



# St. Augustine NEWSLETTER Orchid Society

April 2024

Volume 19 Issue #4

## CLUB NEWS



April 2024 Meeting  
by Karen Ford

### Welcome and Thanks.

Tom opened the meeting at 6:50 pm with 69 attendees. He thanked Dianne, Dottie, Harry and Celia for refreshments and reminded all to Drop a Dollar to help pay for coffee supplies. He then announced that the next monthly repotting clinic will be held this coming Saturday. This is an

excellent opportunity to receive expert advice on growing orchids and also get your plants professionally repotted for a nominal donation. Tom announced the upcoming huge Orchid Show this weekend at Krull Smith orchids in Apopka. This is the biggest Central Florida show of the year with lots of vendors. There will be other shows this month in Port St. Lucie, Spring Hill and Vero Beach.

**Club Business.** Linda welcomed two visitors and new members John Goldenberg from Santa Clara, CA, and Sally Verrinder from Redmond, WA. She reminded members to renew their memberships, as she will update the members list this month. Linda also distributed raffle tickets to members with April birthdays. Please let her know if there are any members having a major life event or needing cheering up, and she will send them a card.

**Orchid Swap and Picnic.** Dianne announced the upcoming orchid swap, sale and annual picnic to be held on April 14 from 4-6 pm at the Memorial Lutheran Church Pavilion. The club will provide hamburgers and hot dogs. A signup sheet was passed around to determine who is planning to attend and what side dish they would like to bring.

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



**Virtual Show Table.** Sue announced that the virtual show table will probably be held on April 11th and she will send an email announcement to confirm the date.

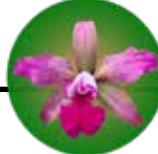
**Supplies.** Supplies for growing orchids were available at the back table. Preorder ahead of time at [info@staugorchidsociety.org](mailto:info@staugorchidsociety.org).



**Show Table Review.** Courtney, assisted by Sue, described the many beautiful flowering orchids brought to this month's meeting. These included three very well-grown Cymbidiums, including an Auntie Mary Kovich with beautiful tall inflorescences bearing large pink flowers. There were two flowering Dendrobiums, one very happily mounted on cedar. A blooming Clowesia Rebecca Northern 'Grapefruit' displayed small pink flowers. Several Cattleyas were described, including an aurantiaca with speckles and a spectacular dark red Hawaiian Prominence mounted on a piece of cedar. A blooming hybrid of the native Epidendrum magnoliae x Brassavola nodosa was growing on top of a small clay pot. An unusual Phalaenopsis schilleriana with mottled leaves displayed pretty flowers. Two small Pleurothallis orchids that were collected by Marv Reagan over 50 years ago in Guatemala were mounted on cedar. One displayed multiple tiny flowers and the other had a new flower bud. These were originally adapted to the rainforest environment and like to be dunked in water daily! Also displayed were an Ascocentrum miniatum (now classified as a vanda) with lots of bright orange flowers, an Aerangis from Africa with very long nectaries, and a Renanthera with branched inflorescences. Finally, a well-grown, small Tolumnia with variable flowers in pink, beige, and yellow was admired.

**SAOS Program.** Sue Bottom introduced Courtney Hackney, a crowd favorite to SAOS members. He presented an informative talk on Moir's Weeds, aka Tolumnias, titled "The Road to Domestication of Equitant

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# CLUB NEWS



## Upcoming Orchid Events

### April

- 5-7 Apopka Int'l Spring Orchid Show  
Krull Smith Nursery, Apopka  
6 SAOS Repotting Clinic, 10 am til noon  
Southeast Branch Library  
6-7 Port Saint Lucie Orchid Society Show  
Port St. Lucie Polish American Club  
9 JOS Meeting, Hybridizing Orchids, 6:30 pm  
Jim Roberts, Florida SunCoast Orchids  
11 Virtual Show Table  
Courtney Zooms into Cyberspace  
Invitation Will be Sent by Email  
13 Florida North-Central AOS Judging, 10 am  
Clermont Judging Ctr, 849 West Ave.  
13-14 Nature Coast Orchid Society Show  
St. Joan of Arc Church, Spring Hill  
14 SAOS Orchid Swap and Picnic, 4 to 6 pm  
Memorial Lutheran Church  
3375 US 1 South, St. Aug 32086  
26-28 South Carolina Orchid Society Show  
Garden Clubs of Greater Columbia  
27-28 Vero Beach Orchid Society Show  
Riverside Park

