



Orchidacea

Newsletter of the
Triangle Orchid Society

Associated with
Sarah P. Duke Gardens

Speaker for May 14, 2012 GENE CROCKER

Gene Crocker grew up in the northwestern part of South Carolina, not far from where he worked for 25 years as Vice-President of Carter and Holmes Orchids in Newberry, S.C. (He retired in December of 2010, but is only a three minute walk from the greenhouses – working part time). He obtained his first orchid plants in 1956, when he was 15 years old. These first plants were cattleyas, his first love, but he has an interest in any and all orchid genera.

After graduating from Clemson University in Textile Chemistry, he obtained a second degree in Meteorology from Penn State and served as a weather forecaster in the U.S. Air Force. He worked as Laboratory Manager for Cannon Mills, famous manufacturer of sheets and towels, for twenty years before joining Carter and Holmes in 1986.

As an amateur orchidist, Gene developed an interest in hybridizing, producing his first cattleya hybrids in 1961. The creative aspects of orchid breeding have been very enjoyable and rewarding for him, always giving something to anticipate. For over 25 years he has carried on the breeding program at Carter and Holmes started in the 1950's by Bill Carter. Many of his hybrids have been awarded by the AOS, including two that received FCC's and one cross that received an Award of Quality. He has traveled extensively, representing Carter and Holmes at various orchid conferences around the world. Perhaps Gene's most enduring claim to orchid fame is the fact that he coined the term, "mericlone", in 1964.

Gene & his wife Kitty have three children and five grandchildren.

Gene will have plants to sell

Inside this issue:

<i>This Month's Speaker</i>	1
<i>President's Column</i>	2
<i>Minutes of the Last Meeting</i>	3
<i>Ray Barkalow notes</i>	4-5
<i>TOS Grower of the Month</i>	6-7
<i>Jack Webster show table awards</i>	8-9
<i>Courtney Hackney Growing Tips for May Meeting Agenda Announcements</i>	10-11
<i>Map and directions To Sarah Duke Gardens.</i>	12

Dinner with the Speaker

5:30 PM - before the meeting
at the Neo China Restaurant
4015 University Drive,
Durham behind Target's
at the South Square Mall.

Call Alan Miller to reserve a seat, at
919-969-1612
All are welcome



May Grower of the Month
Nick Plummer

**The Triangle
Orchid Society
meets at the
Sarah P. Duke
Gardens,
Durham, NC
The Second
Monday of the
Month
at 7:30 PM**

**www.Triangle
OrchidSociety.org**

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A Word From The President

Greetings Everyone!

This is the time of the year to move our orchids outdoors and protect them with some shade. We get rewarded with strong growth and spectacular blooms.

We had several very successful events last month. The TOS Spring Auction was a great day, with a potluck and nice plants to bid on. Our thanks go to Sally Carpenter for all of her hard work on this event.

Our exhibit at the Sandhills Show was beautiful and represented by outstanding plants, with many receiving ribbons. A special thanks to Robin Gurlitz and Marie Crock for putting together such a phenomenal display, and to Josh Gurlitz for registering the plants. For others who volunteered, thank you for helping to make our participation a success.

And finally, we had the Orchid Repotting Workshop at Orchid Trail, where we had the opportunity to improve our repotting skills. Thanks to John Stanton and Paul Feaver at Orchid Trail for hosting this event and for Paul's excellent instruction.

This month our guest speaker, Gene Crocker from Carter & Holmes, will talk about "Cattleyas for the new millenium". Our society has a huge number of Cattleya lovers so this should be an exciting lecture!

Also, don't forget to check out the TOS Grower Of The Month, featuring Nick Plummer and his amazing greenhouse and orchid collection.

Best Regards and Happy Growing!

Armando Neves
 TOS President 2012



Meeting Minutes 04/09/2012

The April 9, 2012 meeting of approximately 44 attendees was called to order at 7:30 p.m. by TOS president, Armando Neves. The Minutes of the March, 2012 meeting were approved. Members and guests were welcomed.

