Central Jersey Orchid Society Newsletter

April 2020 Issue

President's Message April 2020

Since our last CJOS meeting on March 4 the world has turned upside down. The tragedy of COVID-19 for America and the world has exploded in the past month on an almost logarithmic scale. I personally had never contemplated that I would experience a pandemic on this scale in my lifetime. Especially as a physician, my heart and prayers goes out to the health care workers on the front lines. It is up to all of us to "flatten the curve".

During these weeks and likely months of isolation from friends and family, our orchids will be a source of enjoyment and pleasure. All of us will have more time to pamper our plants. Hopefully your care will lead to happier and healthier orchids over the upcoming months. I have taken more plants than usual in bloom from the greenhouse and placed them all over our home. Just looking at them makes Joan and me smile. I have received emails and calls from members just wanting to be in contact and discuss their orchids.

As mentioned in an email I sent out recently, we have no idea when our next CJOS meeting might happen. It is certainly possible that we may not have a get together until fall. The CJOS crisis now seems so insignificant in comparison to the current pandemic. There has been a conference call to discuss the modifications of the bylaws. Sometime in the near future the revisions will be sent out to everybody. Clearly I will be serving as your president for longer than I had anticipated. Ed will be sending out monthly newsletters. Please continue to send him images of your orchids so we can have a virtual show table.

It is Joan's and my hope that you and everyone in your families stay healthy.

Editors note: Please think about helping our fellow orchid growers and suppliers. Check with other CJOS members to get their insights of their experience with growers that they have purchased plants and supplies.

Consisder joining **American Orchid Society**: AOS.org

Like their Facbook page. **Join** their AOS Group and be amazed by the pictures posted like these below:

Keep sending me your pictures so I can send them around for everyone to enjoy- Thank you Ed
edsharkf@yahoo.com

Newsletter Contents

Meetings and Events 2019-2020

Meetings, 7:00pm, are held the first Wednesday of the month at the at the Johnson Education Center (D&R Greenway Land Trust) One
Preservation Place Princeton, NJ 08540

Sept: Ed Weber: Topic TBA

Oct Wayne Hollenbach Topic TBA

Nov: Richard Ho: Mounting orchids and their Care.

Dec: Holiday Party

Jan: David Off of Waldor Orchids

Feb: Bayard Saraduke

March: David Rosenfeld **WHO WERE THESE GUYS: 19TH CENTURY ORCHID PERSONALITIES.**

Apr: Meeting Canceled: D&R Greenway Building Closed
Event will be rescheduled if possible - Potting party / panel discussion.

May: ?

June: ?

Officers and Committee's:

President -David Rosenfeld
orchiddoc@comcast.net

Vice President -TBA

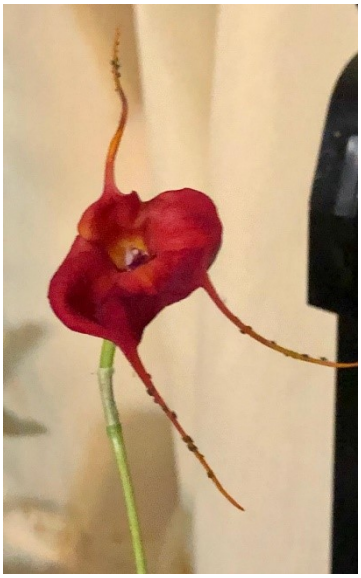
Treasurer/Secretary -Anne Skalka
anne@skalkacpa.com

Refresments – Joy Gabriel
joy.a.gabriel76@gmail.com

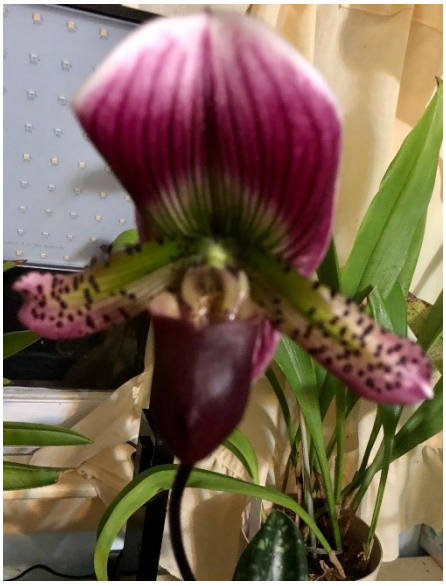
Editor Newsletter- Ed Frankel
Edsharkf@yahoo.com

