St. Augustine NEWSLETTER Orchid Society May 2021

Volume 16 Issue #5

CLUB NEWS



May 4, 2021 Monthly Meeting By Janis Croft

Welcome and Thanks. President Tom Sullivan opened the meeting at 6:50 pm with 45 attendees. Tom thanked Dianne Batchhelder and Dottie Sullivan for the treats and coffee and he reminded all to remember to Drop a Dollar for the treats. Tom also thanked the team for Covid cleaning the room in preparation for the

meeting, and said the Silent Auction would end after the presentation. Dianne Batchhelder thanked all you assisted with the SAOS Picnic. The picnic was well attended with delicious food donations, much laughter and numerous exchanges of plants.

Club Business. Membership VP, Linda Stewart welcomed our guests, and introduced new members Judy Burrus. and her daughter Brandy Bullis (St Aug), Richard Overton (St. Aug), Katherine Holt (St Aug), Kay Payne (St. Aug), Maolo On (MD), Barbara Knight (Penney Farms, FL), John Wlodarczyk (AL), and Richard Schmidt (TX). Linda asked all with birthdays to raise their hands for their free raffle ticket. As our Sunshine Coordinator also, Linda announced that if you know of anyone in need of a cheering up or a get-well card, let her know by emailing her at info@ staugorchidsociety.org.

Mentoring Program. Linda announced that we are restarting our Mentoring Program. If you are a new grower or new to St. Augustine, sign up for the mentoring program and we will link you up with a Mentor that lives close to you. You will be able to phone or email them with questions, visit each other's growing area and get general assistance. Sign-up

sheets are available at the Welcome Table.

Repotting Clinic. Next one is June 5th, from 9 til noon at the Memorial Lutheran Church Pavilion Across from Back Parking Lot. If you need supplies, email info@



staugorchidsociety.org. We have Potting Mixes, Butterfly Clips, Time Release Fertilizer, and Fertilizer Baskets. A Purely Organic Fertilizer order will be placed next week. If you want to order, contact Sue Bottom immediately.

Florida Orchid Shows. Volusia County Orchid Society Show will be held this coming weekend, Mother's Day Weekend. Check website calendar for details here.

Library. Librarian Howard Cushnir brought in a large stack of books that members had requested to borrow. He then read from the Orchid Digest the section announcing the Diamond Award that our club presented to Courtney Hackney. Howard encouraged all to use the library collection listed on our SAOS website. If you would like a book, send a request to librarian@staugorchidsociety.org and he will bring the item(s) to the next meeting.

Next Meeting. Sue announced that our presentation in June will be on Water Quality and Orchids. She asked all to bring water samples and also if available, your water samples containing the fertilizer you use.

Culture Table. Courtney continued with our new approach to the in-house Show Table that focuses on "culture." First up were two phalaenopsis grown in different types of baskets. The first was in a wooden basket with a shallow layer of sphagnum moss, almost impossible to overwater, with roots growing all around outside the basket. A question from the audience was how to repot an orchid like that, Courtney said he blasts out the decaying debris in the basket with his hose and then just puts entire basket and plant in a larger basket or pot to continue growing without

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CLUB NEWS



Upcoming Orchid Events

May

8-9 Volusia County Orchid Society Show
Hester Exhibit Hall, Volusia Fairgrounds

8 FL North-Central Judging, 1 pm Clermont Garden Center, 849 West Ave

14-16 Redland International Orchid Festival
Fruit and Spice Park
CANCELLED

11 SAOS Virtual Show Table, 7:00 pm Courtney Zooms into Cyberspace An Invitation Will be Sent by Email

June

SAOS Meeting, 6:30 pm
 Water Quality and Orchids
 Sue Bottom and Courtney Hackney