### May

- 3-5 Platinum Coast Orchid Society Show  
Kiwanis Island Park Gym, Merritt Island  
4 SAOS Repotting Clinic, 10 am til noon  
Southeast Branch Library  
6670 US-1 N, 32086  
5 JOS Picnic, 12 pm  
1984 Eventide Ave., Switzerland 32259  
7 SAOS Meeting, 6:30 pm  
Multifloral Paphiopedilums  
David Sorokowsly, Paph Paradise  
9 SAOS Virtual Show Table  
Special Guest Dave Off, Waldor Orchids  
Invitation Will be Sent by Email  
11 FL North-Central AOS Judging, 10 am  
Clermont Garden Center, 849 West Ave

- 11-12 Volusia County Orchid Society Show  
Volusia County Fairgrounds  
14 JOS Meeting – Picnic on 5th in Lieu of Mtg  
17-19 Redland International Orchid Festival  
Fruit and Spice Park  
June  
1 SAOS Repotting Clinic, 10 am til noon  
Southeast Branch Library  
6670 US-1 N, 32086  
4 SAOS Meeting, 6:30 pm  
Giant World of Miniature Orchids  
Tomas Bazja, Tarzane Group  
8 Florida North-Central AOS Judging, 1 pm  
Clermont Judging Ctr, 849 West Ave.  
11 JOS Meeting, Encyclias, 6:30 pm  
Bill Nunez, Orchid Hobbyist

### St. Augustine Orchid Society Organization

President	Tom Sullivan <a href="mailto:tomjs91@gmail.com">tomjs91@gmail.com</a>
Vice President Communications	Janis Croft <a href="mailto:croftie1984@gmail.com">croftie1984@gmail.com</a>
Vice President Events	Dianne Batchelder <a href="mailto:ladydi9907@aol.com">ladydi9907@aol.com</a>
Vice President Membership	Linda Stewart <a href="mailto:lindstew@hotmail.com">lindstew@hotmail.com</a>
Vice President Programs	Sue Bottom <a href="mailto:sbottom15@hotmail.com">sbottom15@hotmail.com</a>
Treasurer	Cathy Mayo <a href="mailto:allatoonalady@gmail.com">allatoonalady@gmail.com</a>
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Exhibit Committee Chair	Janis Croft <a href="mailto:croftie1984@gmail.com">croftie1984@gmail.com</a>
Librarian	Howard Cushnir <a href="mailto:hscushnir@gmail.com">hscushnir@gmail.com</a>
Newsletter Editors Webmasters	Sue and Terry Bottom <a href="mailto:sbottom15@gmail.com">sbottom15@gmail.com</a> <a href="mailto:bottom406@gmail.com">bottom406@gmail.com</a>



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Oncidioms". W.W.G. Moir, a botanist and sugarcane farmer from Hawaii, travelled the world learning about sugarcane cultivation and collecting his favorite orchid plants. He spent a lot of time in the Caribbean Islands, where he noticed and collected what were known at the time as small, scraggly, native Equitant Oncidioms. He then began hybridizing his specimens. Courtney noted that these orchids are a very complicated group, and have since been placed in their own genus, Tolumnia, whose closest relatives are located in North and South America. All but one species of Tolumnias are native to Caribbean islands, with the one outlier collected on an island off the coast of Palm Beach, Florida. These plants were geographically-isolated long ago by tectonic plate movements that formed the islands, resulting in reproductive isolation from almost all other genera. Though Tolumnias will occasionally hybridize with some Oncidioms, the hybrid offspring are usually sterile. Moir noted that only one-eighth of his intergeneric crosses produced seedlings, and of his 2100 attempted crosses within the Tolumnia group, only 480 produced seedlings. He was able to produce some fertile Rodriguezia x Tolumnia seedlings that were useful hybrids for future crosses. To complicate matters, Moir noted that some of his attempted 4,450 hybrids produced viable seed in 3 months while others needed 10 months!

Because it was so difficult to produce fertile hybrids from these orchids, Moir elected to study their chromosome numbers. He found that the "standard" Tolumnias have 42 pairs of chromosomes ( $N=42$ ), but that other species of this genus contained 40, 63, 84, 126, and 133 pairs of chromosomes. Moir was able to use this knowledge to improve his hybridization success.

