Central Jersey Orchid Society Newsletter

November 2022

October 2022 President's Message

Dear Members,
November is the true month of transition with most, if not all, of our orchids safely indoors ahead of the cold we know is coming. Some reminders from the AOS:

Cattleyas

"The first cultural change noticed should be a reduced frequency of watering, as the plants dry out more slowly. This is a function of both the reduced day length and lower temperatures, as well as the plants' slowing growth rate. Reduced water needs signal a reduced need for fertilization. Note that the key word is reduced, not eliminated. Feed less frequently and at lower dosage, but feed. Growths, made during summer's heat, and relatively soft and green, will be ripening -- hardening -- in preparation for a brief period of rest (in many cases).

Many of these ripening growths will have a sheath, presaging the coming winter or spring flowering season. In some cases, these sheaths will have been evident since as early as July. (Early sheath development does not mean early flowering on plants with winter-spring seasons.) You may notice that some of these sheaths are showing signs of yellowing. This is not abnormal. Autumn's more pronounced temperature fluctuation can lead to water condensation inside the sheath, hastening the normal process of senescence, so yellowing sheaths can be left on the plant only so long before they must be carefully removed to preserve the bud primordia within. Water condensation left unchecked can rot the bud primordia. The sheaths can be safely removed by slitting open and peeling down toward the pseudobulb".

Care for Cymbidiums and Paphiopedilums Continues on Page 11

Please remember to pay your membership dues with this meeting. Only paid- up and honorary members will be invited to the holiday party December 15th.

Happy Growing,
Anne Skalka, President

New Meeting Location 7:00 at the Trinity Church 33 Mercer St, Princeton, NJ 08540-6893. See pages 12-15 to help you locate the new meeting site

There will be a raffle with plants from Sunset Valley Orchids (Fred Clark)

Blc Joann Yukimura 'April' x 'Charlie Holland' Jim Murtha

Newsletter Contents

Meetings and Events 2022-2023

Arrive at 6:30.
Meeting will start at 7:00PM
Meetings are held the **Third Thursday** of the month.

New Meeting Location
Trinity Church 33 Mercer St, Princeton, NJ 08540-6893

Nov. 17, 2022 7:00 PM
Speaker - Kim Feddersen
Topic: Yes, You Can Grow Vandaceous Orchids

October: Greg Griffis
Achieving Orchid Excellence

Nov: Kim Feddersen
Yes, You Can Grow Vandaceous Orchids

Dec: Holiday Party

Jan: David Off (Waldor Orchids)

Feb: TBA

March: TBA

April: TBA

May: TBA

June: TBA

Officers and Committees:

President - Anne Skalka

Vice President – Jaymie Santiago

Treasurer/Membership – Michelle Thomas

Corresponding/Recording Secretary -Tobie Parnett

Editor Newsletter - Ed Frankel
CJOSnewsletter@gmail.com

George Wallace – Web Master

Details (Maps and Pictures) of New Meeting Location on Pages 12-15

CJOS Members Show Table

Cattleya

1. **Blc Joann Yukimura ‘April’ x ‘Charlie Holland’ Jim Murtha**

2. Blc Eva Marie Barnet ‘Magnificant Watermelon Gold” x Blc Crispen Rosales “My XXX” Jim Murtha

3. Blc Prada green deluxe Jim Murtha

Dendrobium/Oncidium

1. Onc. Shelob
Joe Thomas

2. NOID
Joe THomas

Paphs/Phrags

1.Phrag Sargent Eric
Roz Greenberg

2.Paph Doll's Kobold
Jaymie Santiago

3.Phrag Panther Run
Roz Greeenberg

Vanda/Phals

1.Summer Rose
Michelle Thomas

2.Vanda Fuchs Sunset x Dr Anek
Joe Thomas

Other

1.Habenaria Flamingo
(Grower not listed on Judging form
we can list next month when identified)

2.NOID
Joe Thomas

Species

1. Comparettia
Joe Thomas

2.Phal bellina
Jaymie Santiago

3.Paph henryanum
Jaymie Santiago

Orchid of the Month

Blc Joann Yukimura 'April' x 'Charlie Holland'
Jim Murtha

How Do You Grow?