Sally Carpenter encouraged everyone to come and bring friends to our Spring auction which will be held on Saturday, April 14th at Lake Crabtree County Park in Morrisville. The potluck luncheon starts at noon and the auction begins at 1:00 p.m. Please do not bring orchids to the auction. The deadline for receiving donated plants at the Orchid Trail is Wednesday, April 11th. The auction is always a wonderful event with a good variety of plants available, so bring your friends.

Robin Gurlitz is coordinating the Sandhills Orchid Society Show which will be held at the Cape Fear Botanical Gardens in Fayetteville, N.C. Setup for the show is on Thursday, April 19th. Take-down is on Sunday, April 22nd. The show is entitled "Step into Spring". We need around 60 blooming plants for our exhibit. If you have plants to loan, please email Robin. Plants need to be received at the Orchid Trail no later than Monday, April 16th.

Ray Barkalow was our speaker for the evening. His topic was semi-hydroponics. He brought a variety of materials that can be used in growing orchids this way along with having some orchids for sale.

John and Ann Myhre manned the Welcome Table and sold raffle tickets. Remember, a purchase of 5 raffle tickets gets you 1 for free. Also, bring a plant for the Show Table and receive a free raffle ticket up to a maximum of 5 free tickets.

Anne Williams provided food and drinks for the Refreshment Table.

Ray Barkalow talked about the Paphs. on the Show Tables and Paul Virtue and Armando Neves gave an interesting presentation on the remainder. Thanks, guys!

The Jack Webster Award Plants were:

Greenhouse grown: 1st place for *C. skinneri* "Casa Luna" – Paul Virtue;

2nd place for *Renanthera imschootiana* – Armando Neves; and,

3rd place for *C. intermedia coerulea* – Paul Virtue.

The Non-Greenhouse awards were: 1st place for *V. Roberts Delight* "Garnet Beauty" – Felix Gill;

2nd place for *Sarcoglottis sceptroides* – Nancy Harvey; and,

3rd place for *Epc. Middleburg* 'Maj' AM/AOS – Erica Wolf.

The meeting adjourned at 9:30 p.m.

Submitted by David Pickett, Secretary

Ray Barkalow

April Speaker

In January Steve Arthur came to us and sang the praises of using cedar mulch as a growing medium. Now Ray comes along and tells us about Semi-Hydroponics. While I want my orchids to grow under optimum conditions, I am torn when I get such conflicting advice. I've tried several of the "fads" over the years – I've grown in coconut husks, I've grown in concrete aggregate, and I've grown in DynaRock to name just a few. Currently most of my plants are in New Zealand pine bark, a very hard products that apparently doesn't break down for seven years. However it is very expensive and the shipping costs are outrageous. So, should I try the cedar mulch?? The Semi-Hydroponics?? If you are like me, you don't know which way to turn. I've been on the Internet and done some research on Semi-Hydroponics and frankly I'm impressed by what I've read. I'm going to attempt a brief synopsis. Let me know what you think.

As Ray pointed out, most medium we use with our orchids provides very little nutrition to the plant. In fact he says it is there for mechanical support only. Traditional hydroponics is not suitable for orchids because the constant flow of water over the roots transports pathogens throughout the entire collection. One virused plant in a collection, and suddenly your whole collection is virused. Additionally, it is very expensive in that you need pumps and all sorts of special equipment. Semi-hydroponics (or S/H) can be much cheaper to set up. Ray says he uses custom made plastic pots but you can use any clear plastic container such as cut off soda bottles, deli containers, old paint buckets or even Styrofoam containers. The key is that the bottom be closed, unlike the plastic and clay pots with the cutout bottoms. For S/H, you simply drill two holes into the side of your chosen plastic container, about an inch from the bottom of the pot. Ray does caution that you put the holes side by side, not on opposite sides of the pot. That way if one of the ceramic pieces becomes stuck in one of the holes, the other will remain open. Also, the plastic container should be deeper than our traditional orchid pots. One internet author said the container height should be roughly equal to or larger than the diameter/width of the container. The rule seems to be to add about an inch in height to that of a traditional container. This allows for the reservoir at the bottom of the pot.