Courtney observed that species with large numbers of chromosomes are often adapted to extremely harsh environments, and adding chromosomes could be a survival mechanism to generate variability. One observed adaptation is a stoloniferous growth habit that allows vegetative reproduction in hot and dry habitats that don't support seed germination. Tolumnias with a single-fan growth pattern are frequently observed in more favorable environments. Courtney noted that orchid growers generally prefer plants with more compact rhizomes, as these grow better in pots. In addition to the observed chromosome variability between species, Moir noted that some species made better pollen parents, while others were better pod parents. Courtney described an unusual pollination protocol required to produce seeds from at least one of his crosses.

Nowadays there are 5 important Tolumnia hybrids: *T. urophyllum* ( $N=84$ ), *T. pulchellum* ( $N=42$ ), *T. henekenii* ( $N=40$ ), *T. guianense* v. *albarubrum* ( $N=40$ ), and *T.*

*triquetrum* ( $N=42$ ). Each of these hybrids has unique characteristics that can be observed in offspring. For example, *T. urophyllum* typically produces vigorous plants bearing flowers with large yellow lips. *T. pulchellum* offspring tend to have large purple, rounded flowers. *T. triquetrum* must be used as a pollen parent and produces hybrids with short stems and heart-shaped lower lips. *T. henekenii* hybrids typically have dark purple ("black") lips with yellow-green edges. *T. guianense* hybrids have highly-variable flower colors. When *T. urophyllum* and others with large numbers of chromosomes tend to dominate their progeny. Many of the early hybrids have as many as 5 different species in their background. Modern hybrids often display beautiful color patterns. Characteristics of the parent species are frequently visible in the offspring, and siblings are highly variable.

Courtney next identified many tips for successfully growing Tolumnias. They do not like to be pampered, and should only be fertilized with dilute (1/2 strength) fertilizer when the plants are actively growing in the summer. They don't like acidic water, and prefer either rain or RO water. These plants are very drought-resistant, prefer high humidity environments, and need lots of air movement. You should never leave a wet plant in the hot sun, and never water when it is cold outside or allow water to stand in the plant's crown. And if you must use a pesticide, use 1/2 strength. Tolumnias like being mounted on bark, or in wooden baskets with large chunks of cork, so avoid plastic pots and dense media. Only repot Tolumnias in the late spring, never in the fall. In conclusion, Courtney noted that there are no active Tolumnia hybridizers today, so this orchid group presents a great opportunity for those looking to create unique specimens.



Meeting Conclusion. Christine announced that the member's choice winner was the Pot.(now Rlc.) Hawaiian Prominence 'America' AM/AOS grown by Laura Kissee. Dianne announced the lucky Raffle Winners. Thanks to the helpful hands that stayed to help clean and store the tables, chairs and room.



# CLUB NEWS



## May 7 Meeting Multifloral Paphs, Dave Sorokowsky

Dave Sorokowsky of Paph Paradise will talk about multifloral paphiopedilums. They require a bit more space but the spectacular display of flowers they provide makes them worth it! These large bright light loving paphs can be grown next to your cattleyas.

Dave has been growing paphiopedilums for about 15 years and seriously hybridizing for the past 10 years. He is an accredited AOS judge and his paphiopedilums have received over 100 awards to date from the AOS and CSA. Many of those awarded plants play important roles in his breeding program. In 2018 Dave left winemaking in order to focus all of his time running Paph Paradise Orchids.



**When:** Tuesday, May 7, 6:30 til 9 pm

**Where:** Memorial Lutheran Church

3375 US 1 South, St. Aug 32086



## April 14 Picnic and Orchid Swap

Our annual SAOS picnic and orchid sale/swap is scheduled for April 14<sup>th</sup>. We will be grilling hamburgers and hot dogs for all. Feel free to bring a side dish and adult beverage, and join the fun. Please let Events Veep [Dianne Batchelder](#) know if you plan on attending (954-560-6470, ladydi9907@aol.com) to ensure we have enough food.

Bring any extra plants or goodies you would like to swap with other members. If you do not have plants to barter with, cash works too!