Each month, I would like to show a members growing methods/conditions. Please send me pictures of your growing conditions (summer/winter) CJOSNewsletter@gmail.com. Let's see some pictures of your growing space.

Greg Griffis speaker and the First Meeting at the new site!

Greg Griffis (Longwood Gardens) “How do great growers become great”

Lots of room in the new place

(Continued from Page 1)

Cymbidiums

We begin in earnest the main cymbidium season. *Cymbidium ensifolium* can give some early and fragrant hybrids, but it is now that the bulk of the crop will be flowering. The season lasts for about seven months, adding color to any collection. Miniature varieties will peak for the next three to four months. There are three important things to do: stake inflorescences ramrod straight for best presentation, watch for slugs and snails (especially just after a rain), and fertilize with a mild balanced formula regularly.

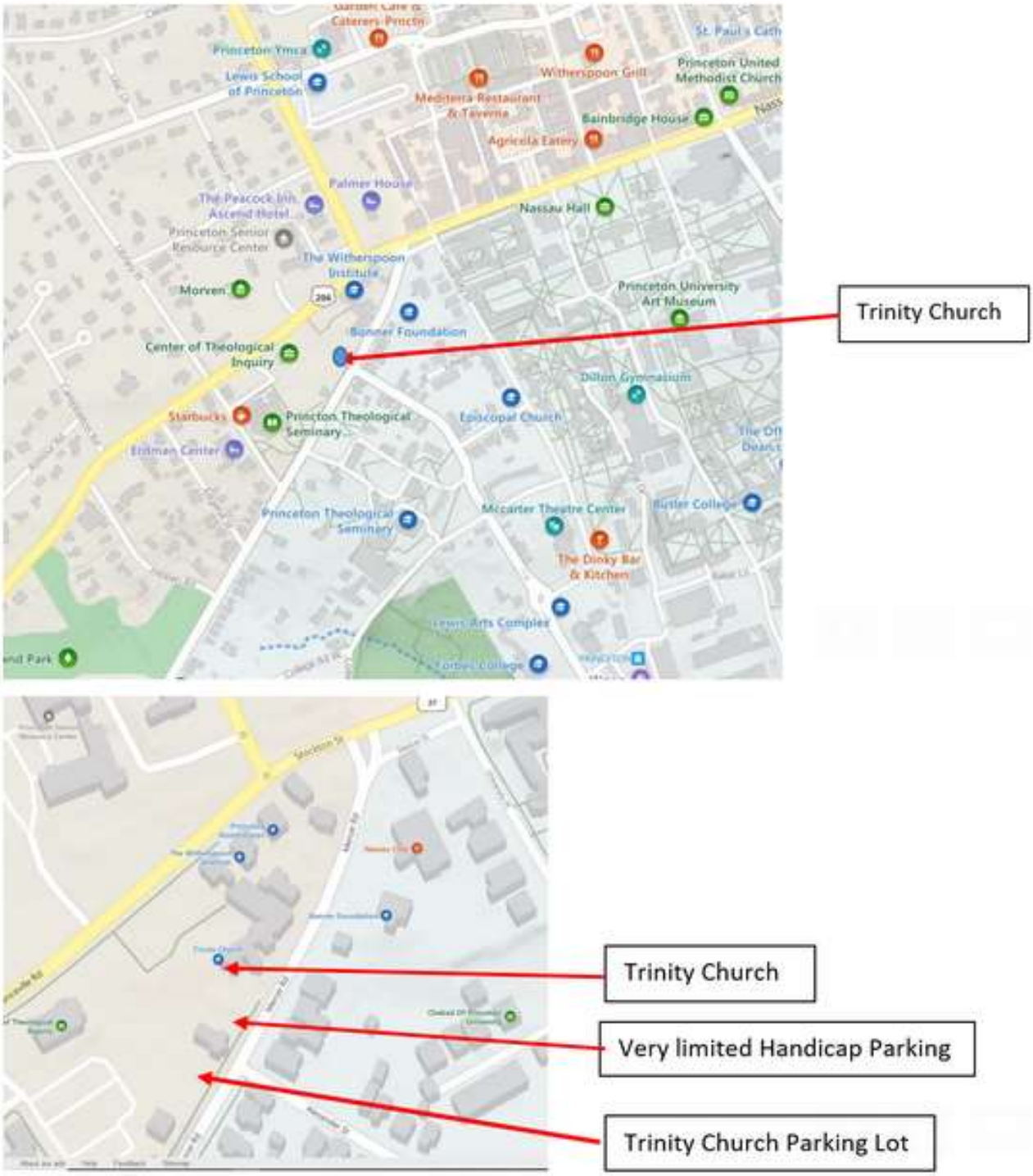
Paphiopedilums

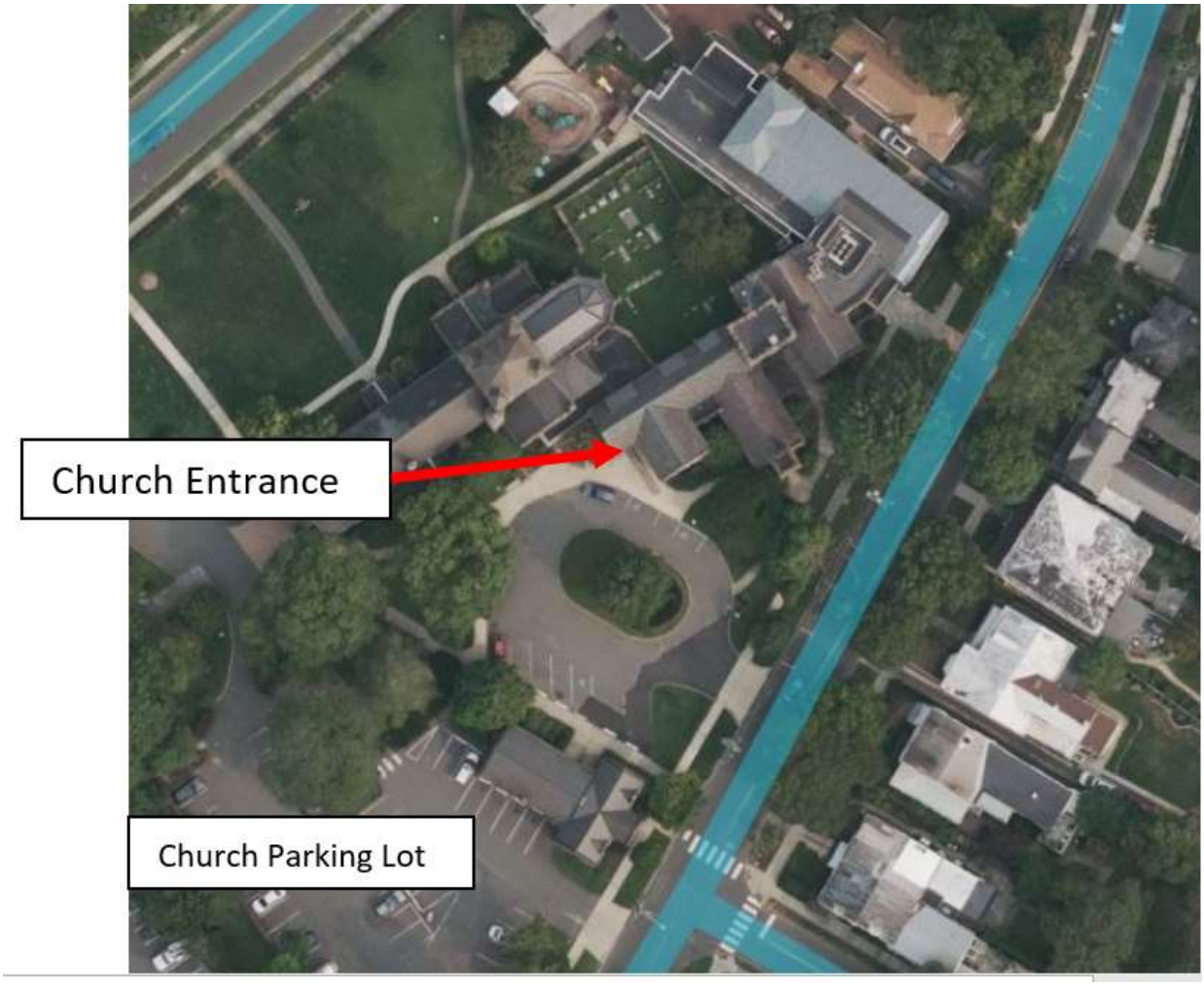
The flowering season for the "toads" or "bulldog" paphs is just getting underway. These cannot be grown everywhere, but where cooler summer nights allow their growth, there is no longer lasting or more exotic display than these. Paphiopedilums are, in general, not heavy feeders, and it is especially important with this type to reduce nitrogen levels now for best flowering and spike length. Be watchful for water accumulating in the growth around the sheath, or for the late-season warm spell, either of which can lead to the sheath's rotting. As the spikes emerge, do not change the orientation of the plant toward the light, as this can lead to a crooked or twisted spike