For medium, you need one of the LECA products. That's Lightweight Expanded Clay Aggregate, and it comes under multiple brand names – Prime Agra, DynaRok, Hydroton, Aireflor are just a few. These products come as small balls and are designed to optimize water retention and air exchange. Because they are uniform in size they retain moisture uniformly throughout the pot. They also wick moisture up from the reservoir as they begin to dry out. Because of this, roots never dry out because they have a constant moisture supply available. These products can be reused time after time, which does help to defray your costs somewhat. They are available at most garden centers and specialty Hydroponics stores.

When potting your plants, do not try to compress the medium around the roots as you would with a traditional bark medium. Instead, shake the pot and pour the medium around the roots, making sure you get the little pellets into the root ball. You pot your plants to the same depth. It is best to re-pot just as new roots are emerging. The new roots will adapt to this new medium very quickly, while the old established roots may or may not. Even if they don't, it is not a problem as they get flushed out of the pot as they break down. It is critical that you rinse and soak the pellets before using.



The pellets tend to be very dusty and may have some mineral salts on them from the firing process. Ray recommends rinsing thoroughly several times, until your rinse water is clear. Then soak overnight for maximum water retention. The fact that the pellets are uniform in size allows maximum free air space in the pot. Most of these products are available in fine and coarse sizes. Ray recommends you use the coarse for most plants as it provides more air around the roots. Ray also says that pot size is not critical as it is with traditional mediums. Over-potting simply takes up bench space! Ray says he has put very small plants into 12 inch pots and has been amazed at how quickly the roots will grow to fill the space.

Watering will vary with the rate of growth as well as conditions in your growing environment. According to Ray, once a plant is established, it cannot be over-watered. He says that he places his fingers over the two drain holes, and fills the pot rapidly, right to the top of the pot. This forces any debris or plant waste material to be flushed out of the pot, and forces fresh water into the reservoir. The waste water drains from the two drain holes, leaving the roots exposed to fresh air. As the pellets dry out, they wick water up to the roots so the roots are always moist. You can water as often as you choose because you cannot over-water this way – there is no wet decomposing material around the roots that causes the roots to rot. However, it is critical that you water often enough that the reservoir does not dry out.

Ray recommends you fertilize each time you water. He uses a MSU formulation, but you can use whatever you prefer. The key is not to use too much fertilizer. As the water flows over the roots, the roots absorb only what they can utilize. Too much fertilizer and you risk burning the roots – and you are wasting money as the fertilizer is expensive. The old adage “Weakly, weekly” still applies. Allowing the water, with the expensive fertilizer, to simply drain out of the pot can seem very wasteful. Ray cautions that you do not recycle the water by using it on your other orchids. Instead he recommends that you collect the water and use it on the lawn or on shrubs in the yard. You may find that the super growing conditions you create leads to algae growing on the inside of your pots. Ray says this is unsightly but not fatal. He recommends a simple spray from your garden center to remove the algae.

Tolumnias, Acinetas, Stanhopeas and Gongorias do **NOT** do well if grown in this manner. Tolumnias have extremely fine roots that dry very quickly after watering. S/H conditions are too wet for them and they give up the ghost very quickly if grown this way. Ray has not tried Vandas so he cannot report on them. Most other genera respond well to this treatment.

More information on conditioning the pellets and other recommendations can be found on Ray's web site www.firststrays.com.

For me, this represents a method I can try gradually. I will select one or two plants and pot them up. If they do well, I may try one or two more. This way I am limiting my expenditures and if it doesn't work, I haven't risked my entire collection.