**Where:** Memorial Lutheran Church

[3375 US 1 South, St. Aug 32086](#)

**When:** April 16, 4 to 6 pm

## Keiki Club – Growing Area Tour

Repotting Madness at the Bottom's

We had about two dozen people at our annual repotting party and growing area tour at the Bottom's. We talked about how you prepare plants for repotting and mounting, and then the frenzy began. We had a variety of seedlings, divisions and keikis to choose from, and SAOS members were available to help guide the decision on whether to mount or pot their orchids. Everyone dropped \$5 in the donation bucket and walked away with new plants.

## American Orchid Society Corner

### Webinars

April 10, 8:30 pm, AOS Members Only  
Greenhouse Chat - Ron McHatton

April 17, 8:30 pm, AOS Members Only  
Virus in Orchids - John Hammond

March 14, 8:30 pm, AOS Members Only  
Home Greenhouses – Jean Allen-Ikeson

### Orchids Magazine this Month

Judging Bulbophyllums – Bill Thoms  
AOS Awards – Carol Klonowski, Niles Dusdieker  
Repotting Phals – Sue Bottom

[Photos of Latest AOS Awards](#)



# INSPIRATION

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*Stenosarcos Vanguard*

© Tony Botto



# CULTIVATION



## Orchid Q & A

by Sue Bottom,  
sbottom15@hotmail.com

**Q1.** My grocery store no-id Phal has twisty leaves and both flower spikes emerged normally then started dramatically twisting even though the LED grow lights are directly above it. The leaves show chlorotic streaking, is the plant virused.



**A1.** Some phals have certain species in the background that have markings similar to what your phal is showing. That flower spike is very confused. I have tried straightening them out and all I do is break them. It's a lot twistier than what I have seen in the past, so maybe there's some genetic predisposition, or perhaps you moved them on the shelf to water them and the light orientation changed? At any rate, you'll have to wait til next year for hopefully a better flower spike. The plant looks healthy.

**Q2.** I see new growth on this Catasetum that still has green leaves, so I'm afraid to repot. Can this wait until the next potting clinic next month? Should I start watering it?



**A2.** The best time to repot any orchid is immediately before the new roots start growing. With most orchids, you don't know when the new roots are starting until you see new green root tips. With catasetums, you know when you see the new green growth begin to form that you have a week or 10 days before the new roots will start growing. This short window is the best time for you to repot your catasetum. That catasetum has outgrown its pot, so you should repot it over the next few days.



**Q3.** This Bc. Yellow Bird spent the winter in my eastern exposure bathroom. As blooms faded, I moved it to a southern exposure under my pool screen. Now almost all leaves are falling off. The leaf tips started browning and then fell off above the pseudobulb.



**A3.** Looks like you've got some cleaning up to do! Get a sterile tool and cut off all the severely damaged leaves, probably close to the base of the leaf. That will remove the source of the problem, which I would suspect to be bacterial in origin. Then, spray it with some copper, and put it back in the eastern exposure bathroom until it perks up. I'd guess that you have been growing in the same pot for a while judging by the density of the pseudobulbs. Try lifting it up by the vegetation and see if there's any wobble in the pot. If there is, repotting is in your future, but I'd wait a bit on this to see what dead/infected areas have to be cut out.



# CULTIVATION



## Too Many Orchids by Dr. Courtney Hackney

Most of the topics covered in this column originate from questions posed by hobbyists or from problems and experiments in my own greenhouse. The one serious problem in my growing area this past month is one I warn hobbyists about on a regular basis. In my own defense, however, it has come about because of

events beyond my control. The problem is overcrowding, i.e. too many orchids.

As most orchid hobbyists know, it is impossible to have one of every kind of orchid and each new hobbyist needs to decide early in the infection period what they want from their orchid addiction. Is it a nicely flowered orchid on the table 365 days of the year or to grow unusual orchids, etc.? It is OK to change these goals as the addiction grows or your knowledge of orchids expands and interests change. But space is always an issue.

My space problem began as the direct result of "International Trade" and "Speculation by Oil Traders", at least that is the story I tell my wife. The influx of large numbers of inexpensive phalaenopsis and members of the Oncidium-Alliance from Asia has cut the profit margins of once-profitable American orchid nurseries at the same time heating prices soared. This has forced many once-prominent orchid nurseries out of the orchid hybridizing business.