While paphiopedilums rarely like to dry out entirely, water needs are significantly reduced beginning now. Overwatering at this time of year can quickly lead to root rot or erwinia problems. Now is the time to practice good sanitary practices in your greenhouse or growing areas, as pest and disease problems have a way of multiplying rapidly in the darker and more crowded conditions that generally mark the winter growing area. With paphiopedilums, especially, "cleanliness is next to godliness" and if the growing area is littered with old foliage, weeds and dying flowers, keeping the plants alive and flowering will be next to impossible.

New Meeting Location **Trinity Church 33 Mercer St, Princeton, NJ 08540-6893 (**using **47 Mercer St** for GPS may pinpoint the parking lot better)

Here are some map locations and pictures (next few pages) to help find the new location. Here is one of the easiest ways to pin point the new meeting location: It is almost directly opposite Alexander Rd. Since it will probably be dark, I have included a few night time pictures of the meeting location.



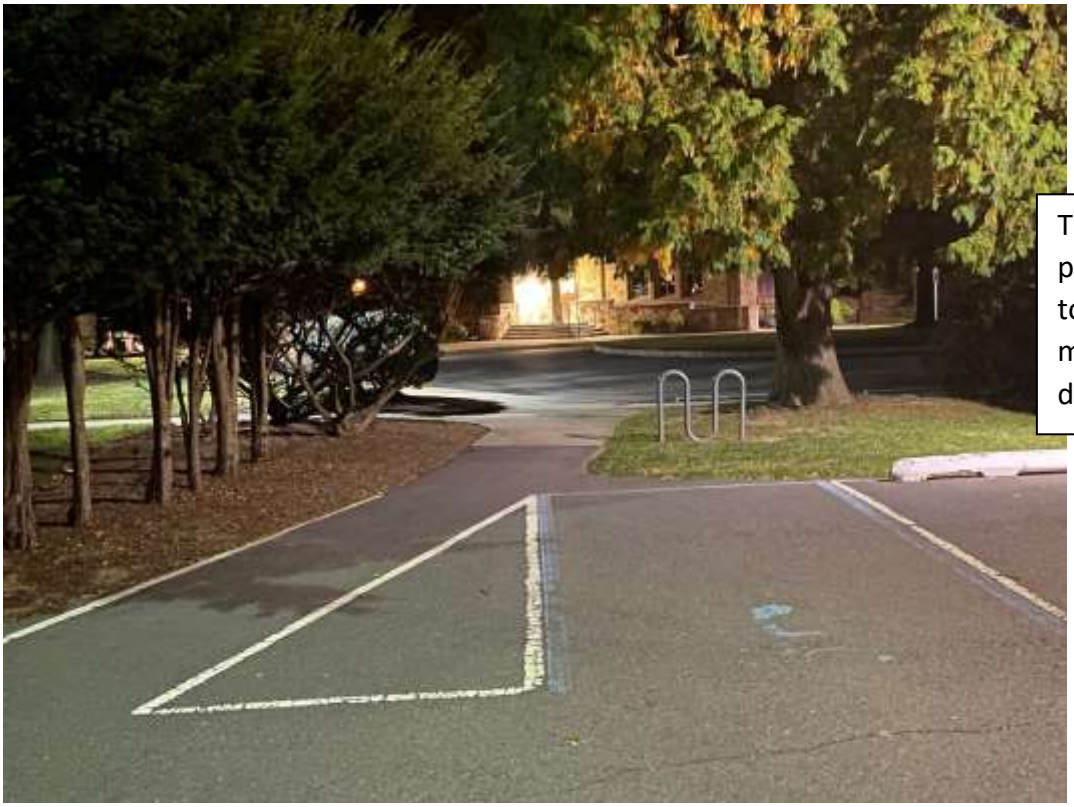

Church Entrance
Church Parking Lot


Church Entrance

Night Time pictures of meeting location

This view is looking south on Mercer St (away from downtown Princeton) note the crosswalk just before the entrance to the Parking lot.