<u>Members Show Table</u> (In the order sent to me)

Renee Jolley



Masd Cheryl Shohan

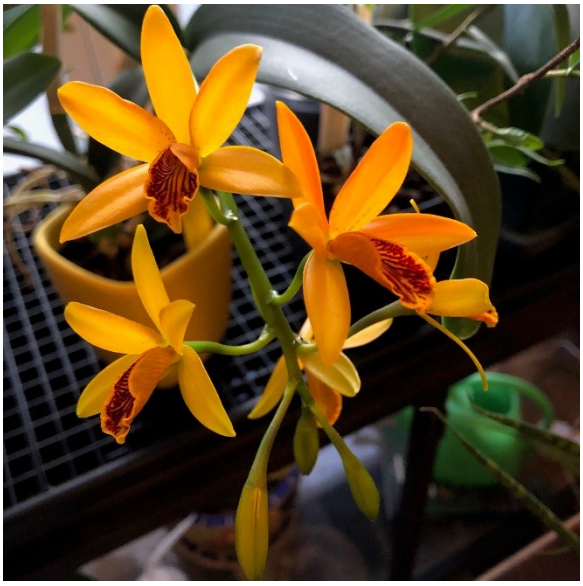


NOID paph

Paph Hawaiian Magic (2nd bloom)

Sara Toth

Eplc. Magic Wand
(Epc Kyoguchi x Lc.TrichorTreat)



Odcm. Wildcat 'Greeen Valley'

Paphiopedium
Gratrixianum (sp aff. Gratrixianum)

