions to promote growth. Some of them live where the climate is humid all year 'round, with the seasons providing "more rain" or "less rain" but never a prolonged period of drought. Even so, these plants are subjected to a daily drying between rainfalls. Others live where a dry season follows a wet one. The epiphytes, in order to survive, must have some means of storing water to tide them over the periods of drying, whether daily or seasonal. Most of them have thickened stems or heavy succulent leaves, or both, which hold water as a cactus does. The thickened stems are often bulbous in shape, which led to their being called pseudobulbs, or false bulbs. (A beginner is often confused by hearing or reading about orchid "bulbs," and is led to believe that these are similar to tulip bulbs. When the term "bulb" is applied to orchids, it is simply a shortening of the term "pseudobulb.")

Terrestrial orchids, those that live with their roots in the ground, come both with and without pseudobulbs. Our native orchids survive the winter by means of an underground rhizome which sends up a new growth each spring. *Cypripedium* (*Paphiopedilum*) illustrates a terrestrial orchid that must have a year round water supply even though its fleshy leaves hold a good bit of water. *Calanthe*, on the other hand, is a terrestrial that has pseudobulbs, by means of which it survives a yearly dry season.

Orchid roots vary in diameter from the very tiny but still rather fleshy roots of the miniature orchids, through a range of sizes that includes the rather slender roots of *Dendrobium*, the slightly fatter ones of *Cattleya* and *Cypripedium*, and the tremendously thick roots of *Vanda*. All have the same function, to absorb water and dissolve minerals. Whether a root grows into the potting medium or hangs out in the air, it is an absorbing organ. The roots of epiphytic orchids have a covering of specialized cells called velamen. This is the white coating that covers all of the roots but the green growing tip. Older roots, or the older parts of roots, may acquire a brownish, corky appearance. Root hairs are not present on the roots of epiphytic orchids, except occasionally on those of flask seedlings. The roots of terrestrial orchids do possess root hairs, situated, as in other kinds of plants, on the section just back of the growing tip. Root hairs are extensions of the epidermal root cells themselves, by which the absorbing surface is increased



*Older roots send out new branches when the new growth activity starts each year. .*

many-fold. Root hairs are of short life. They form from the cells just back of the growing region, and disappear as the cells become older. There is, therefore, only a short section of root bearing root hairs. As the root grows farther and farther along into new areas of the growing medium, the root hairs reach untapped sources of minerals.

Orchids do not have as extensive root systems as other kinds of plants. You may think this statement cannot be true when you contemplate an old *Cattleya* plant with roots clinging in layers to the outside of the pot. But the roots are rather thick and relatively few in actual number, not the finely divided, fibrous type, with which we are familiar in many of our garden plants. It is interesting to contemplate the figures compiled in the study of a single rye plant. The number of roots was found to be 13,815,762, with a total length of 387 miles. It was estimated that there were 14,000,000,000 root hairs, whose total absorbing surface was 4000 square feet. It is easy to see that no such totals would be reached even by an unusually extensive orchid root system.

In most plants the roots branch freely, but the number of branch roots is increased when the growing tip of the root is cut off or injured so that its growth ceases at that point. Orchid roots branch naturally, but not as freely as in other types of plants. *Cattleyas* and *Cymbidiums* branch as freely as any orchid, more so than some. *Cattleya* roots grow for some time without branching, the length depending somewhat on the circumstances. Roots hanging down under the bench where it is damp and cool often grow straight for two to four feet. On the other hand, roots growing out of a pot may branch naturally when about six inches long, or will branch at this length if the tip is cut off. The same thing takes place in the pot as well. This makes it feasible to repot a plant which, starting new roots just before or during flowering, cannot be repotted at the usual time. If you wait until the new roots are about six inches long, they will branch after being cut for repotting.