This view is looking north on Mercer St (toward downtown Princeton)



This view is in the parking lot facing toward the meeting entrance door.

This view is the door (the one that is brightly lit, straight ahead) for the meeting entrance

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AOS 3rd Orchid Culture Day

Rus Vernon, Tom Miranda, Ron McHatton, Peter T. Lin

Sunday, December 4th, 2022
10 AM - 3 PM CST

Join us for our third annual Orchid Culture Day virtual event from the comfort of your home or office. Registration is just $30 for the day of delightful speakers along with tons of orchid care (culture) topics ranging from Dendrobium Species, Oncidium, orchid habitat and its influence on culture, to Vanda Alliance and Q&A. Click 'Learn More' for full details and event schedule.

Go to AOS.org for more information and while you are there, please join AOS. Support this worthy organization.

CULTIVATION

The following is reprinted with permission from the St Augustine Orchid Society

Orchid Questions & Answers

by Sue Bottom,
sbottom15@gmail.com

Q1. This growth is the strangest I've seen. The new growth is growing straight out at an angle and there are aerial roots. I thought I'd risk cutting this new growth off that has its roots airborne, although there are bud sheaths.

A1. As long as you have three or four pseudobulbs, I would cut away the new growth just above where it is rising out of the pot. That piece that is horizontal will ultimately turn upward toward the light, particularly if you gently encourage it to do so with some twist ties. You might consider putting that rambling growth in a basket. Leave the rest of the plant in the pot and hopefully you'll get back bulbs to sprout.

Q2. I have an enormous Epicatt that has always grown and bloomed fine but I recently noticed black leaf tips. Any ideas?

A2. At first glance, I thought this was an issue with water pooling in the new growth and causing a rot, but the black discoloration begins on the leaf tip and moves down the leaf. This looks more like a calcium deficiency in the new growth. Perhaps consider using calcium supplements,

particularly during the rainy season. The Miracle Gro Shake 'N Feed for tomatoes, fruit trees and vegetables is a time release fertilizer containing calcium, for those that don't have a regular fertilizing schedule.

Q3. Almost all flowers on this Catt opened with a strange problem. It mostly affected the lip but some petals as well, even though the buds looked fine and the outer petals were not always affected.

A3. That looks like bacterial blighting on the flowers, probably caused by all the rain we have been having. Either water condensed in the bud or soaked into the bud before it opened, and an opportunistic bacteria started the infection. The flowers are ruined, but you can remove them easily and eliminate the problem from your growing area. If you can move your budding plants to a covered area when we're having these extensive rain events, you'll be able to protect the blooms.

CULTIVATION

Orchids in Fall
by Dr. Courtney Hackney

Many people have a difficult time sleeping this time of year because day length is changing so fast. Not only is the day length changing, but the sun's angle has also changed dramatically since mid-summer. This is the time to reexamine the location of plants and shading and be sure you are optimizing light. Cooler day temperatures also mean that orchids can handle higher light levels than they can in mid-summer without burning leaves. Some growers begin to remove greenhouse shading now. Windowsill growers must determine whether too much light is now entering their growing area and may have to add some shading or move their orchids just a little farther from the window, depending on the exposure.

Many orchids begin to initiate their flowering cycle as the day length decreases. Fall blooming Cattleyas, especially those with Cattleya labiata in their ancestry, have started to develop flowers deep in their sheaths. Many of the Cattleyas with the darkest flowers bloom in the fall. Cooler temperatures intensify pigments in some orchid flowers and begin the flowering cycle in others. Standard type Phalaenopsis require at least a 20-degree day/night temperature change and a week or two of nights into the upper 50s or low 60s to begin the blooming process. Hobbyists growing under lights should place Phals on an outside porch or open windows for a couple of weeks in fall to initiate spikes. Small Phal seedlings should be kept warmer so that they will continue summer's growth as long as possible. They will flower later without your help and carry more flowers thanks to their larger size. Once phalaenopsis have had a couple of weeks of cool night temperatures, keep them at least 65 F at night for best growth and to prevent rots.

