



CLUB NEWS



Hal Hills

March 5 Monthly SAOS Meeting

by Lola Stark, seacuter@bellsouth.net

Welcome and Thanks.

The Saint Augustine Orchid Society met on 5 March at the Watson Realty building with 8 guests, 4 new members and 52 members. President Jeannette Pacetti called the meeting to order at 7:15. Debbie Sandy announced the guests and

new members Mary Colee, Loretta Griffith, Jean Watson and Brian Palombo, who were welcomed and given one ticket apiece to the monthly raffle. The President thanked Jeanette Smith for the refreshments and also thanked Shirley Browning for bringing in her wonderful Red Velvet cake. A list was passed around for members to sign up for helping Jeanette Smith with the refreshments. President Pacetti reminded those who enjoy the refreshments to help contribute! Gail Marshall reminded all the March birthday members to get their birthday tickets for the raffle and asked that anyone interested in becoming a committee member in any capacity, to please get in touch with her. We always can find ways to help. Members were also reminded by the President to enjoy the Show Table and pick a winner for Dick Roth to announce after the break.

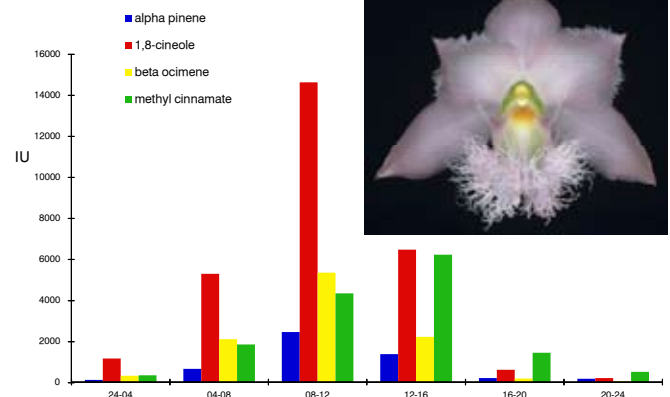
SAOS Club Business. Membership dues are going to be past due by the next meeting. Please get your dues to Bill Gourley, our Treasurer, before April 2. Penny Halyburton, our Librarian, brought 6 books for the members to look at and take home for a month if they're interested. Our new books, *Understanding Orchids* and *Heat Tolerant Cymbidiums* have already been checked out, but if you're interested, Penny is making a list of those interested in checking them out in the coming months. The Keiki Club will be meeting for a repotting clinic and lecture at Sue and Terry Bottom's home. For directions, see our website and follow the signs from SR 206 to the house. We



always have our potting supplies available at the side table during meetings. We have coarse mix potting medium, coco mix potting medium and time release fertilizer. All are \$5.00 apiece. The next Hagan Ace clinic on repotting and information will be April 6.

Orchid Events. The Jacksonville Orchid Show is this weekend, March 9 and 10, so go, enjoy yourselves and pick up some really beautiful orchids. There will be about 12 vendors selling their orchids, wonderful choices and your chance to see some gorgeous displays. Other shows this month include Port St. Lucie and Highlands County. Watch our website for further information.

Fragrance Cycle *Clowesia rosea*



Fragrance intensity for *Cl. rosea* during a day

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Upcoming Orchid Events

March

- 9-10 Jacksonville Orchid Society Show
The Garden Club of Jacksonville
- 9-10 Port St. Lucie Orchid Society Show
Port St. Lucie Community Center
- 24 Keiki Club for Orchid Beginners
Spring Repotting
Sue and Terry Bottom's Home
6916 Cypress Lake Ct. St. Aug 32086
- 30-31 Orchid Society of Highlands County Show
Bert J Harris Jr. Agricultural Center