5 Repotting & Plant Clinic, 9 am til noon Behind the Memorial Lutheran Church 3375 US1 South, St. Aug 32086

5-6 Central Florida Orchid Society Show Oviedo Mall. Oviedo

8 SAOS Virtual Show Table, 7:00 pm Courtney Zooms into Cyberspace An Invitation Will be Sent by Email

8 JOS Meeting, Mounting Orchids, 7 pm Lorraine Conover, Lois Rasmussen

12 Florida North-Central AOS Judging, 1 pm Clermont Judging Ctr, 849 West Ave.

July

3 Repotting & Plant Clinic, 9 am til noon Behind the Memorial Lutheran Church 3375 US1 South, St. Aug 32086

6 SAOS Meeting, 6:30 pm Minature Orchids

Thanh Nguyen, Springwater Orchids

11 Florida North-Central AOS Judging, 1 pm Clermont Judging Ctr, 849 West Ave.

13 JOS Meeting, Topic TBA Speaker TBA 20 SAOS Virtual Show Table, 7:00 pm Courtney Zooms into Cyberspace An Invitation Will be Sent by Email

August

3 SAOS Meeting, 6:30 pm Gadget Night

CANCELLED

SAOS Members Share Tips and Tricks

6-7 Annual Cattleya Symposium Indian River Research & Education Ctr Fort Pierce

Repotting & Plant Clinic, 9 am til noon Behind the Memorial Lutheran Church 3375 US1 South, St. Aug 32086

10 JOS Meeting, Topic TBA Thanh Nguyen, Springwater Orchids

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detaching or disturbing the roots. The second phal was in a wire basket with a thicker sphagnum layer. There was a Cattleya dolosa 'Inferno Survivor', a plant with a history. A squirrel shorted the electrical box and it caught on fire in the summertime in Keith Davis' greenhouse, so the fans failed and the temperature rose burning all the plants. There was a little green on the rhizome of this one plant, which was coaxed back to life, hence the name. There is some debate as to whether dolosa is a natural hybrid or a species. This plant was a selfing of dolosa (pollen from the plant was used to fertilize the same plant) and all the offspring looked the same, so it is a species rather than a hybrid where more variation would be evident in the offspring.

Virtual Show Table. Courtney will continue his monthly Virtual Show Table presentations via Zoom, this month it will be on the second Tuesday. Send your photos for the Virtual Show Table by end of month so they can be included in the newsletter and provide Sue time to prepare the presentation. Each month's Virtual Show Table is recorded and posted on our website.



SAOS Program. Sue Bottom announced our guest speaker, Daryl Venables of Tezula Plants who gave a presentation on African orchids. He is a South African and went over last spring for a visit when the pandemic happened he couldn't get back to his home in Miami for five months.

He started his presentation by showing us slides of the numerous ecosystems where orchids grow in South Africa. He started with the typical African savanna and showed an Ansellia africana in full flower, in full sun with not one leaf—a very tough plant that grows between 64-104°F. Next was the wet tropical belt where aloe were growing, then the Highlands which are cool, with massive trees covered with ferns. The next slide was the Pilgrims Race area where it rains in summer and goes dry in winter, then the Capetown area which is totally opposite, rains in winter



and goes dry in summer and has tropical areas within. The other in-between areas have brackish water filled with decaying matter. This is why it is extremely important to research where an African orchid is typically growing so you can copy the conditions it prefers. Daryl said it is important to have different day and night temperatures except in the lowlands. A 10°F change is perfect. South African growers typically have three greenhouses to cover cool, intermediate and warm growing species.

Rainfall in South Africa typically arrives in the wet season but even in the dry season there is copious amounts of morning dew year round. Clouds engulf the mountains when it gets really hot and protects the orchids which then become bone dry by night time. So even in the dry season they are getting moisture. Daryl then said when the wet season arrives, they can have three solid days of nonstop rain at a time.