As days get cooler, move Cymbidiums into higher light. They can be moved into full sun if exposed to higher light levels gradually. Hybrids in this group of orchids generally like cooler fall weather and most require it to bloom well. In California, growers do not take Cymbidiums inside until nights get frosty. Similarly, many members of the Zygopetalum group, including intergeneric hybrids, will initiate new growths and flower spikes only when night temperatures dip into the 50s. Once new growths appear with spikes, take plants inside or into the greenhouse.

Dendrobiums are such a diverse group that hobbyists must learn to recognize different types before following advice about inducing blooms. Many of the soft-leaved species and forms, including Nobile-types need cool nights, less water, and no fertilizer to flower properly. Some will lose all their leaves, while others will respond with some leaf loss and a slight shriveling of bulbs. Consult local experts or books specializing in Dendrobiums if you are unsure what type you have.


Phal. Paradise Lost

Many species of bulbophyllums are also beginning to flower. The vast majority of these come from very warm climates and will continue to require warmer temperatures if they are to flower and grow well. It can be difficult to maintain the variety of conditions necessary for a wide variety of orchids in a small growing area so compromises may lead to fewer and/or smaller flowers.

Phragmipediums, especially Phrag besseae hybrids, love cooler temperatures and will often begin new growths and grow at an increased rate in the fall. Check media to be sure it is fresh enough to get through the winter, as repotting most orchids in winter is not a good idea. Paphs are especially vulnerable to loosing root systems during winter if the medium is already in the late stages of decay so repot any that may need repotting now.

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 October.

CULTIVATION

Catasetums in October

Fred Clarke, Sunset Valley Orchids

Clowesia Grace Dunn 'Chadds Ford' AM/AOS

As we can all tell the weather is changing and your Catasetinae should now be in their final stages of growth. This was an excellent year for Catasetinae; many growers from around the country reported a fantastic flowering season. The first signs of dormancy will soon be evident, with some areas of the country already see the start of the dormancy. Soon it will be time to stop fertilizing and begin to decrease irrigation frequency, in effect lengthening the dry period in-between watering, mimicking the end of the rainy season.

In nature the rainy season is nearing its end, the rains are less frequent, nights are cooler and day length is shortening. These are the environmental factors that start the dormancy process. With less rainfall, fewer nutrients are moved to the root system (thus stop fertilizing) and the roots stay dryer longer (thus reduce irrigation frequency). This increasing dryness is an indicator to the plant to harden off their pseudobulbs in preparation for the 2-4 month winter dry period. Hardened off bulbs are better at storing water through dormancy. Humidity should be maintained at 40-60% however brief periods outside this range is not a problem. Maintain light levels and keep night temperatures at or above 55 degrees.

Catasetum pileatum

Catasetum Frilly Doris 'SVO' AM/AOS

No repotting at this time, the roots are well-developed and will resent being disturbed. If you were negligent (how could that be?) it is better to wait until next spring at this point. As soon the new growth begins in the spring, that's the time to repot, as you can now see the best way to position your plant in its new pot. With Catasetinae, the roots follow the new growth usually several weeks behind. In nature, the roots grow out and then the rains start. So, as I have said many times, "wait to water until the new growth has new roots 3-4" long." This gives the best results as large healthy root systems make for strong healthy bulbs and better yet, excellent flowering.

One of the great attributes of the Catasetinae is their deciduous nature, if you experienced leaf damage, don't worry, as those leaves are going to drop off and next spring/summer you will have a new set. How many orchids are that forgiving when the leaves are damaged?

When walking around the greenhouses these days it looks like almost everything is blooming! This is my favorite time of year as there are Catasetums in flower, the Cycnoches are blooming, and the first of the Mormodes are in spike! But there is still more to look forward to as the blooming season for Clowesia rosea hybrids begin flowering in December and January. These late season plants bloom on deciduous bulbs, with inflorescences cascading over the side of the pot with many fragrant flowers.