April

- 2 SAOS Meeting, 7 pm
Francisco Miranda, Miranda Orchids
Orchids of the Brazilian Amazon
- 6 SAOS at Ace Hardware, 9 am til 1 pm
3050 US 1 S in St. Augustine
Repotting and Plant Clinic
- 6-7 Central Florida Orchid Society Show
Maitland Civic Center
- 6-7 Anniversary Sale at EFG Orchids
4265 Marsh Road in DeLand, 32724
386-490-6924
- 9 JOS Meeting, 7 pm, TBA
- 12-13 Englewood Area Orchid Society Show
Englewood United Methodist Church
- 14 Keiki Club for Orchid Beginners, 1 pm
Orchids on a Stick
Sue and Terry Bottom's Home
6916 Cypress Lake Ct. St. Aug 32086
- 20-21 EPIC Celebration of Spring
Annual Flower and Garden Expo
Ag Center, St. Augustine
- 20-21 Tallahassee Orchid Society Show
Doyle Conner Building
- 27-28 Vero Beach Orchid Society Show
Riverside Park

May

- 3-5 Platinum Coast Orchid Society Show
Kiwanis Island Park Gym & Annex
- 4 SAOS at Ace Hardware, 9 am til 1 pm
3050 US 1 S in St. Augustine
Repotting and Plant Clinic
- 7 SAOS Meeting, 7 pm

- Keith Davis, Hobbyist and Hybridizer
Tips for Happier and Healthier Orchids
- ? Orchids by Del-Rei Open House
4270 Cedar Ford Blvd, Hastings 32145
Orchids, Food and Libations
- ? JOS Picnic
3611 Richmond St. Jax 32205
- 11-12 Volusia County Society Show
Volusia County Fairgrounds
- 17-19 Redlands International Orchid Festival
Fruit and Spice Park, Homestead
- 26 Keiki Club for Orchid Beginners, 1 pm
Watering and Fertilizing Your Orchids
Sue and Terry Bottom's Home
6916 Cypress Lake Ct. St. Aug 32086

St. Augustine Orchid Society Organization

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Program. Our program for the evening was about the Fragrances of Orchids, given to us by Dr. Hal Hills. Dr. Hills is from Massachusetts and did his doctoral research on the fragrances of orchids pollinated by euglossine bees using a gas chromatograph and mass spectrometer. He had several of the members actually smell the different orchid fragrances. We did some further research on the subject:

When a bee lands on a flower, the assumption is that it is there to collect pollen or nectar for food. But when the bee is a male of one of the several species in the group *Euglossini* and when the orchid is a flower, be assured there is something very different going on. All the Neotropical Stanhopea and Catasetum subtribes are pollinated exclusively by male euglossine bees which are attracted to and collect the floral fragrances. With finely feathered brushes on their front legs, male euglossine bees gather non-edible fragrances from the orchids they visit. No one really knows why, but it is thought that the bees

Some of the floral fragrances include:
Cineole – eucalyptus oil, odor of Vicks VapoRub
Methyl salicylate – oil of wintergreen
Carvone – component of caraway seeds
Eugenol – clove oil
Methyl Cinnamate – component of cinnamon
Phenylethyl Acetate – component of rose fragrances
Benzyl Acetate – component of narcissus and hyacinth
Pinene – component of turpentine



We have a winner

Meeting Conclusion. Following the program, we had a 15 minute break and then Dick Roth announced with a slightly embarrassed grin that his Dendrobium Adastra 'Berkeley' AM/AOS had won best on the show table and will appear on our yearly calendar next year as the flower for March. Congratulations! We then had our weekly raffle run by Fred Keefer, Gail Marshall and Coral Godwin, our youngest member!

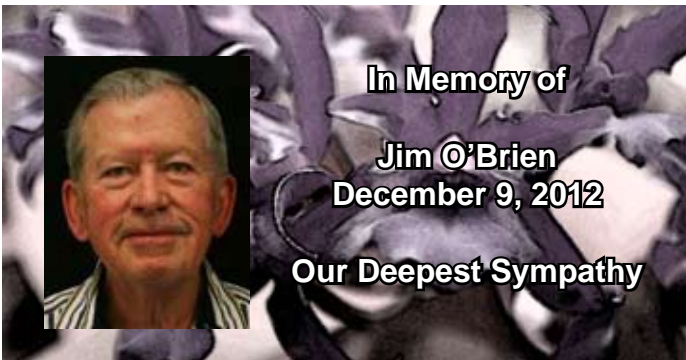


Thanks to Watson Realty and Jeanette Smith for the use of their meeting space at 3505 US 1 South



Tension builds before the drawing of the Grand Raffle

convert these fragrances into sex attracting pheromones, pollinating the orchid in the process. This is a pollination process by which a orchid species with a specific fragrance attracts only one or two species of euglossine bees of the dozens that might be active within the habitat to reduce the risk that the pollen will be carried to the wrong flower.