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The newly growing roots, from the time they start until they reach several inches in length, do not seem to have the capacity to branch that season. If their tips are injured they simply cease growing. It is therefore dangerous to injure the new roots during this period of their growth. However, the short stubs will branch when the next season's growth begins. Older roots send out new branches when the new growth activity starts each year. When the new roots start from a lead you will see new roots coming from old brown roots that you may have thought were dead. As long as an old root is firm and solid, it is still alive. When it becomes soft and the outer layers separate from the tough inner core or stele, it is dead.

The leaves of orchid plants show many forms. First there are the foliage leaves, the more or less permanent and showy ones, which are fleshy, leathery, or thin with prominent veins. These may remain on the plant for many years, as in *Cattleya*, *Cypripedium* etc., or they may dry and fall after the growth matures, before or during flowering, as in *Cycnoches*, *Catasetum*, *Calanthe* and some *Dendrobiums*. Then there are the sheathing leaves, thinner, smaller, less long-lived. Developing pseudobulbs are often clothed in sheathing leaves which soon dry and fall. In *Cattleyas* the sheathing leaves become tissue-paper-like as the growth matures and peel away from the stem. In *Oncidiums* and *Odontoglossums*, some of the sheathing leaves soon disappear, but often a pair of smaller foliage leaves remains at the base of the pseudobulb while the larger foliage leaves grow from its apex. The stems of some flower sprays are clothed with sheathing leaves during development, as in *Cymbidiums*, while others have small bracts at the nodes along the stem. Flower buds are often protected by a sheathing leaf, as in *Cypripedium* and *Dendrobium*. In *Cattleyas* and their relatives, a green envelope, a modified leaf, covers the whole group of flower buds during their early development.

Typically, a leaf develops at each node along a stem. In *Vanda* the towering stem bears foliage leaves at closely set nodes. *Cattleyas* and many others have sheathing leaves at the lower stem nodes and foliage leaves at the apex of the stem. In *Cymbidiums* you have to strip the leaves off of the pseudobulb to see how they are set at separate nodes on the stem. In the axil of each leaf there is a bud. Certain buds have the capacity to form flowers, others vegetative growths. Not all buds have an equal chance to develop. There are more vegetative buds present on any plant than will ever normally develop into growths, one of nature's safety factors. Although there are many vegetative buds along the rhizome of a *Cattleya* plant (two at each node) often only one becomes active as the growing season starts. If this is broken off, the one on the other side becomes active. Some plants habitually break

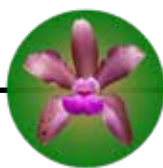


*The flowering growth of cattleyas come from the apex of the pseudobulb, as a long stem clothed with sheathing leaves. The sheath, a modified leaf, encloses the flower buds of Cattleya while they are developing.*

two leads at a time from the lead growth, and sometimes buds from the next younger ones. Often buds long dormant on the older parts will become active and give still more leads. Obviously, the habit of breaking many leads is a desirable characteristic. When a plant is divided, the older part is left without a growing lead, and then a bud that has been dormant for many years will be provoked into growth. Vegetative growths often come from buds along the canes of *Dendrobiums* and the flowering stem of *Phalaenopsis*. *Dendrobiums* may be propagated by cutting the older canes into pieces and laying them on damp sphagnum moss to stimulate the development of dormant buds. Cultural conditions may discourage or encourage the development of buds, vegetative or flowering. Temperature and day length influence the development of one kind or another of buds in many kinds of plants, including some orchids.

A flowering growth develops from a bud in a leaf axil, from one at the base of the plant, or along the stem, or at the apex of the growth, depending on the habit of the species. In *Cattleyas*, *Laelias*, most *Epidendrums*, *Cypripedium* and some others, the flowers come from the apex of the year's growth. In *Cymbidium* the flower spike arises from the axil of one of several of the lower leaves. In *Odontoglossum* and *Oncidium* it may come from the axil of a leaf at the base or along the side of the pseudobulb. *Cycnoches*, *Dendrobium* and *Vandas* produce flowers from any of the leaf axils, usually those closer to the top of the stem. When you are faced with a kind new to you and want to see whether flowering growths are forming, look inside of the leaves where they join the stem. Flowers that come after the leaves have fallen arise from buds formed while the leaf was growing.