Cirrhopetalum (Bulbpphyllum)
Fascinator var hempaliana

Anne Skalka

Lemon Chiffon

Rachel Lemcke

Den. unicum

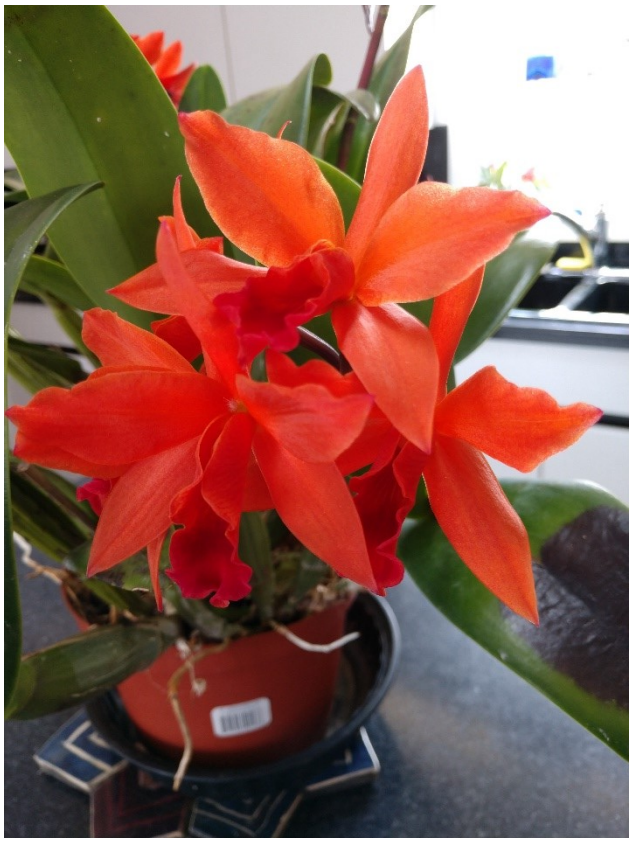
Karen Kennedy

Max Tenufolio

Larry Steel

NOID

Naomi Nierenberg



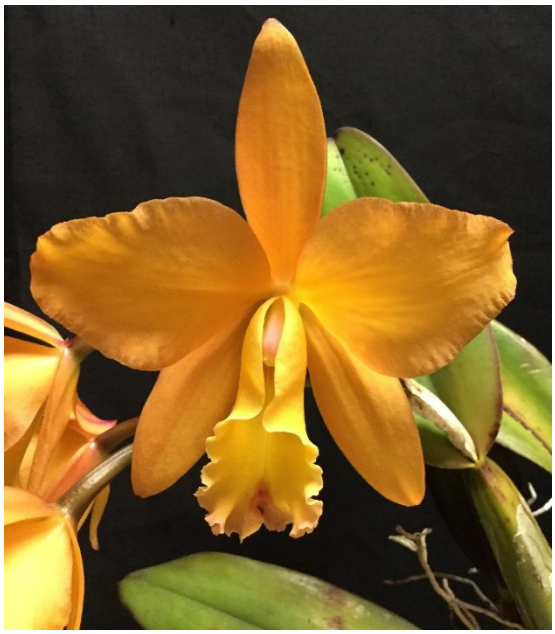
Pot. Golden Circle x Lc. Tropical Aurora

Ed and Pam Frankel

Pot. Oro Verde 'Remar' AMAOS x
Blc Marlene Lunquist
'Carmela' AM AOS

NOID

NOID



Pot. Love Passion ‘dogashima’x
Blc. Hawaiian Discovery
‘Fluorescent Orange’ HCC

Love Castle ‘Kurenai

David and Joan Rosenfeld

Chysis bractescens

Aerangis citrata

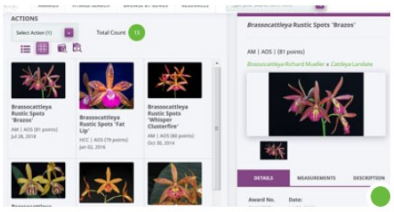
Jumellea arachnantha
'White Spider Queen'
CCM 84 pts

***How Do You Grow*?**

Each month, I would like to show a member's growing methods/conditions. We started with ours. Please send me pictures of your growing conditions (summer/winter) edsharkf@yahoo.com No submission this month. Let's get some pictures of your growing space

American Orchid Society

Upcoming AOS Webinars

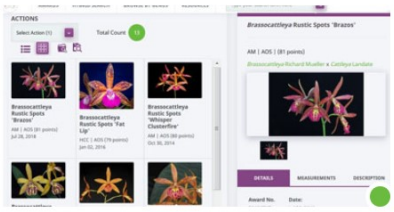


Orchid Pro - Learning How to Use It

Laura Newton

Tuesday, April 14th, 2020
8:30pm EDT

How to use OrchidPro



Orchid Profor Judges

Laura Newton

Tuesday, April 21st, 2020
8:30pm EDT

Orchid Pro for Judges

Greenhouse Chat April 2020

Ron McHatton

Tuesday, April 28th, 2020
8:30pm EDT

Orchid Q&A

Please support the American Orchid Society (AOS)
Become a member there are so many benefits and you are supporting a great cause.

JOIN at AOS.ORG
Go to their website and see all the valuable information the Society provides

CULTIVATION

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

Media – Size Matters

by Courtney Hackney

Size really does matter… at least with respect to orchid growing. The size of the medium in which you place your orchids, the size of the pot, and even the size of a greenhouse all determine some aspect of your cultural practices.

Most novice growers do not consider that the medium magnifies the effective pot size for their orchid. Consider that an orchid mounted on a 1" x 1" flat board has one square foot from which to potentially absorb water, fertilizer, etc. A similar size piece of cork with its very irregular surface not only increases the effective surface area, but also creates small crevices and areas where water can sit or where temperature can vary so that orchid roots have more surface area from which to draw.

Potting media accomplish the same effect to a greater degree. Potting media, usually sold as coarse, medium, and fine, allows a grower to greatly expand the surface area from which an orchid can draw water and nutrients. Far more water and nutrients are held by a fine medium than by coarse medium in the same size pot. There is also correspondingly less air space. Most media that contain mixtures of ingredients, e.g. bark and charcoal, try to use similar size ingredients so that the ratio of material to air is high. While fine bark mixed with coarse bark increases the surface area it also lowers the air space by filling in gaps between coarse bark with fine bark. Avoid mixes that combine different sized products.