CLUB NEWS

March 24 Keiki Club Spring Repotting

Many of your orchids are sending out new roots. If they need to be repotted, this is the time to do it. We'll show you how to repot your orchids, and there may be some orchid divisions for you to pot up and bring home. Bring a 4 and 6 in clay pot, just in case. We'll meet at 6916 Cypress Lake Court in St. Aug from 1 to 3 pm. Bring a folding chair and any plants you have questions about. Guests and visitors are always welcome. Call Sue at 797-4360 if you have any questions.



April 2 Monthly SAOS Meeting Orchids of the Brazilian Amazon Francisco Miranda, Miranda Orchids

World renowned orchid taxonomist Francisco Miranda will give a presentation on Orchids of the Brazilian Amazon at the April 2 meeting of the St. Augustine Orchid Society. Francisco's talk will address the geographic and climatic peculiarities of the Amazon region and the wide variety of orchids that grow there.

Francisco Miranda was born in Rio de Janeiro. He began his taxonomic studies in the orchid family in 1981. He studied Amazon orchids and completed his Master's degree with a thesis on "section Cattleyodes of the genus Laelia". His main interests are the Brazilian laelias and cattleyas. He is the author of several papers ranging from species descriptions to subjects of growers' interest in Brazilian, German and U.S. publications. He is also author of two books. Since 2000, he has lived in Haines City, Florida, where he operates Miranda Orchids, an orchid nursery specializing in Brazilian species and the Cattleya alliance.

2013 Dues Are Now Due

Membership dues for 2013 are now due. We'll be collecting dues through March, after which we'll update our 2013 SAOS roster. Dues are \$15 for an individual and \$25 for a family. You can mail your membership check to SAOS c/o Bill Gourley, 807 Kalli Creek Lane, St. Augustine, FL 32080.

February 17 Keiki Club Spring Preparations

We had a dozen familiar faces at the Keiki Club get-together talking about the changes in our cultural practices during the spring months, as well as bringing home new orchids during the spring orchid show season. If you start seeing the green root tips on your orchids start to enlarge, you know that spring is on its way.

- Sometime towards the end of March you'll be able to move your plants from their winter to their summer homes. Remember to transition them gradually for two weeks or so to the increased light of their summer home in order to avoid sunburn.

- You'll start increasing the frequency of watering to match your plants increased metabolism. Be wary of unpredictable weather. If the weather is warm and the sun is shining, water as you do during summer. If the days are cool and cloudy, revert back to your winter watering schedule.

The annual repotting marathon is about to begin. Sterilize your pots ahead of time. Identify which plants you want to repot and make sure you have ample potting supplies on hand.

The spring show season is coming up. Here are some suggestions for adding new plants to your collection.

- Select fully established healthy plants with plump unblemished leaves and pseudobulbs. You should be able to lift the pot by the vegetation without the plant wobbling in the pot.

- When you bring the plant home, apply a protective drench of the Bayer imidacloprid product (1.5 tsp/qt if using the 1.47% imidacloprid product). Pour the insecticide through the potting mix where the roots will absorb the insecticide any kill any lurking sucking insects like scale from the inside out.

- Once your new orchid has bloomed out, repot it into your mix of choice so all your similar plants can be watered concurrently. If all your cattleyas are in a coarse mix, and your new cattleya is in bark, repot your new cattleya in the same coarse mix after it is done blooming.