*This article by the legendary author of Home Orchid Growing Rebecca Tyson Northen is excerpted from the original in the August 1953 American Orchid Society Bulletin (22:8, pp. 583-589)*



# CULTIVATION

## December 2020 *Catasetinae* Growing Tips

by Fred Clarke, Sunset Valley Orchids

Now that winter has really set in, your *Catasetums* and *Cycnoches* will have matured their growths and finished flowering, but there are always a few late bloomers that soon should be on their way to dormancy. *Mormodes* will be finishing up their bloom season, and now it's time for many of the *Clowesia* hybrids to flower.

The onset of dormancy is caused by several factors: the maturity of the pseudobulb, shortening day length, cooler day/night temperatures and a reduction of root zone moisture. The yellowing and dropping of leaves signal the beginning of dormancy. Now is the time to stop fertilizing and cut back on watering frequency, simulating the end of the wet season in nature. This change in culture will cause the pseudobulbs to harden off in preparation for the upcoming months of dormancy. When most leaves are yellow/brown and have fallen off, cease watering altogether. This marks the start of the dormant period.

Those of you in Florida and the southern states will have dormant plants now, and it's possible that some of you may start to see the first beginnings of new growth.

Not all plants lose all of their green leaves when dormant, and it's not uncommon for some to hold a few leaves well past the point when irrigation has stopped.

The onset of dormancy generally occurs naturally; however, when plants are cultivated in consistently warm growing areas, such as in the home or under lights, dormancy sometimes needs to be encouraged. I have found that managing irrigation is one of the best tools to trigger dormancy. If you still have plants in December with a full complement of green leaves, it's time take a more aggressive approach. Allow the media to become dry, regardless of the number of green leaves. Let the media stay dry for 3-4 days then water sparingly, about one or two ounces of water. The water may flow right through the media, and that's okay. Allow the media to dry and wait 4-5 day before following the same stingy irrigation procedure. Repeat this process, increasing the dry interval between waterings. This will trigger dormancy in plants that are resisting the transition.

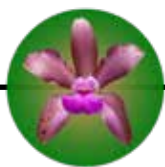
As my *Catasetinae* go to "sleep" for the winter I am reminded of the words of Shelley: "*If winter comes, can spring be far behind?*"



*These six plants illustrate the progression of *Catasetinae* into dormancy, from left to right: 1) leaf tip yellowing, 2) leaf yellowing, browning and abscission, 3) more yellow leaves, tip die back and leaf drop, 4) obvious missing leaves at base, 5) two leaves remaining, 6) leafless plant.*



# 2020 YEAR IN REVIEW



# 2020 SHOW TABLE REVIEW



**Grower Walter Muller**  
**Zygo. Blue Blazes 'Barrie Ford'**



**Grower Steve Hawkins**  
**Stenosarcos Vanguard**



**Grower Jerry Fowler**  
**Phal. Summer Candy Girl**



**Grower Glo MacDonald**  
**Encyclia Moonlight Shadows**



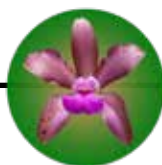
**Grower Leslie Brickell**  
**Lc. Mishima Flash**



**Grower Sue Bottom**  
**Eria hyacinthoides**



**Grower Harry & Ceclia McElroy**  
**Cymbidium Mimi 'Lucifer'**



# 2020 SHOW TABLE REVIEW



**Grower Leslie Brickell**  
*Lycaste Nobuo*



**Grower Penny Halyburton**  
*Paph. Hung Sheng Spice*



**Grower Linda Stewart**  
*Pomatocalpa spicatum*



**Grower Sue Bottom**  
*Bic. Dora Louise Capen 'Lea' AM/AOS*



**Grower Sue Bottom**  
*Clowesia Grace Dunn 'Chadds Ford' AM/AOS*



**Grower Glo MacDonald**  
*Onc. Tsiku Marguerite*

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