As we looked at the slides of orchids in situ, it became apparent that they were growing on lichen or moss covered branches. He advised that their moss is nothing like the sphagnum we use and that when we mount these orchids, only use 1 or 2 strands of sphagnum next to the mount with the plant on top and well anchored with his recommended panty hose strands. At the end of his presentation, he showed how he cut the top and toe off from one side of a panty hose leg. He doughnut rolled the hose up all the way. Then cut off 1/4" or so through the roll and you have an extremely long strand of panty hose to tie your orchids to a mount without damaging the roots. He also showed us a slide of what he called South Africa's best kept secret, Mundulea sericea, commonly known as the Cork Bush (KurkBos). It was a tree whose bark had fissures that were not too deep or shallow but just the right depth to provide a good grip to plant's roots. It is similar to our cork but much more durable and long lasting.

Daryl ended his presentation with slides of orchids from the various African genera and species including Mystacidium, Bulbophyllum, Polystachya, Aerangis, Angraecum, Cyrtorchis, Di-aphananthe, Eurychone, Microcoelia, Plectrelminthus, Rangaeris and Tridactyle. He suggested Afri Orchids as a great source of these plants. They come to the Tamiami and Redland Orchid festival shows.

Meeting Conclusion. The evening concluded with the Silent Auction and Raffle table. Thanks to the helpful hands that stayed to Covid clean and store the tables, chairs and room.

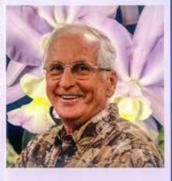


CLUB NEWS

ORCHID DIGEST DIAMOND AWARD RECIPIENT

Dr. Courtney Hackney St. Augustine Orchid Society

St. Augustine
The St. Augustine Orchéd Society is hoeored to
present the Orchid Digiest Diamend Award to Dr.
Courtney Hackney Educative Hackney is an invaluable member of the St. Augustine Orchid Society. He
has no intreest in an official title, probably had enough
administrative duties during his tenure as a university
professor and biology department chair. He is an educator at his core. Courtney can talk orchids on any leveel, so beginners and professionals seek his advice and
coursed, learning how better to grow their orchids.
Courtney's review of the plants on the show table is
the highlight of our monthly meetings. He talks about
each plant and its history, how best to grow it, and
how it is used in hybridizing. During the talks about
each plant and its history, how best to grow it, and
how it is used in hybridizing. During the pandemic,
he fold us bedtime stories in a monthly Zoom rendition. He speaks to the club each year on a variety of
topics, sharing tips and tricks, addressing cultural
missteps, pests and dileases, insights into cattleys
hybridizing, and more. He belps with scheduling our
speakers, identifying new talent and helping coordinake travel plans. He is our auctioneer extraordinative,
making our annual fundraising event both fun and
educational. Courtney is the Good Dector, a gift that
keeps on giving!





Spring Picnic and Orchid Sale/Swap

We had 32 members come to the picnic at the Pavilion behind the Memorial Lutheran Church. Tom and Doug were busy at the barbecue pit, flipping burgers and dogs onto everyone's plates. Members brought the fixings, side dishes and desserts to round out the meal. Lady Di orchestrated the event, so it all went off smoothly, as if by magic. There were orchid divisions and plants, pecky cypress and ceramic pots available to buy or trade, along with a silent auction, so lots of people went home with a new goodies in addition to a full stomach. What fun!

American Orchid Society Corner

Webinars

May 4, 8:30 pm, Everyone Invited Greenhouse Chat Orchid, Q&A - Ron McHatton May 14, 8:30 pm, AOS Members Only Prosthechea karwinskii – Julia Douglas

Orchids Magazine this month:

Denver Botanical Garden – Art Chadwick Phalaenopsis in Bhutan – Stig Dalstrom et al Threatened Madagascar Orchids – Landy

Photos of Latest AOS Awards

Keiki Club – Road Trip Opportunity

Volusia County Orchid Society Sale

The Redlands International Orchid Festival has been cancelled for 2021, but this weekend the Volusia County club is having an orchid show. There will be 19 vendors.