INSPIRATION



CULTIVATION



Growing Tips for March

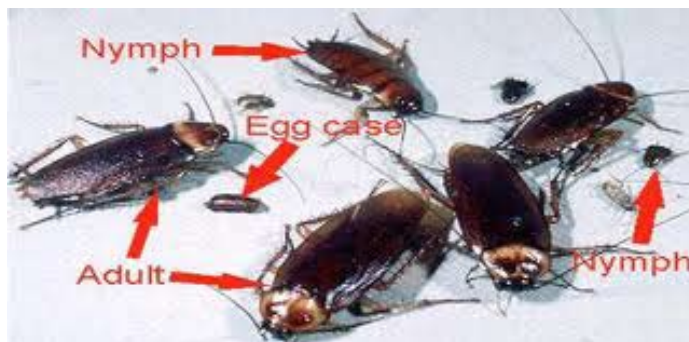
Dr. Courtney Hackney,
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Dept. Biology, Univ. North Florida

Spring is here; at least it was today. No matter when it finally arrives, there are a few indicators that should be obeyed when it does. For me, small dead roaches in a cup of water said it was. Empty cups are left on benches among plants and moved around each week to be sure that my watering is thoroughly soaking pots and media. It is surprising how often I find a portion of a bench that seems to be neglected when it comes to water. The drowned roaches, however, indicate that some insects are beginning to hatch and become active, thanks to warmer night temperatures.

If you follow this column you may remember that the large roaches, "Palmetto Bugs", that rule Florida have been my worst enemy since moving here five years ago. An old friend, Karen Tobiassen, suggested that I try Orthoboric acid. Sold in a fine granular form, the product was initially scattered around on benches especially where I had either seen roaches during one of my late night "roach hunts" or seen roots eaten by what I suspected were roaches. Some was also applied on the surface of extra orchids to be sure there were no negative effects on my orchids.



Initially, I was disappointed because there was no pile of roach corpses scattered under benches. After a couple of weeks, I noticed fewer damaged roots near areas where the Orthoboric acid had been placed and dead roaches nearby. Most important was the fact that these dead roaches were terminal larval stages that are the most destructive because they live in the bottoms of orchid pots. They were often found during repotting and very hard to kill with pesticides while hiding in the pot among the medium and crock or Styrofoam peanuts. Better still was the fact that the orchids and their roots in pots saturated with the stuff looked just fine when I removed these from their pots. An application throughout the greenhouse in early fall seemed to eliminate these pests all winter.



Their return was not surprising, given the fact that there is lots of nature outside the greenhouse that sneaks in during winter. A spring application will begin this month even though I have seen no apparent damage yet.

There is a mystery that has long intrigued me with respect to orchids and disease. There are number of commercial growers and friends from whom I receive orchids where I expect problems. It is not the quality of their orchids, but the fact that plants from them develop more than a normal level of diseases once in my growing area. Why? I have examined these plants carefully, looked at nutrients in their tissues that are usually high, and not found satisfactory answers. Conversely, my orchids as well as those from some other growers rarely have these problems even though they are growing side by side.

My suspicion was that my own plants had some type of immunity or at least resistance to many diseases that these other orchids did not have. While plants do not have circulatory systems where disease fighting cells will move to diseased areas, they do have an immune response. The immunity is stimulated by previous attacks from pathogens and communicated around the plant via plant hormones called auxins. Even more interesting is the fact that some auxins can be passed from plant to plant via the air, even to plants of different species.

A new product (Axiom) that attempts to stimulate Systemic Acquired Resistance (SAR) is now being marketed for various vegetable crops and is reputed to boost the plants immune system, increase plant growth and flowering and even decrease the incidence of Botrytis. Will such a product work on orchids that grow slowly and are members of a distinctly different plant family? Pesticides that confuse insect molting cycles seemed like wild ideas at one time, but are now part of my pest control. Who knows what this new product will do? Only time will tell.



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Your Orchids in March

based on Robert Scully articles,
courtesy of the AOS



General Growing Tips. Signs of spring abound with an abundance of emerging flower spikes and buds. The flush of spring growth will follow soon so plan your repotting program which should begin in earnest this month. The best time to repot is right before the new roots start growing so the plants will reestablish quickly. Watch for signs of mites, particularly on thin leaved orchids like the catasetinae and grammatophyllums, and treat any problems promptly.

Cattleyas. Several species flowering now are *C. amethystoglossa* with its large heads of crimson and white blooms, *C. aurantiaca* that delights with clusters of small yellow to orange star-like flowers, *C. skinneri* carrying many clusters of lavender or white blooms or the natural hybrid of these last two *C. guatemalensis*. Soon sheaths will emerge on *C. mossiae* hybrids. Monitor their development so that moisture does not accumulate in the sheath causing bud blast.



