



Orchidacea

Newsletter of the
Triangle Orchid Society

Associated with
Sarah P. Duke Gardens

Speaker for April 9, 2012 Ray Barkalow

My orchid growing began when, as a Ceramic Engineering student at Georgia Tech., I volunteered at the future Atlanta Botanical Gardens. I was given a big, "floofy" purple cattleya. I was hooked. From there I became a pro by killing my weight in plants

My profession involved a lot of travel, at one point averaging 13 flights a week for three years!

Not wanting to become a "super pro" I needed to find a way to keep my orchids happy and healthy while I was a gone. This led to the development of Semi-Hydroponics

From a greenhouse disaster which killed 20 years of orchids. I "accidentally" started a business by writing off my new greenhouse equipment as a business expense. So now there was a business looking for a product. Divisions on some of my orchids were offered to the internet orchid community via a post to the rec.gardens.orchids newsgroup. My business had started!

The best part about the exposure that First Rays has given me is the ability to communicate with folks from around the world on the fascinating subject of orchids. Sharing the obsession is second only to growing the plants.

Pre-order through www.firstrays.com

Ray will have plants to sell

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

Please remember to pay your 2012 dues promptly.

For your convenience a statement accompanies this newsletter. Print it, fill it out, and bring it with you to the January meeting. Or, you can send it, with a check, to:

Sally Carpenter, TOS Treas.
412 Church Street
Smithfield, NC 27577

What could be simpler??

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

www.TriangleOrchidSociety.org

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A Word From The President

Greetings Everyone!

This month our guest speaker, Ray Barkalow, will teach us how to grow orchids in Semi-Hydroponic culture. If you are a overwaterer like me, the idea of a technique that prevents you from killing an orchid from too much water sounds very interesting!

April this year is loaded with fun and exciting orchid activities! The Spring Auction happens on Saturday April 14 at the Lake Crabtree in Morrisville. See more details in the newsletter and come join us for a very nice day with a potluck lunch and bidding on beautiful orchids.

The Sandhills Orchid Society Show happens April 20-22, in Fayetteville. We are preparing a large display for this show so if you have blooming orchids to showcase in our exhibit contact Robin Gurlitz, robing@i-gga.com.

But we are not done yet! The Orchid Repotting Workshop is scheduled for April 28, Saturday, 10-11:30am at the Orchid Trail, Morrisville. This event is limited to 16 attendees so we require prior registration.. Email us at info@triangleorchidsociety.org and request to participate.

Best Regards and Happy Growing!

Armando Neves
 TOS President 2012



Meeting Minutes 03/12/2012

The March 12, 2012 meeting of approximately 50 attendees was called to order at 7:30 p.m. by TOS president, Armando Neves. Members and guests were welcomed. The Minutes of the February, 2012 meeting were approved. Everyone was encouraged to pay their dues to Sally Carpenter, our treasurer. There were many beautiful plants on the raffle table. Thanks to Robin and Josh Gurlitz for manning the Welcome Table.

Our Spring auction will be held on Saturday, April 14, 2012 at Lake Crabtree County Park in Morrisville. Sally Carpenter encouraged everyone to respond to the survey as to whether they will attend so that we will have an idea of the number of plants to feature. Please bring a dish to the potluck luncheon which starts at noon to be followed by the auction at 1:00 p.m. Donations of orchids should be taken to the Orchid Trail no later than April 8th or brought to the April 9th meeting. Please do not bring orchids to the auction. Please encourage your friends to come. Everyone always has a great time and you will be helping the Society with your participation.

There will be a repotting workshop sponsored by the Society to be held at the Orchid Trail on Saturday, April 28, 2012 from 10:00 a.m. to 11:30 a.m. There will be a 30-minute talk. The workshop is open to 16 participants. To participate, please send an email to info@triangleorchidsociety.org Please bring a small plant to repot. There will be a minimal charge payable to the Orchid Trail for the cost of materials. Thanks to John Stanton for allowing us to hold this event at his establishment.

The Society wants to make membership even more beneficial to everyone. You can help the Board by completing the survey that was emailed to you by board member Sally Carpenter.

The Sandhills Orchid Society is hosting a show in Fayetteville entitled "Step into Spring." They would like us to put in a 50' exhibit. To do this, we will need plants and volunteers. The show will be set up on Thursday, April 19th and will be taken down on Sunday, April 22nd. Contact Robin Gurlitz to volunteer (robing@i-gga.com).

The "TOS Grower of the Month" is a new feature that is open for participation by all members who wish to share their experiences with growing orchids. There will be a different person featured in future monthly newsletters. To participate, send an email to info@triangleorchidsociety.org

Ralph Sears, vice-president, introduced our speaker, Dr. Robert T. McMillan. His presentation was entitled "Infectious and Non-infectious Diseases of Orchids." He may be reached at mcmillan@kerrys.com

Thanks to Michael Le who provided refreshments for the evening including some excellent homemade goodies. Thanks Michael!

Nick Plummer and Paul Feaver gave an excellent presentation on a variety of plants on the Show Tables. Please raise your hand if you want to know more about a specific plant that is not mentioned.

The Jack Webster Award Plants were: Greenhouse grown: 1st place for *D. primulinum* grown by Armando Neves; 2nd place for *D. farmeri* grown by Paul and Olivene Virtue; and, 3rd place for an unknown Cymbidium grown by Alan Miller. The Non-Greenhouse grown awards were: 1st place for *Cyp. formosanum* grown by Richard Turner; 2nd place for an unnamed reed stemmed Epidendrum grown by Elliott Anderson; and, 3rd place for *Sarc. Hartmanii* 'Blue Know' grown by Sarah Patterson.