My problem began when they began to sell their "once outrageously priced" breeding stock. Orchids that were never offered for sale or at prices that only wealthy Arab sheiks or Japanese business moguls could afford were now within my grasp.

Orchid nurseries have closed at such a pace that some of these plants were selling for the price of an average meristem and risked being lost to future generations of orchid hybridizers. What else could I do but add these prizes to my collection? The only thing a self-respecting orchid grower could do was to rescue these poor orchids.

One cattleya clone long coveted and on the market for \$10,000 was rescued for a mere \$100. Cutting-edge phal stud plants in all colors and forms were available for the price of a floral arrangement. At one time these plants were closely held by hybridizers who only traded with each other. In some cases, large parts of phalaenopsis stud collections



were bought and sold as pot plants. "These rare orchids had to be saved."

Along with the joy of having such special plants comes the sadness of realizing that many great hybridizers that once used them to make novel hybrids have moved on. Very soon, American orchid hobbyists will be limited to orchid hybrids that originated outside the U.S. and mass produced for the wholesale pot plant market. It was the domestic sale of extra plants for this market that allowed most American orchid nurseries to experiment and in the process create new hybrids and color forms.

Hopefully, many of these once-prized orchids are finding their way into private collections where they will be maintained. The Internet is one way to make contacts and exchange plants, seeds and pollen, but orchid hobbyists seeking the unusual are going to have a more difficult time finding them once the glut of stud plants has left the sales tables.

*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 2006.*

April 6

Repotting Clinic

Southeast Branch Library  
6670 US 1 North, St Aug 32086  
First Saturday of the Month  
10 am til noon



# CULTIVATION

## Equitant Oncidium Culture, Tapping the Potential by Anita Aldrich

Sooner or later, even the most avid "big flower" devotees find equitant oncidiums too curious a phenomenon to be ignored. No longer are the flowers the nondescript entities that the late W. W. Goodale Moir began breeding in the 1950s. Sensing their potential, he spent some 30 years exploring it. As a result of his insight, today's hybrids exhibit a virtually limitless spectrum of patterns and colors, and their lavish production of flowers seems to defy the limits of space and plant size. The aesthetic impact of this group lies in the mass production of flowers, and meeting the plants' basic requirements easily results in a very respectable bloom display. But for truly spectacular performance, going that extra inch can make miles of difference.

Some of the extra measures that have helped maximize growth and flowering for me are included with the comments on basic culture summarized in the table. Of course, these guidelines are based on what has been successful under my conditions, which are warm and humid. During the summer, temperatures frequently go into the 90s, and the humidity ranges from 70% to 90%. Except for the few winter months of cold weather, the greenhouse is opened fully to take advantage of the steady breezes off the Gulf of Mexico. This natural, humid air movement has a twofold advantage: 1) it helps to cool the plants and keep the atmosphere in the growing area fresh and buoyant, and 2) it does so without the use of conventional greenhouse systems.

The odds are overwhelming that your conditions are different from mine (or even from the grower down the street!), so there can be no cut-and-dried approach to the culture of any orchid. The best advice I ever got was to compare conditions and try to modify approaches accordingly, while remaining flexible and willing to experiment.

As with all orchids, an understanding of the natural habitat is essential to providing their basic needs. The equitant oncidiums are native to the islands of the Caribbean. Some species are found throughout the range, while others are restricted to a single island. They are found perched on the ends of twigs or clinging tenuously to tree trunks in a variety of situations from near-desert to shady and moist. Most of the species occur in areas where they receive some moisture daily, either as rain or heavy dew. There are even a few species (e.g., *Onc. arizajuliana*, *Onc.tuerckheimii*, *Onc. compressicaulis*) which grow at higher altitudes. Our experience with these is limited to the sad realization that they are difficult to maintain in a healthy state in our warm climate. Whatever the habitat, the common thread is exposure to ample air circulation. In cultivation, this is the key to success.

**Potting and Mounting.** Their epiphytic habit and need for air movement would suggest that equitants are good candidates for mount culture, and, indeed, they are. The 12" x 12" pressed cork tiles available in home improvement stores are proving to be a convenient and readily available medium. Cut into 2" x 12" strips, these make very space-efficient "community slabs," accommodating four plants to a strip. The bases of the plants are covered with a thin pad of sheet moss or coconut fiber and secured with a narrow strip cut from a nylon stocking. Under my conditions, the sheet moss retains moisture slightly longer, which seems to help the newly mounted plants establish more quickly. The nylon stocking is flexible enough that the plant is not constricted as it fills out. Later, if desired, individual plants can be separated, each with its own section of cork. If your space is not limited, the type of mount can be virtually anything from tree fern balls to potted trees.