Cymbidiums. Flower spikes are starting to develop and should be trained for their best display, although they are tender and easily broken. Arching or upright spikes display better if trained upward at first growth; some growers place a name tag in front of the developing spike to guide it. Pendulous cymbidiums should be allowed to grow naturally and downward without any type of training.



Oncidiums. *Onc. papilio*, the butterfly orchid, may be putting out the first in a series of many buds that will bloom through spring and early summer. Do not cut the inflorescence because it will continue to produce flowers year after year. Even though *Onc. papilio* has hard leaves suggesting it will tolerate a lot of light (like cattleyas), it is better grown under bright phalaenopsis conditions.



Phalaenopsis. The hybrid moth orchids seem to last in perfection for months. Certain species are starting to bloom like the pink *Phal. schilleriana* and spotted *Phal. stuartiana* that are both fundamental to many modern hybrids. If grown in New Zealand sphagnum moss, make sure the moss does not deteriorate before the flowering season because a healthy root system is important to sustain the many flowers.



CULTIVATION



Orchid Questions & Answers

by Sue Bottom, sbottom15@bellsouth.net

Q1. My *Ctsm. tenebrosum* has 6 new growths showing. Two of the new growths have 1 inch flower spikes forming from the base. Is this the normal growth pattern, to have spikes forming with the new foliage? I have checked

the flower spikes thoroughly and they are not secondary bulbs forming.



Q1

A1. My friend Stephen Moffitt over in Houston tells me this is the normal growth pattern for this species *catasetum* (check out our [catasetum website](#)). *Ctsm. tenebrosum* is the first to throw off new growth in the spring and tends to spike with the new growth. Hopefully you've already completed your annual spring repotting, otherwise it is probably best to repot next winter before new growth begins.



Q2



Q2. I just bought this orchid today and the seller said she had put leaf shine on it. I had to stop in a store on my way home and left the orchid in the car (I live in Florida) for about 30 min. I think the sun and warmth of the car made the shine soak in too much and now part of the leaves are turning brown and seem to be damp underneath!

A2. You (or more correctly, the seller) should never put leaf shine on your orchids because it blocks the stomata and the leaves can't breathe. During the summer, you can easily sunburn plants by leaving them in the car. I don't think 30 minutes in the car during the winter should have had such a negative effect on them. I think the leaf shine did them in and the seller owes you a refund.

Q3. I bought a small *Sedirea japonica* a year ago. Over time, the root tips became dark brown. It is in a small plastic pot the leaves look healthy. Recently I watered and misted it more often, thinking that perhaps root browning is due to our dry, indoor air in Canada. Any suggestions?



Q3

Colleen Pruett

A3. I think I'd repot it into a small clay pot with sphagnum moss, keep it moist in the spring through fall time frame and let it get drier in winter, fertilizing regularly during the growing season with dilute fertilizer. Here's a link to [New World Orchids](#) for information on growing this orchid.



CULTIVATION

Cleaning Clay Pots

Sue Bottom, sbottom15@bellsouth.net



If you want to reuse your clay pots, it is important to clean and sterilize them prior to reuse. It is a chore that can quickly become unmanageable unless you clean your pots at the same time as you are repotting during the marathon repotting season in the spring.

Scrub Debris from the Pot. The first step is to remove the potting mix, roots and other detritus from the pot. I fill a 5 gallon bucket with water and drop the pots into the bucket as I am repotting. You can add dishwashing soap to the water if you like. At the end of the repotting session, use an abrasive pad to scrub away as much of the roots, encrusted salt and other debris as you can. Then your last repotting chore of the day is sterilizing your pots.

Sterilize the Pot. You sterilize the porous clay pot so you don't transfer pests, diseases or virus from the last inhabitant to the next inhabitant of the pot. You can use chemicals or heat to sterilize clay pots.