The more surface area, the more water and fertilizer that is potentially available to an orchid. Bacteria and fungi quickly cover the surface of an organic medium, enhancing its roughness and ability to hold water. They also enhance the nutrition of an orchid by converting the urea in many fertilizers to forms of nitrogen that orchids can use. In the process, though, they cause the medium surface to decay. The smaller the size of the medium the faster the process leads to a medium that will not support the growth of orchid roots. In fine media, there is little air space and the bacteria and fungi compete with plant roots for oxygen. When a medium is said to be "sour" that is the time when there is no oxygen present in the medium for extended periods of time; a condition that leads to the death of orchid roots.

Coarse media have small surface to volume ratios and provide less water and nutrients and more oxygen, but last longer, while small media are the opposite. The ultimate small medium is ground peat. Plants, including orchids, grow quickly in media dominated by ground peat, but can also lose their roots when the media "sours". There are a number of commercial media, including ProMix, which utilize peat as a major component. Often called "soilless", these media attempt to compensate by adding Perlite to soften and aerate the medium. While this lengthens the time plants can remain in the medium, it does not change the basic relationship of decay to particle size.

Pot size matters as well. As the pot size increases the same relationship of surface to volume changes with respect to the pot itself. Small pots have large surface area to volume ratios compared to big pots. This is especially important for clay or other porous surface pots as oxygen is exchanged through the clay and water lost to the atmosphere. Plastic pots do not exchange either water or oxygen through the pot, only through the surface medium and any holes in the pot bottom or side. The same type and size medium in clay pots tend to last longer than in plastic pots. Remember that decay is dependent on bacteria and fungi that grow more quickly on wet versus dry surfaces.

One other facet needs to be considered and that is roughness of the medium surface. Brick chunks are relatively smooth compared to the same size lava rock but hold relatively little water and fertilizer relative to lava rock. Nonorganic media do not harbor bacteria and fungi that decompose them and roughen the surface. They will eventually provide living space for bacteria that use excess fertilizer or decaying plant materials. This makes similar sized media of organic versus inorganic act very differently with respect to their role in both plant nutrition and water holding capacity.

The same basic concept applies to growing space as well. Large greenhouses take longer to change humidity and temperature and so are less vulnerable to rapid environmental change. Because they may also contain more plants, pots, media, etc. that release water and store heat, large greenhouses also buffer rapid changes. Growing on a small windowsill versus a large greenhouse requires very different techniques and materials.

Finally, size does matter when it comes to flowers. Small orchid plants have limited ability to absorb and store light energy. Large, mature orchids are able to store all the energy required to produce the maximum number and size flowers possible for that individual clone. Until an orchid is mature, it can be difficult to know what the potential for the plant may be.

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 2003.

Orchid Questions & Answers

by Sue Bottom,
sbottom15@gmail.com

Q1. My dendrobium has developed spots on the leaves and I'm unable to identify the cause. I have been spraying with a systemic fungicide.

A1. I would say that is bacterial rather than fungal, particularly if it happened pretty quickly. Copper is a very effective bactericide but of course you can't use it on dendrobiums because they are so sensitive to it. You can pour or spray the leaves with a fresh bottle of hydrogen peroxide. There are not many great options for dendrobiums. The systemics you are using are good fungicides for the leaf spotting fungi, but not for bacterial infections.

The question is, how did the bacteria get a stronghold in the plant. Low air movement and excess leaf moisture are conditions conducive to bacterial blighting, particularly if you are growing outdoors where the plants are watered by Mother Nature, so the leaves are wet at night.

Q2. I am located in Melbourne, Australia. When my orchids bloom mainly in our winter, I get a healthy number from each. However, there are a large amount number of dead looking growths in my pots. Should I be re-potting to remove them or leave things as they are?

A2. Harry, the Cymbidium Man, advised Nigel to repot: If cymbidiums are not repotted every 3 or 4 years, the center part does tend to die and should be discarded when repotted. Potting media tends to break down and decay over time and encourages rotting of the plants as well.

Remove all rotten material including roots. Pots should be just large enough to allow for 2 yrs growth.

I like to divide my plants when I repot and pot two or three good growths and a nice firm back bulb. Two years growth for a division is 2 inches between the plant and pot rim all the way around.