Pressed cork tiles cut into 2" x 12" strips make space-efficient "community slabs." Individual plants and their sections of cork can be separated easily if desired.

Equitants also can be grown in pots. In fact, under drier and/or warmer conditions, pot culture actually may be a better alternative. The trick is simply to provide an open, fast-draining mix and to adjust the frequency of watering. As far as mixes are concerned, I use a half-and-half blend of a commercially prepared seedling mix (seedling-grade bark, charcoal, and perlite) and a "peat-lite" mix (peat, perlite, and vermiculite) with good success. This blend drains readily but retains a slight amount of moisture so that the frequency of watering for plants in pots is reduced. Other possible media include straight bark, shredded tree fern, and charcoal. Whichever seems to work best with your conditions is the "right" one.

I prefer clay pots over plastic ones because they dry quickly and "breathe." Growers in warmer and drier parts of the country may find this an advantage. The "breathing" pot acts like an evaporative cooler around the roots, providing an immediate microclimate around the plant and relieving some of the growth-interrupting effect of too-high

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# CULTIVATION

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*Equitants in net pots can be treated as mounted plants or slipped into clay pots during hot weather to maintain good growth. Note robust top growth coupled with a vigorous root system.*

temperature. Physiologically, the rate of growth increases with an increase in temperature up to a certain point (which varies from species to species). Beyond that, the growth rate drops sharply, and the plant just marks time (or even regresses) until more favorable temperatures return. Plastic pots restrict air circulation and allow heat and moisture to build up around the roots. Soggy, stale conditions can develop, and rot can set in rapidly. Once this state is reached, equitants are notoriously difficult to revive.

Plastic "net" pots now on the market offer a good compromise between slab and pot culture. One advantage is that they can be slipped into a clay pot during hot, dry periods to help maintain a good rate of growth. Another is that the plants can be repotted to larger quarters without removing the net pot and disturbing the roots.

**Basic Growing Conditions.** Most of today's complex hybrids do well under the wide range of conditions found in the intermediate greenhouse, under lights, on windowsills, and, depending upon where you live, outdoors for all or part of the year.

**Light** - Conditions for cattleyas are suitable for equitants, although hybrids containing a fair amount of *Onc. triquetrum* may prefer slightly more shade. As with other orchids, best flowering is achieved by giving them as much light as they can take, and this appears to be optimum when the leaves take on a bronzy red color. Because light intensity and duration vary so widely geographically, leaf color can be a useful guide to estimating the proper amount of light. The red pigment is produced in response to increased sugar levels resulting from increased photosynthetic activity. It also serves as a self-shading device and permits the plant to endure a high amount of light energy without burning.

When moving plants to a higher light situation, do so gradually to allow the plants to build up the pigment and avoid sunburn.

**Watering** - How and when to water depends on individual conditions. The main thing to remember is that the roots must dry out between waterings. If this occurs frequently (as it will with mounted plants) or if the humidity is low, daily watering or heavy misting may be warranted. On the other hand, if the humidity is high or the weather is cloudy, etc., watering or misting is needed less frequently. Plants in pots may need thorough pot watering only once a week with an occasional light misting in between. At the outset, a frequent check of plants over a period of time gives the grower an idea of how quickly a new medium is drying, and watering practices can be adjusted accordingly.



*Tolumnia triquetra – grown and photographed by Suzanne Susko*

**Fertilizing** - Almost any sensible fertilizing program will contribute toward robust growth and flower production. In nature, the plants are bathed with nutrients from decaying plant and animal material washing down the trees with every rain. So the natural approach - frequent and dilute - makes good sense. I use a 20-20-20 formulation at the rate of 1/2 to 1 teaspoon per gallon of water applied every second or third watering and a shot of high-phosphorus fertilizer two or three times a year. Alternating with plain water is important to avoid accumulation of fertilizer salts, which can damage roots.