CULTIVATION

Fertilize Weakly Weekly

by Sue Bottom, sbottom15@hotmail.com

The instructions on most water soluble fertilizer package usually say something like apply at the rate of 1 teaspoon per gallon. They don't give specific application rates for your philodendrons, your roses or your orchids. Many of the orchid books recommend you fertilize your orchids weakly, weekly. How much fertilizer should you apply to your orchids? Well, it's complicated and there are quite a few factors to consider.

Are Your Orchids in Active Growth? Most orchids accelerate their growth rate when the days lengthen and the sun intensity increases in the spring. Your goal is to match the fertilizer application rate to the growth rate, so the availability of nutrients is not a limiting factor. Many, but by now means all, orchids rest during the winter months. Most cattleyas don't require much, if any, fertilizer in winter. The winter dormant orchids like habenarias and catasetums should be kept mostly dry, with no water or fertilizer in winter. The soft cane dendrobiums like a coolish, dryish winter with occasional waterings but no fertilizer; the fertilizer will encourage the formation of keikis rather than flowers. Alternatively, phalaenopsis continue growing in winter and should be fertilized, albeit at a lower rate

What Media Are You Using? Sphagnum moss and peat based mixes like Pro-Mix tend to hold the fertilizer salts more tightly than coarse or inorganic media, so salts can build up in the mix. The nature of the mix makes it very difficult to flush, so more dilute fertilizer should be used with salt retentive media. Organic mixes like bark will hold onto some nutrients, which can be absorbed over time by the orchid. Many orchid books recommend a high nitrogen fertilizer like 30-10-10 be used with bark-based mixes, but this has the unintended impact of hastening the degradation of the bark by the microbial population that consumes the extra nitrogen. Inorganic mixes like clay pebbles and charcoal may adsorb salts onto their surface, but this is generally not available to the plant later. The SAOS coarse mix is about 30% bark, 30% coarse perlite, 30% clay pebbles and 10% charcoal, so it will provide some nutrient retention while providing airy open pore spaces for the roots.

How many soluble salts are in your water? If you are using well water typical in St. Augustine, you notice lots of white hard water marks on your plant leaves from all the calcium bicarbonate in the water. This water tends to be very alkaline, has plenty of calcium and not much magnesium, and can increase the pH around the root zone of your orchids that leads to nutrient deficiencies. This water also tends to be high in soluble salts, and the addition of fertilizer, which is basically another salt, just increases the salt content of the water so the conventional wisdom is to try to minimize fertilizer additions to prevent salt toxicity. The different salts compete with each other for uptake, so you may actually have to increase fertilizer rates so the plant receives enough of each of the nutrients it requires. If you have pure water like rainwater or reverse osmosis water, you have to supply all the nutrients to your plants. If you have tap water, you are likely somewhere between these extremes. You should consider selecting your fertilizer and nutrient supplements based on your water quality.

How Often Do You Fertilize? If you fertilize once a month, you should apply fertilizer at a higher concentration than if you would if you fertilize more regularly. Many of the orchid books recommend you fertilize weekly flushing with plain water monthly, or fertilize every other time you water, flushing with plain water in between. Other orchid growers use a continuous liquid feed, in which they fertilize with

	Well Water	Tap Water	Rainwater or RO Water
Water Quality	Your water is likely very alkaline with many dissolved salts including high levels of the beneficial calcium, low levels of magnesium ions and possibly low to high levels of toxic sodium and chloride ions.	Your water is likely slightly alkaline with an acceptable to borderline level of dissolved salts, some beneficial calcium and magnesium and possibly low to high levels of toxic sodium and chloride ions.	Your water contains no dissolved constituents so you will have to supply all the building blocks your plants desire, including calcium, magnesium and micronutrients that are not found in all fertilizers.
Preferred Fertilizer	Acid reaction fertilizer like Jack's or Peter's Classic 20-10-20 or Peter's 20-10-20 plus Epsom salts	Jack's 15-5-20 Tap water formula, or alternate between rainwater and well water fertilizers	Cal Mag fertilizer like Peter's Excel 15-5-15 or Jack's 12-4-16 RO formula

CULTIVATION

Continued from page 9

a dilute solution each time the orchids are watered. More dilute solutions more frequently seems to be closer to the natural environment in which orchids evolved.