Where: Townsend Pavilion

Volusia County Fairgrounds, SR 44 DeLand

When: May 8 and 9, 9 am - 4 pm



June 1 Monthly Meeting Water Quality and Orchids Courtney, Sue and SAOS Members

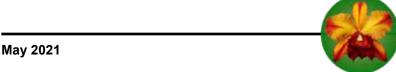
Sue and Courtney will talk about how important good quality water is to your growing success. Bring a sample of your water in for analysis at the meeting. Janis will talk about her rainwater collection system, Scott will talk about his small reverse osmosis system, and Courtney and Sue will talk about their well water. We'll talk about what you can do if your water is less than optimum. Joint us. We'll have orchids on the sales, raffle and silent auction tables. Guests and friends are always welcome!

When: Tuesday, June 1, 6:30 til 9 pm Where: Memorial Lutheran Church 3375 US 1 South, St. Aug 32086

Shop Smile.Amazon

Click this <u>Smile.Amazon link</u> to select the St. Augustine Orchid Society as your charity. For eligible purchases, the AmazonSmile Foundation will donate 0.5% of the purchase price to SAOS. We received more than \$60 in 2020 from this program.





INSPIRATION





Orchid Questions & Answers

by Sue Bottom, sbottom15@gmail.com

Q1. This mounted Dendrochilum glumaceum has leaf changes that began about 3 months ago on two leaves which I removed. It is now on older and some younger leaves, mostly the undersides

but then progresses to the tops; the pseudobulbs are not affected. It receives infrequent overhead water, being watered every other day after the moss has dried and has good air circ. I sprayed with hydrogen peroxide twice early on, but nothing else since.

A1. That looks and sounds like a fungal infection, rather than bacterial or viral. It sounds like one of the leaf spotting fungi. There are common fungal leafspot diseases in ornamentals from Alternaria, Cercospora, Septoria, and Phyllosticta. Something like Pageant or Heritage are often recommended for leaf spotting fungi.

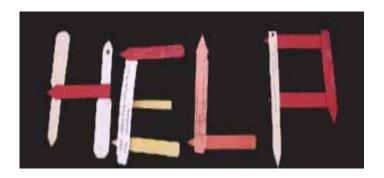


It sounds like you are doing everything right culturally. I wonder whether this cultivar is just more susceptible to the fungus. If this is the case, you can accept it, try routine applications of one of the fungicides, or perhaps consider the radical option to completely sanitize the plant. Remove each and every leaf that shows signs of the disease to the top of the pseudobulb. The hope would be to remove all the spores from the area so the fungus is stopped. Then, apply a protective spray on the plant, cross your fingers and hope for new growth and leaves.

Q2. Is this Thai disease on my vanda? Is Physan good for treatment, or is there something better?

A2. It looks like the fungal infection Guignardia, or Thai disease. Run your fingers across the lesion and if it feels like sandpaper, that's what it is. If so, maybe invest in some Thiomyl, otherwise known as Cleary's 3336, with the





active ingredient Thiophanate Methyl. Monthly preventative sprays are recommended in Motes' vanda book.

Q3. My catt has some bumps and strange growths, should I be worried?



A3. I don't think it's anything to worry about. I've had what looks like extra tissue growing on the upper side of my cattleyas from time to time. I don't think it is edema, which is a blister that forms on a fully developed leaf. This is some sort of mutated tissue that forms as the leaf is developing. Courtney thinks it is a genetic issue, probably triggered by environmental conditions. Hopefully, the next leaf will be normal.





Mites in Spring by Dr. Courtney Hackney

Once again, I forgot to treat for mites in early spring and, once again, I lost leaves to these tiny beasts. Mites usually appear during times when the humidity is low, and affect mostly thin-leaved orchids such as Oncidiums. They first show up in my greenhouse on Phals and each year, I fail to recognize their symptoms

until the plants start "screaming".