**Problems.** Fortunately, equitants are not plagued by many problems. Keeping a clean greenhouse and regularly observing plants for early detection and treatment of problems go a long way toward keeping a healthy vigorous collection. Although healthy plants occasionally are attacked by pests and diseases, environmentally stressed plants are prime targets.

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# CULTIVATION

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*Environmental problems* - Unthrifty plants always seem to stand out in a crowd. Their leaves are thin and twisted, and the color is a rather anemic gray-green, whereas a healthy plant is plump and grass green or bronzy green. If pests or diseases are not evident, the problem usually can be traced to a root system in trouble, especially in the case of pot culture. Remove the plant from its pot and check the roots. Dead roots are dark brown and stringy, sometimes mushy. A very bad sign! Without a healthy root system, the plant slowly starves and dehydrates. The only hope lies in trimming off all the dead roots and keeping the plant on the dry side, misting occasionally, until new roots are evident. This may take several months (if it occurs at all) and may require more patience than even Job might muster.

The danger of sunburn from a sudden increase in light is easy to deal with. Simply acclimate the plants slowly to higher light. Sunburn damage shows up as dry, papery brown or black patches with well-defined edges. Other than being unsightly, there is usually little concern as long as bacteria or fungi do not invade the fresh damage. If sunburn is suspected, keep the plant on the dry side until the damage heals.

Those singularly beautiful days during the spring months when a very warm, bright day follows an extended period of cool, cloudy weather can present a singularly distressing phenomenon - the cooked-vegetable syndrome. Especially vulnerable are tender green plants or new leads not yet hardened to high light levels. Our immediate reaction is to cool the plants by misting. This results in the trapping of water in the leaf axils. The direct radiant heat elevates the water temperature to a lethal level, and the cells are literally cooked. In most cases, the entire base of the plant is irreversibly damaged. On these days, mist the plants early in the morning, then during the heat of the day, mist the atmosphere for cooling.

*Pests* - The pests most often encountered are mealybugs and scale, and they always seem to appear out of nowhere! These insects seek out the safety of the overlapped leaves and, once ensconced, are difficult to eradicate. The preferred treatment is direct removal of the pests with a cotton swab soaked in ordinary rubbing



*Tolumnia calochila* – grown and photographed by Suzanne Susko.

alcohol. Heavier infestations or larger collections may require chemical warfare. Diazinon 50 W (1 tbsp per gallon of water), malathion 50% EC (1½ tsp per gal), Sevin 80% WP (1½ tsp per gal), or a recommended systemic are effective for most insect problems. Avoid using Cygon on equitants. It seems to stress the plants too much. I prefer to use the wet table powder formulations whenever possible. The carrier solutions of the emulsifiable concentrates are sometimes harsh on the plants.

Whatever pesticide is used, always follow the manufacturer's directions and always wear protective gear. These chemicals are dangerous and can cause serious damage to both plant and grower if misused. I use chemicals only when necessary rather than on a regular basis. Although this means more time spent observing the plants individually, the problems of resistant strains of pests and the adverse effects of exposure are kept to a minimum.

*Diseases* - The airy, somewhat dry cultural conditions for equitants tend to discourage most fungal and bacterial diseases. When they do strike, it is usually by invasion through already-damaged tissue or tender young tissue. Disease may be manifested in discrete spotting or total involvement of the tissue.

Fungal leaf spotting often is confused with pigmentation but is more irregular in size and distribution and slightly sunken. Treatment with Banrot 40 W (1 tbsp per gal) provides good control. Unfortunately, even after the fungus has been controlled, the spotting remains for the life of the leaf.

Bacterial diseases usually involve larger areas of tissue and spread rapidly once they have gained entry. If action is not taken when symptoms first appear, the plant can be lost in just a matter of days. Signs to look for are soft brown or black areas with a wet appearance. If this occurs at a leaf tip, remove the affected part by cutting below it a short way into healthy tissue. Then paint the cut on the healthy tissue Banrot to protect it from further infection. If more or harder-to-reach areas are involved, a drench treatment with Physan 20 (½ tsp per gal) should be used.

**Payoff.** To achieve the full impact of the potential display of blooms, a little grooming sometimes is necessary. "Specimen" plants in 3-inch to 4-inch pots or larger need little staking, if any. The rocket-burst effect of inflorescence production is best left alone. Plants with only a few inflorescences may need some help for maximum effect, especially if the light is uneven, as in a lean-to greenhouse or on a windowsill. Moving the plant to more even lighting before the inflorescence has committed to a horizontal direction may be enough to encourage upright growth.