Are Your Orchids Heavy Feeders? Vandas and cymbidiums tend to be heavy feeders desiring more fertilizer than light feeders like paphiopedilums and cattleyas. The drought enduring orchids that use the CAM photosynthesis pathway tend to grow more slowly than many other plants. They keep their stomata closed during the day to limit water loss, and open them at night to absorb carbon dioxide that is stored until daylight when photosynthesis begins. This adaptation allows them to endure drought, but it requires the expenditure of extra energy, so they grow more slowly than their counterparts that absorb carbon dioxide and photosynthesize concurrently.

How Do You Balance These Factors? Many of us have mixed collections of orchids and it is impractical to use one fertilization rate for one group and a different rate for another. Instead, select an application rate that is suitable for all of your orchids, perhaps ¼ to ½ teaspoon per gallon weekly in summer and ⅛ to ¼ teaspoon per gallon weekly in winter. Then, you can supplement the heavy feeders with some time-release fertilizer. Blend in some time-release fertilizer with your potting mix when repotting your catasetums, or top dress your spring blooming phals in the fall to encourage blooming.

The purpose of fertilizer is to supply your plants with the building blocks they need as they harvest energy from the sun to produce new growths and flowers. Some of these building blocks, like calcium, magnesium and micronutrients, may be naturally present in your water unless you are using a pure water source like rainwater. Some water-soluble fertilizers contain calcium and magnesium, while others do not, and even those with calcium and magnesium may not have enough. You should select a fertilizer that is best for your water quality.

Then you have to decide how much fertilizer to give your plants. Most people make this decision on the basis of the nitrogen content, the first number in a fertilizer formula, although the levels of calcium and magnesium are just as important for your plant health. For my mixed collection of orchids using reverse osmosis water, I try to provide 60 ppm nitrogen, 50 ppm calcium and 20 ppm magnesium in summer with every watering, and 40 ppm nitrogen, 30 ppm calcium and 15 ppm magnesium in winter. With my RO water, I have to add calcium nitrate and magnesium sulfate supplements in addition to fertilizer to get to the desired concentrations.

Overfertilizing your orchids means you are giving them more fertilizer than they can use efficiently given the amount of light, air and temperatures they are exposed to. You run the risk of having lush, soft growth that is more easily attacked by pests and diseases. Plants grown with less fertilizer will not grow as fast perhaps, but should be stronger and more resistant to problems.

Fertilizer is probably the least important aspect of orchid growing. The legendary Rebecca Northen wrote that beginners should not fertilize at all, they should master the elements of light, temperature, air and watering first, and only then start fertilizing their orchids. Dave Off of Waldor Orchids, who grows the most immaculate mature cattleyas, says they don't fertilizer their orchids except for after repotting when they are top dressed with some time-release fertilizer. Start your fertilizer program at a quarter or eighth strength for several months, after which you can decide if more or less fertilizer is better under your growing conditions.

Application Rate	Nitrogen (ppm)	Calcium (ppm)	Magnesium (ppm)
Peter's 20-10-20 or 20-20-20 GP**			
¼ tsp/gal	75	0	0
½ tsp/gal	150	0	0
1 tsp/gal	300	0	0
Magnesium Sulfate ($MgSO_4$)**			
¼ tsp/gal	0	0	35
½ tsp/gal	0	0	70
1 tsp/gal	0	0	140
Jack's 15-5-20 Tap*			
¼ tsp/gal	50	10	5
½ tsp/gal	100	20	10
1 tsp/gal	200	40	20
Peter's Excel 15-5-15 Cal-Mag*			
¼ tsp/gal	50	15	6
½ tsp/gal	100	30	13
1 tsp/gal	200	65	26
Jack's 12-4-16 RO*			
¼ tsp/gal	40	25	7
½ tsp/gal	75	45	15
1 tsp/gal	150	90	25
Calcium Nitrate ($Ca(NO_3)_2$)*			
¼ tsp/gal	60	70	0
½ tsp/gal	115	140	0
1 tsp/gal	230	280	0
Items marked with one asterisk can be mixed together, and items marked with two asterisks can be mixed together