Traditional Bleach Soak. The traditional advice is to disinfect your clay pots by soaking them overnight in a 10% bleach solution (10% bleach or 9 parts water to 1 part bleach). If you are using a 5 gallon bucket, add one half gallon bleach, drop in your pots and fill to the top with water. You can also add pool algacide (2 tsp/gal if 10% strength) in lieu of or in addition to your bleach solution for extra killing power. You'll pull the pots out of the bucket, wash them off with a hose and drop them into a second 5 gallon bucket. Fill this with water and let them soak for several hours to remove any residual bleach or algacide. Remember to use rubber gloves so your skin doesn't contact the bleach/algacide solution, which after a very few exposures can cause skin sensitivity and chemical burns. The bleach/algacide kills everything with the possible exception of virus so the next step is heat treatment. If you bake the pots in the oven

at 400 degrees for an hour, the virus will be eliminated. Add your used rhizome clips and other wire products to the oven to decontaminate them at the same time. Let the pots cool off in the oven and they are ready to be reused, assuming the salts are gone.

Dishwasher and Oven Alternative. I have started washing precleaned pots in the dishwasher followed by baking them in the oven, thereby eliminating the need for the bleach soak. After the initial scrub, I let the pots soak for a day or two in a water filled 5 gallon bucket to start dissolving any residual salts. Alternatively, you can bring them into the kitchen and soak them in hot water which will hasten salt dissolution. I scrub the pots a second time to remove encrusted salts and residual debris and then pop them into the dishwasher, sometimes with twice the normal amount of soap or a few teaspoons of Trisodium Phosphate (TSP). The heat and soap will draw the salts either out of the pot or to the outside edge of the pot. As they are removed from the dishwasher, check for any remaining salt encrustation and, if present, scrub with an abrasive pad while the pots are still warm. Then bake the pots in the oven for an hour at 400 degrees along with any wire products that need decontamination. Let them cool in the oven. If salts are not visible on the pots, they are ready to be reused.



Remove Stubborn Salt Encrustation. You need to remove any residual salts that have been absorbed into the porous clay pots. Otherwise, the roots of your newly repotted orchid can burn if they come into contact with the white deposits as a result of salt toxicity. If soaking and washing the pots does not remove all the salts, you have a few alternatives.

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Mild Acid Soak. If the pots still have visible white stains, try an overnight soak in a mild acid. Use white vinegar in whatever concentration you are comfortable handling, either a pure or a diluted (10%, 25% or 50% vinegar) solution. Scrub any residual salt from the pot followed by a second soak in water to remove the acetic acid.

Simmer on Stove. Even better, drop your pots in a stew pot filled to the brim with water and set on a slow simmer for several hours. The heat will help draw the salts from the pot. You can add some white vinegar to help solubilize the salts into the water. Then soak the pots in fresh water to remove the acetic acid.

Nuclear Option. If salt encrustation is still present, consider admitting defeat and replacing the pot because the next alternative is the nuclear option. It involves a concentrated acid soak using muriatic acid, either pure or diluted (10%, 25% or 50% muriatic acid) followed by a fresh water soak to remove the acid from the pot. There are many safety and environmental hazards involved with handling muriatic acid, so be prepared to follow all label precautions, use gloves, goggles, etc. as well as have a disposal plan because the acid is highly corrosive and foams excessively when you try to neutralize it with limestone prior to disposal. Muriatic acid represents a potential threat to you, your pets and your environment that can be avoided by simply replacing the pot.

One Step Cleanup Using a Kiln. Bob Scully of the former great orchid nursery Jones and Scully uses a kiln to sterilize and desalt pots prior to reuse. He simply removes the debris and roots from the pots and runs them through a kiln. The kiln operates at such a high temperature that pests, diseases, virus and salts are all eliminated in one step. He brushes any residual ash off the pots after removal from the kiln and they're ready to use.

Cymbidiums

What Triggers and Supports Flowering

By Harry McElroy, cymbidiuman@msn.com

The environment needed to trigger flowering is fairly exact in many species of orchid. Phalaenopsis give us a good example of an easy to identify flower trigger, "temperature change".

Phalaenopsis growers often let their growing areas cool to 45 degrees in the cool bright days of fall for a few nights and then keep the temperatures above 55 degrees F for the rest of the year. The few cool fall nights trigger the spring flowers. The temperature drop trigger is useful to commercial pot plant producers. One nursery I visited had an area which could be cooled to 45 degrees in midsummer to trigger flowering. Imagine a huge nursery with plants on conveyor belts moving through an 80 acre greenhouse with smaller plants at one end. A cool room near the middle and a warm area after the cool for flower spikes to develop. At the very end of the greenhouse is a shipping and loading area where the plants with spikes are prepared and loaded aboard tractor trailer trucks at the rate of 5 trucks loads a day 365 days a year. The fast growth rate and the ease of triggering flowers is why Phalaenopsis are a huge success as pot plants due to the ability to control flowering in this way.