However, once the lateral direction of the inflorescence

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# CULTIVATION

## Continued from page 10

is evident, moving it will only compound the problem by causing the inflorescence to contort as it adjusts to the new lighting. Left alone, these inflorescences continue to grow toward the brighter light and soon the weight of the flowers pulls the inflorescence down even more, preventing the blooms from being presented to the best advantage. However, these inflorescences may be trained to a more vertical stance for improved presentation. Bamboo skewers and twist ties work well for staking, and this should be done as soon as the aberrant direction of the inflorescence is evident and while the stem is still pliable. Continue supporting the inflorescence until the buds begin to show. Make the last tie about an inch below the first bud, so the inflorescence can begin its graceful arch as the buds develop. If the inflorescence is strong and has responded well to training, the stake can be removed altogether.

Some inflorescences should not be staked at all. *Oncidium triquetrum* and many of its hybrids produce short, laterally projecting inflorescences which arch very little by nature. Staking these is not only a waste of time but also destroys the bouquet effect that is *Onc. triquetrum*'s charm.

Equitants have a delightful propensity to produce secondary and even tertiary inflorescences as the primary

flowers fade, and an individual plant may be in bloom over several months. So don't be too quick to cut those flowerless inflorescences!

Equitants are relatively undemanding when one considers the longevity of bloom and the number of flowers produced for a minimal amount of effort. Oddly enough, if only their most basic needs are provided, the grower is rewarded with a good show for a very small investment, and maximizing cultural practices requires so little extra effort that you sometimes get the feeling you're receiving more than you deserve!



*Tolumnia urophylla* – grown and photographed by Suzanne Susko

Equitant Orchid Culture		
	Basic	Maximized
Air Movement	←————— Absolutely essential —————→	
Medium	←———— Select medium that gives best results —————→	
Temperature	Intermediate: 55F to upper 90's	High in middle to lower 80's
Light	Light shade to bright sun; leaves grass green	Bright; leaves bronze-green; move indoor growers outdoors during summer
Water	One to two dry days between waterings or mistings	Frequent enough to catch within one day of dryness, mist slabs 2-3 times daily
Fertilizing	Light, fairly frequent; when feeding companion plants ←———— Leach well between feedings —————→	Every 2nd-3rd watering
Problems	←———— Observe regularly; treat upon detection —————→	
Presentation	Allow inflorescences to develop regardless of light ←———— Don't cut inflorescence prematurely —————→	Provide even lighting or stake inflorescences as necessary

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# ORCHID ADVENTURES



## JOS Spring Show

The classic early spring weather was perfect for the JOS Show. The hordes descended early, everybody looking for more beautiful orchids to add to their collections. Some of our favorite orchid vendors were there, what in the world would we do without our orchid vendors!

The displays were lovely too. It can't be easy to put in a display that is viewed from all angles, but they managed to do it. There were fantastic specimen plants on display, including an incredible multifloral paph in the Breden display. Lots of individual exhibitors too, showing off the fruits of their labor. Gorgeous!



# SHOW TABLE

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Grower Jeff Milkins  
*C. Louisa Barton*



Grower Gordon Cromwell  
*Paph. Toni Semple var. album*



Grower Joe Sayer  
*Slc. Terry's Spots*



Grower Sue Bottom  
*Lc. El Cerrito*



Grower Janis Croft  
*V. (Josephine van Brero x Robert's Delight)*



Grower Deb Grace-Johnson  
*Phal. Sogo Lawrence*



Grower Allen Black  
*Otr. Automagically*



# SHOW TABLE



Grower Bev Vycital  
*Phal. Yaphon Black Snake 'Markie'* AMAOS



Grower Janis Croft  
*Gptm. Starburst 'Parkside'* AM/AOS



Grower Sue Bottom  
*Blc. Pollyana 'Jennifer's Favorite'*



Grower Allen Black  
*C. lueddemanniana 'Crownfox Goliath'* FCC/AOS



Grower Keith Davis  
*C. Gene May 'Emberside'* HCC/AOS



Grower Diane Winters  
*Cym. Green Sensation*



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