Not sure what material they use for potting in Oz but fine bark should be good, like the Pinus radiata bark from New Zealand. Some of the Australian growers I know have mentioned that they use it.

Q3. What is causing this flower blighting? The white cattleya flower opened in perfect condition and developed the black streaks after a few days, and the pink cattleya is starting to show some streaking. These plants are being boarded and are now in a more humid environment.

A3. When you get that necrotic streaking in the flower about a week after it opens, and if it seems to follow the veining in the flower, I would be very very afraid that it is virused. If it is, I would suspect it is brown necrotic streak which some believe is caused by a strain of Cymbidium Mosaic Virus and others believe is from a dual infection of CymMV and Odontoglossum Ringspot Virus. The white cattleya is almost certainly virused. The pink cattleya may just have some bacterial blighting, but if in a few days that necrotic streaking appears through the midribs, then you would be afraid of virus. Do you have any test strips to verify whether or not they are virused?

Listen to Your Plants

by Courtney Hackney

Folks used to claim that my mother talked to her plants because they always grew so large and beautiful, winning blue ribbons at every flower show. While she did not literally "talk" to her plants, she did listen to them. Plants, including orchids, emit a variety of signals that can tell us what they want or when conditions are not right. Leaf color can indicate a lack of nitrogen and subtle differences in colors of flowers and shape indicate various other nutritional problems. Look at orchids at the end of a cold, gray day and one can almost "feel" their distress. Orchids emit gases as well as take them in so a day with no sun limits photosynthesis, raising carbon dioxide levels. You can detect these subtle changes, but only if you learn to listen to your orchids.

No matter how many books one buys on the subject of growing orchids, each grower must learn to listen to your plants. Plants under stress eventually produce more obvious symptoms, but the trick is to recognize the problem before there is damage. Often, there will be just one or two plants out of the collection that seems to be struggling. Check these plants for insects, especially scale.

Recently, one Phal seemed to be slightly different in color or vigor despite repotting at the same time as its neighbors. Each week it seemed to be more different. Only when it finally started losing leaves did I remove it from the pot to find that a perfectly round piece of potting material had blocked the only drainage hole in the pot causing the loss of most roots. I could have prevented severe damage to the plant if I had only listened.

Longer days are here with days now longer than nights and your orchids are telling you that they are ready to begin to take advantage of the more intense light by putting out new leaves and growths, new roots, and even flowers for spring blooming forms. Repotting is in order for plants that need it. Vandas hate repotting and seldom need it if they are in baskets or rock. Baskets will eventually rot, especially if you have anything besides roots in them. If a plant is in a decaying basket it can be repotted by simply soaking the plant for 30 minutes so that roots become supple. Then carefully separate roots from wood. If the wood is totally decayed just remove what comes off easily and replace the entire plant in a new basket. In some cases, the vanda will have grown too tall and unstable even in its new basket. If this is the case, wait to repot when there are new roots. Cut the stem of the plant so that there are at least three old roots plus one or more new ones. Usually the old stem will develop a new lead and you will have two plants. If space is a problem put both the old stem and new one in the same basket to produce a basket that will have twice as many flowers each year once the cut stem matures and the lead stem re-grows some roots. While vandas need infrequent repotting, the other end of the spectrum is the terrestrial orchids notably paphs.

Most paphs cannot tolerate degraded media, especially when it becomes soggy and acidic. Different media and watering regimens can lengthen the time between repotting, but semi-annual repotting is not uncommon with this group. Generally the smaller the pot, the more frequently they must be watered, which leads to more frequent repotting. Other terrestrials may vary, but generally require moist media that in turn, degrades faster.

Cattleyas are a mixed lot with most doing well if repotted now, even if they are coming into flower. The best time is always just before they begin to grow new roots. Repotting will stimulate root growth in most hybrids and species, but avoid repotting bifoliates until new root growth begins no matter what time of year. This group can easily be lost if repotted at the wrong time. This general rule applies to hybrids as well. Every good Cattleya grower knows that the best flowers are produced when new growths are outside the pot. This has less to do with being out of the pot and more to do with the fact that such a plant has developed a large root mass to support larger flowers.