THANK YOU JOY LEMIEUX FOR TRANSCRIBING RAY'S TALK AND SHARING YOUR COMMENTS WITH US.

Nick Plummer

May 2012 TOS Grower of the month

Nick is a superb show table presenter with a broad knowledge we suspect is a product of his experience growing orchids and researching them. When he brings plants in they are always well grown, interesting and, more often than not, species.

Nick has been growing orchids for 19 years and 90% - 95% of the orchids he grows are species. In his first semester of graduate school, Nick went to a florist to buy a houseplant for his apartment. He came home with a white hybrid *Phalaenopsis*. Then he bought an orchid book to find out why it was dying. The orchid book listed the addresses of some mail-order nurseries who were happy to send catalogs. Nick bought some more plants and joined the local society in Ann Arbor. Home-made light stands and, eventually, a greenhouse followed in the usual process. Nick now specializes mostly in *Cattleyas*, with some *Bulbophyllums*, *Phragmipedium*. His favorite genera are *Encyclia* and *Habenaria*, particularly the *H. rhodocheila* group. He also like orchids from arid environments, which ties in nicely with his interest in succulent plants. *Cypripediums* (which used to spend the winter in his refrigerator when he lived in Michigan) and *Masdevallias* are no longer grown here in 'warm' North Carolina.

Nick grows his orchids in a 16' X 20' greenhouse which he designed and built himself. The greenhouse has an asymmetrical roof with a long south facing slope and short north facing slope. The concept is to maximize light and minimize heat loss during the winter. The north wall is insulated, while the roof, sides, and south wall are glazed with twin-wall polycarbonate. The benches are made from concrete block and wire closet shelving. The greenhouse is heated with an Empire heater that burns propane and is cooled/humidified with a swamp cooler. It is shaded by a large hickory tree in summer, so it is brightest in spring and autumn. The space seems to work best for *Cattleya* alliance species that grow in Winter/Spring. Due to the shade tree, summer growers don't get as much light as they might like, and the greenhouse is too warm and dry in winter for cool growers.

Although he does not hybridize his plants, Nick does like to self-pollinate or sib-cross various species. He gives the seed to a friend who is good at flasking or sends it to Troy Meyers at the Meyers Conservatory (<http://www.troymeyers.com>). The Conservatory flasks species seed, returns one free flask of seedlings, and sells the rest. It's a great way to inexpensively propagate your plants.

Nick grows his *Cattleya* alliance orchids in terracotta pots with lava rock and varying amounts of aliflor. His terrestrials are grown in plastic pots with peat/perlite/sand or pure sphagnum. After ten years of careful nurturing, he proudly bloomed a *Dendrophlax fawcetti* (close relative of the Florida ghost orchid). Unfortunately it died a year later. He also bloomed a *Eulophia petersii*, a desert plant from Africa, with an eight foot inflorescence. (He did not mention if this required an expansion of the greenhouse!). Nick has some plants mounted on cork, but actually fewer than when he grew under lights. He finds potted plants easier to display when in bloom, and with the inorganic mix in a terracotta pot, he no longer worries about rotting the roots of plants that want to dry out rapidly.

His interests related to orchids are hobby greenhouses, photography and orchid culture.

PHOTOS OF NICK'S GREENHOUSE & GROWING AREA



Enc. Cordegera rosea



GREENHOUSE EXTERIOR



TYP. BENCH



GREENHOUSE INTERIOR SHOWING
INSULATED NORTH WALL



GREENHOUSE INTERIOR SHOWING
LONG SOUTH SLOPE



1st Place Ribbon:

V. Robert's Delight "Garnet Beauty"
Grown by Felix Gill

**Jack Webster Awards
Non-Greenhouse
Grown**



2nd Place Ribbon:

Sarcoglottis sceptroides
Grown by Nancy Harvey



3d Place Ribbon:

Epc. Middleburg "Maj"
Grown by Erica Wolfe

**Jack Webster Awards
Greenhouse Grown**



1st Place Ribbon:
C. skinneri "Casa Luna"
Grown by Paul & Olivene Virtue



2nd Place Ribbon:
Renanthera imschootiana
Grown by Armando Neves



3rd Place Ribbon:
C. intermedia coerulea
Grown by Paul & Olivene Virtue



Courtney Hackney..Growing Tips for May 2012

Dept. of Biology, Univ. North Florida

Email: Hackneau@comcast.net

Paphs and phrags are largely terrestrial plants, which require more constant moisture. They have roots that do not have the hard protective covering found on epiphytes. Let these orchids sit bare-root for any length of time and the roots dry up and die. You can imagine my surprise when an experiment with a paph planted in lava rock yielded fantastic growth and flowers. Admittedly, the experiment was initially done because I am lazy and did not want to repot my paphs every year. Most paphs are grown in some kind of bark mix that holds more moisture, which is ideal for their fine roots. As terrestrial plants, they do not need roots that will survive the drying that epiphytes experience. Unlike some orchid groups, paphs and phrags can grow very fast under the right conditions, i.e. good light and nutrients.

Most expert paph growers repot these orchids at least annually, but there are ways of extending the time between repotting besides growing them in some rock mixture. If your paphs are potted in an organic mix, a simple approach that will extend the time between repotting is to spray a fine jet of water into the top of each pot to wash away the fine products of decay. Often, what are left are larger particles of bark, perlite and charcoal. Once all of the fine material is washed out, add some additional bark on the top and dress with pelletized dolomite lime on the surface to raise the pH of the medium. If the paph just falls from the pot at this time, it needed repotting anyway.

It is the acidity that comes from decomposing bark that causes problems for paphs and phrags. The slow release type of dolomite lime lasts longer, but needs to be added every month or so depending on the pH of your water. Most paph species naturally grow in limestone outcrops or soils derived from limestone, so the addition of the extra calcium and magnesium found in dolomite lime is beneficial to the paph as well as a pH buffer.

Being basically lazy, my approach is to avoid organic media and use lava rock. Lava rock holds water and grows paphs and even phrags well as long as adequate fertilizer is applied. I put larger lava rocks in the bottom of the pot, 1/2-1" and smaller ones on top, depending on the pot size. My large paphs are in 6" deep plastic pots where 1-2" lava rock goes on the bottom. Even here in Florida where water is very basic, it is necessary to add dolomite lime. If you use an organic medium, follow the same procedure, except use plastic peanuts for drainage at the bottom and be aware that organic media can sour quickly. The only modification I have made since I began using lava rock 8 or 9 years ago is the addition of 10% or so of lime rock to the lava rock. I try to match the size of the lava rock when I add lime rock.

The only issue that results from growing large paphs in lava rock is that old growths and their roots eventually decay, producing the acid conditions around roots that can cause problems. Sometimes, a sterile cutting tool can be used to simply cut the old growth from new growths. If done when the orchid is wet the old roots will come out with the old growth, removing a source of decaying organic matter. A jet of water directed at the hole where the old growth was removed will get most of the decaying roots out. I also put a teaspoon of dolomite lime in the hole and cover it with new lava rock.

The only other issue so far with lava rock medium is the plant pushing up and out of the pot. As new roots fill the pot they seem to push the whole plant out and up. It does make it easy to move the whole plant, roots rocks and all into a new pot, but my goal is to not repot.

**NATIVE ORCHID CONFERENCE
WILMINGTON, NC MAY 19-23, 2012**

The Native Orchid Conference 2012 meeting will be held @ UNC Wilmington and surrounding areas. Then there will be a travel day to Brevard with field trips in that area. The dates are May 19-23. Cost is \$125 per individual / \$225 per couple. The field trip last year into the Green Swamp area around Wilmington was great fun and a worthwhile event. **Paul Welty** will be more than happy to field questions from any individuals whom are interested in attending.

Paul can be emailed at pwelty@averillpark.net.