It is easy to miss mites on your orchids because they are tiny. I use a magnifying glass or high-powered reading glasses. Usually, I can only find one or two on a plant. Mites multiply when the greenhouse humidity is low in late winter or spring. On Phals, mites cause the lower leaves to drop and leaves appear desiccated. Often leaves develop pigments often mistaken for too much sun. Orchid leaves can also burn because mites steal so much water from the plant, that plants cannot open their stomata and cool themselves.

All winter long, hobbyists bring me plants that are not doing well and want to know why their orchid is not thriving. A large majority of these plants are being grown indoors and have had mites this year. The extra long winter in the Southeast combined with home heaters, which dry the air, often leads to mite problems for indoor growers.

The common mite on orchids is the red spider mite and occasionally the false, red spider mite. These are usually found on Oncidium leaves. Phals seem to have other mite species. They also do not seem to be abundant enough to cause much damage. However, when I treat for mites, Phals improve almost immediately whether the infestation was heavy or not. There are a number of miticides available to commercial growers that work well, but they are expensive and may not be available to hobbyists. A thorough spraying, top and bottom, of leaves with Sun Oil or similar light oil works well enough for me. Once the normal summer's humidity returns, mites cease to be a problem.

Most orchids have already begun their summer's growth, so now is the time to fertilize and increase watering frequency. If you use Nutricote, it is time to make your new application since last years application should be gone, if you used the 6 month release form. New seedlings or orchids that have lost their root systems will benefit from foliar feeding with a dilute liquid fertilizer. There are many



good fertilizers available, but be sure to use them at ¼ strength and always flush heavily with plain water once a month.

If you use R/O (reverse osmosis) water or rainwater you will also need to supplement your water with dolomite limestone either by adding it to your fertilizer water, which can be tricky, or applying it directly to the plant in granular form. All plants need calcium and magnesium and agricultural lime has both in just about the right proportion.

Light and heat will soon become an issue. Remember that the sun reaches its highest point next month (21st) so it will be easy to burn the leaves of your orchids if you are just getting them outside after the long, dark winter under lights. The darker your leaves the more heat they will absorb and the more quickly they will burn. Conversely, indoor growers may find their windowsills are no longer getting the direct light their orchids once enjoyed because the sun is almost overhead.



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 May 2005.



Out of Africa

By Ken Slump, reprinted with permission

"I know, it is another starry white flower with a spur," commented a friend who sensed me stifling a yawn after he enthusiastically led me to yet another of his favorite African orchids that was blooming in his greenhouse. While his comment was intentionally simplistic, it is true that orchids from Africa and Madagascar tend to lack the seemingly endless variety and wow factor of their popular counterparts from tropical Asia and the Americas. Still, there are many unique and beautiful orchid species from this part of the world.

And a large and varied part of the world it is. Africa extends about 5,000 from the Mediterranean on its northern boundary to Cape Town at its southern tip. It is a continental land mass second only to Asia in size. The equator nearly bisects the continent. As you would expect, virtually every type of climate is represented. Warm temperatures and seasonal moisture typify many of the climatic zones in Africa. While some of the largest deserts in the world are found here, tropical rainforests exist too, particularly near the coasts, along rivers and on mountain slopes.

ANGRAECOIDS Those starry white flowers with a spur, more accurately the species and hybrids from the genus Angraecum, are often the first that come to mind if you ask someone to name an orchid from Africa. Most authors seem to agree that there are upward of 200 species in the genus, and as with any group so large, a simple phrase to describe the blossoms of them all is doomed to inaccuracy. Indeed, they are not all white flowered. Among Angraecum species, flower color varies. White, cream, light yellow and pale green are the colors most often noted. Such light-colored flowers attract night pollinators, particularly moths, and many are sweetly fragrant. Plant and flower size within the genus vary greatly, but they do all have a spurred lip.

The genus Angraecum is part of the Vanda alliance. These orchids have monopodial growth habits and are mostly epiphytic. The smaller types may be grown mounted; larger ones potted. Many are of easy culture once established and thrive if given a somewhat cooler rest period after flowering.