Phals should be repotted as soon as they finish flowering. If you use one of the peat-based media, such as ProMix, repotting is an annual affair. Bark mixes may last two years, but that is usually the limit. If you want a large plant next year do not wait for every flower to drop, as most will keep putting out new flowers for months unless the spike is removed. Once the spike is removed the plant will initiate new leaf and root growth, which is the perfect time to repot. It is best if the plant is reestablished in its new pot before summer's heat arrives. Seedlings are a special case, no matter what type, and generally need more frequent repotting. Phal seedlings may be repotted three times in a year going from com-pot, to 3" pot, to 6" pot (flowering size) all in one year.

Other genera vary, but seldom last more than a year in a seedling size pot. Fertilizer and water are applied more frequently to seedlings thus causing media to degrade quickly.

Determining when to repot an orchid is difficult for beginners and expert growers alike, but listening to your orchids will help you know when it is time.

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 April 2003.

Spring Migration

by Sue Bottom

Punxsutawney Phil did not see his shadow this year, so we hoped for an early spring. If you have ever brought out your plants too early thinking spring has sprung, only to find there is one more cold front on the way, you know you should first channel your spring energy into preparing your growing area.

The spring blooming Callista and Dendrobium section Dendrobiums spent the entire winter out in the shade structure with no supplemental heat or protection from winter rain, and bloomed profusely after our mild winter.

Preparations. There are some chores you can get out of the way while you are debating whether or not it is too early to move your plants out from their winter home. It is not as much fun as playing with your plants, but it will pay dividends in the long run to have a clean and pathogen free growing area. Remove all the weeds in your growing area. Rake away leaves, particularly those dropped orchid leaves from last year with the evil dotting on the undersides that are disease spores just getting ready to infect your new leaves. Spread a herbicide containing Diuron (Karmex and others), to prevent weeds from sprouting. If you have benches, sterilize them before moving plants out. You can use Physan or pool algaecide to disinfect, or go full metal jacket and spray with pool chlorine. If the weather forecast still looks good, you can think about your next dance moves.

Tough Guys. We all have those tough guys, the nobile and seminobile dendrobiums that have incredible spring blooms and enjoy a coolish, dryish winter rest to produce them. You may or may not water them during the winter, though once or twice a month watering may mimic the dew they receive naturally. Cymbidiums can live outdoors during most of our winters and require protection only from hard frosts. Harry McElroy, the Cymbidium Man, grows them in an unheated shade house. My Coelogynes, that Marv has recently identified as Unchained Melody and flaccida, spent the winter in an unheated hoophouse and bloomed incredibly in their wire baskets.

Which Plants First? It's not quite as simple as last plants in, first plants out. The last ones you brought into the protected area in the fall are the ones that are the most cold tolerant, so logically they are the first ones to move out since they are the most likely to withstand a late season cold spell. The exception would be your winter dormant orchids that are not yet ready for Mother Nature to water them lest they develop rots.

Check the forecast for the next month to check wither the nighttime lows are projected to be above 50F, realizing the uncertainty in such a forecast and assuming temperatures may really drop down into the 40s.

Stanhopea Relatives. The Stanhopeas and Gongoras were moved from their winter homes first because many of these can tolerate cool nights. Most weathered the close winter quarters fairly well, but without great air movement, they are prone to fungal leaf spotting and Anthracnose on the leaf tips. Each plant was inspected as it was moved out and infected leaves were removed to prevent the spores from spreading. In the past, I have cut away just the leaf tips but this leaves a big open wound and it seemed like the remaining part of the leaf showed signs of infection a month later, so now the whole leaf is removed and discarded. No repotting was necessary because in the late summer/early fall the tired sphagnum moss was jetted away and replaced with fresh moss. The Stanhopea grandiflora was in bloom and the Stanhopea nigroviolacea has four early season buds emerging from the bottom of the basket.

The Gongoras and Stanhopeas were the first plants brought out to the shade house this spring. Fungal leaf blighting had to be removed before the plants were hung in their summer home.

The Coelogynes overwintered in an unheated hoophouse, protected from cool winter winds and watered with an automated spray system. They bloomed beautifully in their wire baskets.