The flower triggers for cymbidiums are much more complex and less easy to control. In addition, flowers must experience the right conditions from spike initiation to flowering. If conditions are not right after the flower spike begins then the developing spike simply withers and dies sometimes without even being found or even later the buds simply turn brown and fall off. In the United States most cymbidiums are grown where temperature and light conditions are similar to native habitats. Enthusiasm for the species rests with many hobby growers in these areas. Specialized cymbidiums which grow in warmer climates and are less demanding in warm climates have only a small but growing number of enthusiasts.

In Europe, Cymbidiums are prized as cut flowers. Flowers which appeal to Royalty are easy to sell and a lot of effort is put into meeting the demand. The U.S. economy and culture demands "pot plant" grade plants. The European

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culture demands high quality cut flowers. The effort needed to understand and furnish the cymbidium's needs are an economic necessity in Europe. A hobby grower often cannot afford the close control of the professional greenhouse grower in Holland but studying and learning their techniques does teach us what we can do too enhance our success.

Areas we need to control are light, temperature, air movement, water and nutrients:

Light - I like to say that cymbidiums should have 70% light but there are a lot of species of cymbidium so this is just a starting point. They should have a slight yellow cast and not be burned. If the leaves feel hot to the touch or are getting brown then it is too much light possibly without enough air movement or water. My own plants get too little light, are dark green with a lot of leaves for the number of flowers. They will do better with more light. I need to change my light levels. Trees are a problem for me.

Temperature - Many cymbidiums will not flower without a day night temperature change of 20 degrees F and the best temperature swing between 75 and 55 day to night in July and August. We need Warmth Tolerant and Heat Tolerant Cymbidiums in areas without temperature changes like this such as Florida, where selection of plants becomes much more important. I have cymbidiums that grow fine in Florida. I find that it does help the plants grow and flower better if I mist the plants lightly in the evenings when it doesn't rain. Cool fall conditions are not a main trigger for most cymbidiums but there are exceptions. The species hookerianum requires a cold spell or even a freeze to bloom as do some of its hybrids.

Air Movement – Air movement is very important. Plants placed outside in the open in Florida should get plenty of air movement. It is important to space plants so that air circulates around them. The old "Cat Test" is a good one. A cat should be able to walk easily between your cymbidiums with needing to push leaves around. (I have too many – another problem area in my collection).

Water - Cymbidiums should never dry out completely but never be soggy either. The evening water mist I give my cymbidiums is all they get from April until it heats up in June. I mist in July and August both morning and night unless it is raining a lot, turn off the water if you are experiencing a lot rain. Usually in late September early October I turn the mist system off and revert to manual control of the mist/water system. In the fall and winter I water only when I think

the plants need it. Note: that watering changes go with fertilizer changes. I use a very durable potting mix due to the rain and wet conditions my cymbidiums grow in.

Fertilizer – Cymbidiums cannot be "fertilized into bloom" but I believe the correct application of fertilizer can help a cymbidium bloom. It is important to say that the first four points above are more important than fertilizer. The variation in fertilizer that cymbidiums get in nature was explained to me by an expert and I think the explanation helps understand what I am doing.

Cymbidiums in nature grow on mountain slopes on the south side of the Himalaya mountains. This area of the world is uplifted seafloor due to the Indian Ocean Tectonic plate colliding with the Asian Continent. It is also a monsoonal region which is very wet in the spring and summer and much drier in the fall. Cymbidiums grow on the forest floor in forest litter in some cases on trees. (Cymbidiums are good at catching leaves and litter). During the rainy season the roots are exposed to relative high nitrogen levels from the falling rain and decaying plant material. Later in the summer rains turn to fog and mist that only keep the plants slightly damp. The roots reach deeper under the decaying vegetation to the earth underneath and a lowering of nitrogen and rise in potassium and calcium is encountered by the roots during the drier parts of the year.