Among the larger-growing species is Angraecum sesquipedale, a perennial favorite. It is sometimes called the comet orchid because of the flower's long spur, which may extend up to 14 inches. The spur contains a small nectary at its tip. The plant can easily grow to 3 feet and carries two ranks of closely spaced 12-inch leaves along its stem. The inflorescence may carry several long-lasting, fragrant flowers, and the plant usually blooms in winter. Orchid growers never tire of telling friends and



Angraecum eburneum

orchid newcomers of Charles Darwin's connection to this orchid. Darwin studied and published on orchid pollination mechanisms in the mid 19th century. When confronted with this flower, Darwin proposed that its pollinator, as yet unknown, would be a moth with a long proboscis that could reach the length of the spur to its nectary. When the moth was finally discovered decades later, the plant received the species name Praedicta. Angraecum sesquipedale comes from the warmer lowlands of Madagascar. It seems to thrive when grown in a rather large pot and left undisturbed. Intermediate conditions and moderate light levels suit it well.

Growers with limited space might seek a plant of Angraecum compactum, also from Madagascar. A mature branched plant may grow to 1 foot and carries thickened leaves just 2 or 3 inches in length. The large flowers often occur in pairs and have a spicy fragrance during the evening hours. Angraecum compactum could grow well as a mounted plant. It does best in cool to intermediate temperatures and shady, humid conditions.

A large branch of the angraecoid clan is represented by the genus Jumellia, with more than 60 species. Most occur in Madagascar and the neighboring Mascarene and Comoros Islands. Like their cousins, Jumellia species produce a star-shaped white, fragrant flower with a long spur. The flowers are usually borne singly, but often in great abundance. Jumellia comorensis has a somewhat straggling growth habit. It has been found growing epiphytically on the trunks of rough-barked trees. While its fragrant flowers are not produced in profusion, more than one source says that it blooms almost continuously.

Aeranthes is another worthy angraecoid genus that occurs through much the same range as Jumellia. There are perhaps 40 or more species in the genus. Every orchid

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Angraecum sesquipedale

lover seems to appreciate the fascinating flowers of these plants. These rainforest denizens seem to do their best in hanging pots with a fast-draining medium. Intermediate to warm temperatures suit them well. Shade or filtered light is ideal. The plants are best grown hanging so that the blossoms can be enjoyed on their wiry, pendulous inflorescence. Flowers are often borne singly, in succession. They are usually white to creamy yellow or greenish. Most Aeranthes flowers are somewhat thickened centrally with rather short, pointed sepals and petals, which lends them the appearance of a large insect or a small amphibian dancing on air.

The sequential-flowering Aeranthes grandiflora comes from Madagascar and sports yellow-green flowers. The green-flowered Aeranthes caudata tends to produce multiple flowers at one time and is native not only to Madagascar but also the neighboring Comoros Islands.

Another related genus of vandaceous orchids features some worthy genera that were once a part of the genus Angraecum, but were later incorporated into a genus of their own. Aerangis includes about 50 variable species, many with horticultural value. Because of their generally small to medium stature, many Aerangis species are ideal candidates for mounted specimens if a sufficiently buoyant, humid atmosphere can be created. Semishaded conditions are often desirable. Similar to Angraecum, Aerangis flowers are usually white, fragrant and long-spurred. A number of species are noted for their arching, exceptionally graceful inflorescences. The boundaries of humid West African forests are a common home for Aerangis biloba, which received its species name for its broadly double-lobed leaf tips. The pendulous inflorescence carries up to 15 waxy white fragrant flowers. It tolerates a wide range of light conditions, from shade to sun.