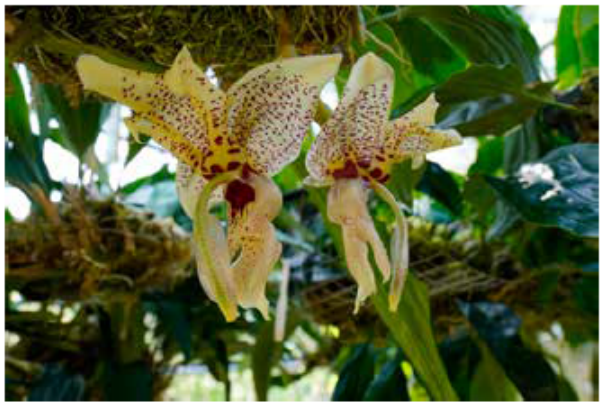
Zygopetalum Relatives. The Zygos love these cool nights so let them enjoy them while they can! Put them in a night bright spot for now, but you will have to provide them with more shade as the season progresses to protect them from overheating. This is a good time to repot them. You can consider using the double potting technique where you pot them in clay in either a ProMix or sphagnum based mix and then wrap the outside of the pot in some sphagnum moss and drop it into a larger pot. This can help keep the roots a little cooler in the heat of the summer.

Paphiopedilums. Many of the paphs thrive with cooler nights that can drop into the 40's. As you move the plants out, check to see whether they need repotting. Try picking up the plant by the vegetation rather than the pot and see if it is wobbly in the pot. If it is wobbly, the roots would probably benefit from being moved into a fresh potting mix. Courtney Hackney has great success with growing in lava rock, but I have been unable to duplicate his regimen. I use a blend recommended by Jim Krull of Krull Smith, consisting of medium bark, sponge rock, charcoal, clay pebbles and maybe 5% ProMix to increase water retention.

Once you have some degree of certainty that temperatures will remain above 50F, you can move most of the rest of your plants out, the cattleyas, Angraecoids, bulbophyllums, etc. As with all your plants, inspect each plant as you move it to its summer home. Check for signs of pests, particularly scale, mealybugs and mites. Also check leaves for evidence of fungi, including the spores that are often present on leaf undersides. You can spot treat isolated problems. If you find widespread issues, you

may have to rethink your winter care options to eliminate the conditions causing the problem.

Dendrobiums. The dendrobiums are a very diverse group. Your nobile and seminobile (Dendrobium section) dendrobiums, often called the soft canes, the callista dendrobiums with the spring blooming flowers that look like grape clusters, and the Aussie dendrobiums probably spent most of the winter outdoors enjoying the cooler weather. Your other dendrobiums can be moved out now, except for the phalaenopsis type dendrobiums, which have long flower sprays emerging from the top of their hard canes. Wait until nighttime lows are going to be reliably above 60F so you don't risk leaf drop in these warmth loving dendrobiums.



The Stanhopeas started blooming early this year. They are grown in wire baskets with a fairly thin layer of sphagnum moss and get buoyant air movement, protected only by shadecloth.

Vandas. Vandas too have a wide range of cold sensitivity. The small plants with star shaped flowers that used to be called Neofinetia falcata are very cold tolerant, as are the blue flowered Vanda coerulea and the fragrant Vanda tessellata. The large flowered two toned vandas with Vanda sanderiana are the least cold tolerant, and these should be protected until nighttime temperatures won't drop below 60F.

Phalaenopsis. Conventional wisdom recommends most phalaenopsis should be kept warm, particularly when in bud and bloom so these should be protected when nighttime lows are below 60F. Of course, we have all seen Walter Muller's phals that winter in a shade house with supplemental heat only during the coldest nights. Unless you can duplicate Water's growing conditions, keep your blooming orchids protected until nights are reliably in the 60's. You might also consider keeping them under an overhang or roofed structure to prevent rainwater from accumulating in the crown of the plant.

The warm growing vandas summer in a shade house with a misting system set on a timer. The big two toned vandas are less tolerant of cool weather than some of the other vandas.