The Dutch growers mimic nature by feeding accordingly with fertilizer injectors. Their [website](#) lists all the mixes they use, but I don't own a fertilizer injector so this is what I do with my fertilizer program.

January or February, rate for each gallon pot:

- 1 tbsp dolomite lime mix (1/2 lime 1/2 Seashell)
- 1 tbsp 18-6-8 plus Micro's 6- 7 month time release Nutricote
- Sprinkle of Deadline Snail Poison

June, rate for each gallon pot:

- 1/2 tsp 18-6-8 or other water soluble balanced fertilizer @ 100 ppm N
- 1 tbsp lime-seashell mix
- Sprinkle of Deadline Snail Poison

Mid to Late September, rate for each gallon pot:

- Hi K (e.g., 4-8-11) water soluble fertilizer at 200 ppm K (Potassium) - Do not use Muriate of Potash
- Sprinkle of Deadline Snail Poison

The Dutch website reference is <http://www.floricultura.nl>, when you get to this web site select "Culture" at the top of the page then "Downloads".



MY FAVORITE ORCHID

My Favorite Orchid

by Linda Stewart, lindstew@hotmail.com

When asked to write about my favorite orchid for the newsletter, I had to really stop to think about it. I love miniatures of all types, particularly varieties of Aerangis and the wonderfully fragrant Neofinetia hybrids. But probably the orchids I have enjoyed the longest are the Tolumnias, formerly known as equitant Oncidiums.

I lived on the Big Island of Hawaii during most of the 1980's and found myself fascinated with these little orchids. They were readily available, and in those days could be purchased for only a couple of dollars apiece. I grew my Tolumnias, or what the locals referred to as "popcorn orchids", with my miniature African violets. They shared a table in front of a south-facing window with light filtered in through a sheer curtain. There was (and still today) no air conditioning in most homes on the Island, so the window was left open just a crack at all times for ventilation. As for potting medium, I didn't have a clue. I just grew them in whatever medium they came in at time of purchase. I was equally clueless regarding fertilizer, and although they were fertilized regularly, it was with African violet fertilizer. Although I had received numerous orchids



as gifts through the years, I had never successfully grown them before. To my surprise, I found Tolumnias easy. I enjoyed the fact that they remained compact in size, and something was almost always in bloom.

My cultivation techniques have changed somewhat since those early years. I now grow them in charcoal and clay pots, and only repot when they are literally bursting out of their



tiny pots or begin to show decline. I water twice a week, fertilizing weekly with a balanced fertilizer at 50% of the recommended strength. The important thing to remember with Tolumnias is that those fine little roots must dry out between watering. Tolumnias like to have their roots crowded, and finding pots small enough used to be an issue until I discovered that 1" to 2" clay pots are generally available at hobby supply stores. Tolumnias are similar to Phalaenopsis in that further blooms can be encouraged on the old flower spike by cutting just below the old flowers and above that next node, and they will frequently continue to re-bloom for weeks.



These little orchids offer so much variety in color and form that I can always find something new to add to my collection, so it is fortunate that their space requirements are minimal. A few years ago, Tolumnias were fairly uncommon here in Florida, and I am glad that they once again have gained in popularity. When in bloom, my Tolumnias



still share window sill space with my miniature violets, and my fascination with them has never waned.



SHOW TABLE



Grower Dick Roth
Den. Golden Aya



Grower Yvonne & Bob Schimmel
Asctm. ampullaceum 'India'



Grower Dick Roth
Den. primulinum



Grower Dick Roth
Ascda. Ann Reaben Prospero x V. Paki



Grower Sue Bottom
Cl. Grace Dunn 'Chadds Ford' AM/AOS



Grower Sue Bottom
Den. Aussie's Chip



Grower Sue Bottom
Den. Elated



SHOW TABLE



Grower Steve Serkin
B. Aristocrat



Grower Dick Roth
Den. Adastras 'Berkeley' AM/AOS



Grower Bill Gourley
Phal. Mistral's Sunrise Flame 'Mendenhall'



Grower Sue Bottom
Phal. Cradle Song x Phal. aphrodite



Grower Dick Roth
V. coerulescens



Grower Sue Bottom
Zgt. Midnight Blue 'Willow Pond'