Perhaps the showiest of the genus, indeed one of the gems of the African orchid flora, is Aerangis luteoalba var. rhodosticta. This showy miniature ranges across equatorial Africa, but is nowhere common. It seems to frequently grow on the smaller branches of trees overhanging rivers and waterfalls, always in sheltered, shaded sites. The small plants seem to thrive best when mounted. The species may be somewhat short lived, as some report difficulty in keeping plants alive for more than a few years. Shade and humidity are likely your keys to success. When in flower, Aerangis luteoalba var. rhodosticta is eye-catching. The inflorescence carries from one to two dozen flat, creamy white flowers with rather wide sepals and petals that are nicely rounded. Each flower's most dazzling feature, however, is its bright red column. When the flowers are produced in large numbers, they leave an unforgettable impression.

These few suggestions are indeed the tip of the iceberg when it comes to spurred starry white flowers that are native to Africa. Collectors may look to the genera Mystacidium, Summerhayesia, Rangaeris, Diaphananthe and Cyrtorchis, and others, for additional options. While their themes may be similar, each interpretation is unique.

It is possible that a number of orchid growers do not have a single African orchid. If you ask an orchid grower to conjure an image of wild Africa, you will undoubtedly get a reference to the continent's incomparable animal life. But I think it is fair to say that its diverse orchid flora is equally as deserving as its fauna.



Aeranthes grandiflora

The original, longer version of this article appeared in the American Orchid Society Orchids magazine, in July 2007 (Vol. 76:7, pp 500-505).



Top Dressing with Mycorhhizae

by Sue Bottom, photos by Keith Davis



I am even getting new growths on dowiana that just flowered, some with double new leads.

Orchid growers are always learning new tricks from their orchid buddies. Take Keith Davis up in North Carolina. He was visiting his friend Russ Bolt of Looking Glass Orchids and naturally the topic of conversation turned to growing orchids. Russ grows his diversified selection of orchids in PRO-MIX HPCC, a peat based formulation rather than the bark or clay pebbles base many other growers use. He's careful about watering because this mix tends to retain water, and his results are impressive. So impressive that Keith decided to test it out in his greenhouse by using the PRO-MIX HPCC as a top dressing. He reports:

I know some of you have heard me talk about the amazing results I have been observing when top dressing plants with the PRO-MIX HPCC. Here is yet another example. C. dolosa alba that had pretty much maxed out in flower count and growth size, at least I thought so. Early in the spring, I top-dressed the plant with about 1/2" and just look at the size of the bulb compared to all the previous ones. To date, the most blooms that Kurtis or myself have had on this plant is 3 per spike. It was awarded the AM in Greensboro with 2 blooms...

I am seeing this on everything I top dress with it. I have had Lorraine Shirai 'Raye' for more than 20 years and it has NEVER put out but one growth per year. I topped-dressed it with the PRO-MIX about 8 weeks ago and it now has three new growths, two on the back bulbs.

PRO-MIX HPCC contains sphagnum peat moss, perlite for porosity and drainage, chunk coir for air and water porosity, and mycorrhizae for enhanced growth. The myccorrhizae blends all contain what the manufacturer calls PTB297 technology, consisting of an endomycorrhizal inoculum of Glomus intraradices (6,000 viable spores/q). This fungus, which is now known as Rhizophagus irregularis, populates the plant roots and helps provide nutrients (particularly phosphorus) and water to the plant in exchange for the sugars it receives from the plant. Keith adds:



PRO-MIX HPCC comes in 2.8 cu ft loose bags or 3.8 cu ft compressed bales. The HP stands for High Porosity and the CC is for chunk coir.

As a top dressing, the coco fiber keeps the stuff from filtering down between the open mix below and it stays on top. It does not seem to have any detrimental effects to mix below. I do add medium sized sponge rock to the PRO-MIX. In a large mixing container, I dampen the mix and add about 30% by volume sponge rock and use it like that.

I use it on seedlings too and have the best results of any mix I have ever tried. On small seedlings, I place broken pieces of peanuts in the bottom 1/3 and fill the rest of the pot with the PRO-MIX. I do this with pots up to 4" size. These C. hardyana coerulea seedlings arrived in 2" pots from Tropical Orchid Farm. All were in growth, which has since matured. I put each in a 4" pot with chunky pieces of sequoia bark and peanuts, then top dressed each pot with just enough PRO-MIX HPCC to cover most of the chunks. All are now producing double and triple new growths. Those not treated with the PRO-MIX HPCC matured the original growth but did not have any new growths.