Catasetum. Then there are the winter dormant orchids that endure droughty conditions in their natural habitat by avoiding it, dropping their leaves and going into a deep slumber, like some lycastes, habenarias and catasetum relatives. These may well be able to tolerate cooler conditions if your summer growing area has a roof. If the plants are rained on before the roots have elongated and the leaves unfurled, the new growths may perish as a result of crown rot. Catasetum repotting starts in December and continues through March, after which the plants are kept dry. Only when the roots have grown down to the bottom of the pot and the leaves are 5 inches tall or so and open are they moved out to the shade house to happily soak up all the summer sun and rain.

Only when the new growths are about 5 inches tall and the leaves unfurled are they moved out into the shade house where they are watered every other day when we are without rain.

The Cattleya seedlings love growing outdoors, drying out rapidly in the low humidity spring air. They will be moved under cover when the rainy season starts, to avoid rots.

The spring migration should not be a slam bam move from winter to summer homes. Look at each plant as you move it. Make an assessment of how well or poorly it did and what you might change next year. The Stanhopeas did particularly well, so perhaps we have found their happy place. The Bulbophyllums, well perhaps not so much. Growing them under the vandas has subjected them to too many rots so we are emulating Linda Stewart's approach. This year we will be growing them out in the shade house with more air movement and less continuous leaf wetness. We also want to learn more about how Walter Muller grows his incredible Phalaenopsis, in wooden baskets with almost no potting mix. Who says you can't teach an old dog new tricks?

Catasetums are repotting from December through March, just as the new growths form. The repotted ones are on the left and the ones awaiting repotted

From Southeastern Pennsyvania Orchid Society (SEPOS) April Newsletter

You don't see that everyday

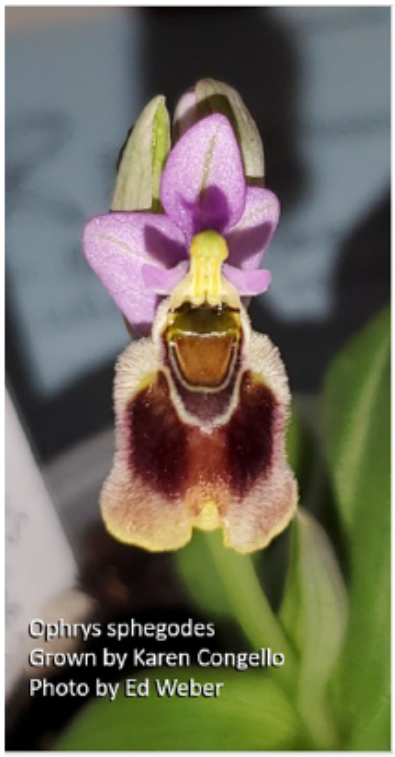
by Ed Weber

In February we got a very rare treat indeed. Two of our skilled members displayed orchids of the genus Ophrys, more commonly known as The Bee Orchids. These orchids are terrestrial orchids and are seldom seen in collections. The fact that SEPOS has two members who grow them attests to the skill level of our members.

Ophrys (OH-friss) orchids come from Europe, North Africa, and Asia as far north as the Caucasus Mountains. They are among a group of orchids that employ trickery on an amazing level in order to ensure that they are pollinated. The flowers physically resemble females of the species of bees that are endemic to the same regions as the plants inhabit. This resemblance goes so far as to have "fuzzy" lips which simulate the hairs on the female bee's abdomen. The petals resemble the wings of the female. In addition, the flowers emit a fragrance very close to the pheromones the female bee exudes, making them irresistible to the male bee. The male, upon detecting the pheromone-like aroma, flies in and attempts to mate with the flower. In the process, the pollen of the flower is deposited on his head. After a while he becomes frustrated and flies off in search of a new mate... only to be fooled once again! In his attempts with the next flower, he delivers the pollen he has already collected, thus ensuring a new generation of orchids. So even though the poor bee may not get to pass his DNA along, at least he helps the orchids do so!


Ophrys speculum
Grown by Karen Congello
Photo by Ed Weber

Domenic Ariaudo presented *Ophrys mammosa* and Karen Congello presented *Ophrys speculum* and *Ophrys sphegodes* (see photo). Requiring cool to intermediate temperatures and moderately bright light, they die back completely at the end of their relatively short growing season. Most species then require a period of rest during which no water should be given. In nature they are spring bloomers.


Ophrys sphegodes
Grown by Karen Congello
Photo by Ed Weber