MORE ORCHID EVENTS

Our **TOS FALL AUCTION** is now being planned. Contact **Armando Neves** to volunteer for THIS wonderful events.

Watch this space for news about **TOS GROWERS DAY**, our annual event that concentrates on orchid culture and growing skills.

The **Triad Orchid Society** will be having their show in the fall of 2012. We will keep you informed

Triangle Orchid Society Meeting Agenda:		Calendar	Speaker	Topic
7:00-7:30	Set Up Show Table and Chairs	May 14	Gene Crocker Will sell plants	Cattleyas for the New millenium
7:30-7:40	Business Meeting Announcements	June 11	Geraldine Powell Will sell plants	The ABC of cool weather orchids
7:40-8:30	Program			
8:30-8:50	Refreshment Break	July 9	Michael Coronado Will sell plants	Vanda Culture
8:50-9:20	Show Table Review, Show Table Awards			
9:20-9:30	Raffle			

Welcome Table	Refreshments
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May	Nancy Harvey & Lee Allgood	Robin & Josh Gurlitz
June	Connie Howard	Anesha Johnson & Jeanette Massengill



Associated with

Sarah P Duke Gardens

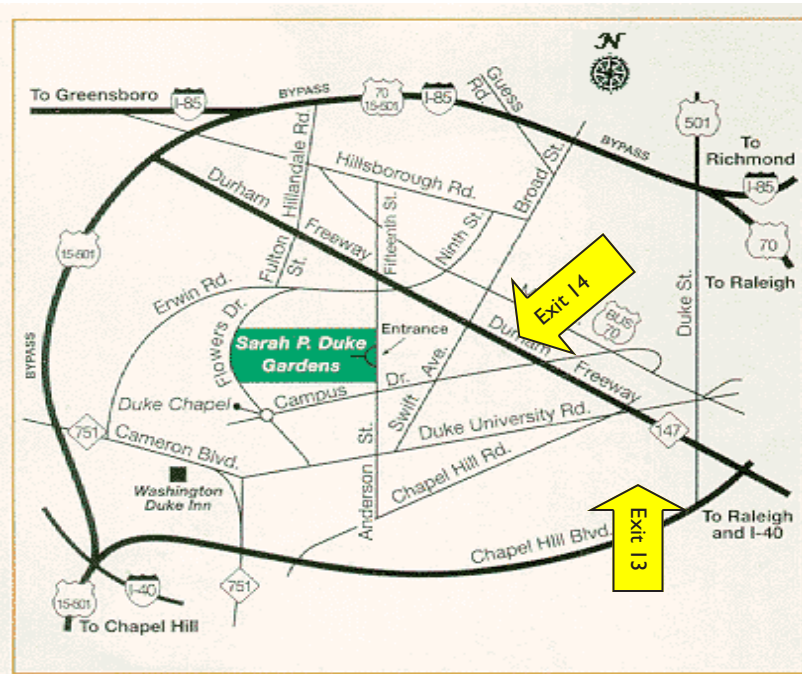
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TOS Exhibit at the Sandhills Show

Ribbon winners include: Lee Allgood, Melissa Bullard, Marie Crock, Robin & Josh Gurlitz, Bob Meyers, Armando Neves, David Pickett, Paul & Olivene Virtue, Phil Warner.



**The Triangle Orchid Society
meets at the
Sarah P. Duke Gardens,
Durham, NC
The Second Monday of the Month
at 7:30 PM**

Visitors are Welcome!
www.TriangleOrchidSociety.org

From the East. **Exit 13 on the Durham Freeway(#147)**
Head South on Chapel Hill Rd. Turn right on Anderson St.
The Gardens are on the left.
From the West. **Exit 14 on the Durham Freeway (147)**
Head South on Swift Ave. Turn right on Campus Drive ,
Turn right on Anderson St. The Gardens are on the left.

Triangle Orchid Society Dues are:

\$20 per year single, or **\$26** per year for two persons living at the same address.