The SAOS potting mix for phalaenopsis is a 50-50 mix of sponge rock and PRO-MIX HP that contains mycorrhizae and biofungicides, but no coir. Most PRO-MIX biofungicide products have been enriched with Bacillus pumilus (strain GHA180) that colonize developing root systems and suppress root disease causing organisms such as Pythium, Rhizoctonia and Fusarium.

Courtney gave this interim report:

I have been using PRO-MIX HP as a top dressing on my Phals for a couple of years. This product does not have Coir or mycorrhizae. I switched to PRO-MIX with the mycorrhizae, but not the coir, last fall. Both

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seem to provide the same level of growth. I usually apply this topdressing after I remove Phal flowers in the spring, so there may not have been enough time to see the benefit of the mycorrhizae. Both the PRO-MIX HP with the mycorrhizae and my old PRO-MIX HP add moisture in summer when Phals dry faster than the Catts, allowing me to water both at the same time.

I am using the Sunshine Mix as it is, i.e. no added sponge rock. My mature Catts are potted in a very coarse mix. When I add a layer of Sunshine Mix on this medium it tends to sink into the surface of my medium unless I use a heavy layer. On seedlings, it tends to stay on the surface even though they are in coarse medium. I never put the top coating on and water plants as this tends to just flush the Sunshine Mix through. If the Sunshine Mix is left in the pot for a couple of days it seems to absorb water and not flush through when I water. I found that several of the seedlings that had the Sunshine Mix top dressing began to look desiccated, so I pulled the plant from the pot and discovered that the roots were totally dry. The top dressing was acting like a barrier to water flowing into the pot. When I took the plant out of the pot it looked like there were fine cotton fibers, likely mycelia from fungi, throughout the top dressing that had become almost hydrophobic. I checked several



C. dolosa alba. Look at the size of the new pseudobulb compared to the older growths, and 7 flower buds compared to the normal 2 other pots and they too were not getting water into the roots. Now I try to not cover the entire surface on seedlings, which seems to be working OK.

We tried to purchase the PRO-MIX HPCC at horticultural outlets like BWI to no avail, so we turned to our local hydroponic store who suggested Sunshine Advanced Mix #4 with mycorrhizae. This product seems even better, containing 50% Canadian sphagnum peat moss, 35% perlite, 15% coir, a proprietary blend of endomycorrhizae as well as silica. Courtney and I are trialing this product, and if you would like to experiment with it, SAOS is offering coffee jugs of the material for \$3, two for \$5. Preorder by email to info@staugorchidsociety.org.



These C. hardyana seedlings are producing double and triple new growths with the PRO-MIX HPCC



ORCHID ADVENTURES





SHOW TABLE



Grower Janis Croft Den. smilliae



Grower Se Bottom Den. Golden Aya



Grower Linda Stewart Enc. bractescens 'Belize'



Grower Steve Dorsey Milt. Sunset 'TJ'



Grower Leslie Brickell Aergs. hildebrandtii



Grower Courtney Hackney
Ren. Bill Crocker 'Hackneau' AM/AOS



Grower Janis Croft Rdcm.Tezula Odyssey



SHOW TABLE



Grower Suzzane Susko Gastrochylis retrocalla



Grower Courtney Hackney C. Ivy's Blue Eyes '#1'



Grower Allen Black B. digbyana 'Lookin Good'



Blc. Chinese Bronze 'Marco Polo' x Lc.Summerland
Girl 'Orchidglade'



Grower Steve Dorsey Den. trantuanii



Grower Leslie Brickell Lycaste Nobuo

Link to all Pictures. https://flic.kr/s/aHsmVzvuC8

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