The meeting adjourned at 9:30 p.m. Submitted by David Pickett, Secretary.

Dr. Robert McMillan

March Speaker

Dr. McMillan has retired from academia and now focuses his research on infection and noninfectious diseases as they relate to the Phalaenopsis and Dendrobiums that are grown at the Kerry Nursery in Gainesville, Fl. He has spent thirty eight years as a plant pathologist and is recognized throughout the industry as one of the leading experts in his field.

I cannot begin to describe the plant diseases that Dr. Mc Millian discussed. I can and will however, report on the way these pathogens are passed from plant to plant, and what Dr. McMillian recommends as controls. Most plant diseases he described appear to be spread by air borne spores. As the spores are microscopic there is no way to know they have entered your growing area until the results of their infestation becomes visible. Spores are also transmitted by rain, by splashing water, and by water left standing on the foliage.

Dr. McMillan recommends that you inspect your plants regularly. Forget the flowers he says, check out the plant and be on the lookout for the telltale discolorations. Most pathogens first show themselves as lesions on the foliage – areas of marked change in color that quickly intensify. Dr. McMillian states that in the early stages it is possible to control most pathogens by pruning the affected foliage and spraying the affected plant. When pruning foliage it is critical to sterilize your equipment, which he admits is problematic. Heating pruning shears with a propane torch will not necessarily kill pathogens as tissue may be imbedded between the blades of your shears where the heat from the torch does not touch them. Additionally, repeated use of a torch to sterilize blades will greatly shorten the life of the shears. We all know how expensive good pruning shears can be! Dr. McMillian recommends that when cutting is involved, one should use single edge razor blades, and dispose of them after each use. Use each blade on only one plant!

If you are using sprays and chemicals, store your chemicals in a cool dry location. Use them quickly as their shelf life is generally very limited. As many of these products are sold in fairly large amounts that cannot be used by the average hobby grower in a single season, Dr. McMillan recommends that members of orchid societies team up to purchase chemicals. I noted that some of the chemicals that Dr. McMillan recommended can only be purchased if you have an Applicators license. These can be obtained by signing up for a class with the Extension Service and writing their exam. Once you have the license you must retake the training at regular intervals to remain eligible to purchase these chemicals. Dr. McMillan pointed out that the cost of chemicals is often prohibitive – before treating your diseased plant, consider the cost of treatment versus throwing the plant out and replacing it.

The best prevention techniques involve prevention. Maintaining a clean growing area is critical. Debris left to rot on the floor of the greenhouse can produce bacteria that can infest an entire growing area. Adequate air movement in the growing area helps control infestations from air borne spores. Additionally, water left to pool in the floor can become breeding grounds for various bacteria, not to mention mosquitos.

Dr. McMillian's mantra is threefold – check plants regularly, don't wait to treat, and identify what you are treating prior to treating. He also recommends selective pruning when a problem first comes to your attention. Then consider the cost of the chemicals you would use against the cost of replacing a diseased plant. Often it may be cheaper to replace the plant. However, if you decide you do want to treat the plant, choose the product that is least damaging to the environment but is still effective for its intended use. As many similar products are available, choose the one with the highest percentage of active ingredient that will be effective. As too high a concentration will kill your plant, and too low a concentration will do nothing towards controlling the pathogen, it is critical that you determine how high a concentration you actually need.

The most reassuring thing Dr. McMillian had to say was that he is available to identify pathogens for you. He asks that you send samples to his lab

c/o Kerry's Nursery,
21840 SW 258th St.,
Homestead FL 33031.

His e-mail address is rmcmillian@kerrys.com. You can also reach him by phone at (786) 256 5425.

THANK YOU JOY LEMIEUX FOR TRANSCRIBING DR. McMILLAN'S TALK

ANNOUNCEMENTS SPRING SHOWS

SANDHILLS ORCHID SOCIETY

Exhibits set up: April 19

Show open to the public :

April 20 thru April 22nd

At Cape Fear Botanical Garden, in Fayetteville, NC

OLIVENE & PAUL VIRTUE

April 2012 TOS Grower(s) of the month

Anyone who has seen Paul and Olivene's orchids will agree they are breathtaking. Below you can read their advice on how to grow great orchids. A full transcript of the Virtue's interview with TOS is on our website.

Tell us more details about your collection and your growing space?

We have 700 orchids and a 12'x18' greenhouse with propane heating and a swamp cooler for hot days, all automatically triggered by thermostats. There are too many plants for the greenhouse in the winter so some come into attic dormer window shelves, and we have a plant cart that is used to keep Cymbidiums outside on sunny winter days, which is rolled back into the garage when overnight temps are expected to go below 32. Each spring, all but the low-light species (mostly Phals) go outside into a temporary shade house that I rebuild each spring and tear down in the fall (about 12'x45'). It is built from 4"x4" and 2"x4" and covered with 40% shade cloth - a little bright for many plants but I find ideal for Cattleyas and Vandas. Blooming plants are brought into the house to enjoy, though we find that more than a few days can start to set back high-light plants. Cymbidiums that are in bloom go into south-facing windows.

Tell us more details about your favorite growing media / pots / baskets / mounts

We start plants from compots into 2" clay pots with fine lava rock or fine bark mix. Next year into 4" clay pots with medium lava rock, then 6" when they outgrow those. The next step is to 12" wooden baskets, with large lava rocks, that I build from cedar siding that I rip to 3/4" strips. The Vandas go into baskets or are left bare-rooted and watered each day, even in winter. Phals are in a mix of Lava rock or bark mix and we are experimenting with Pro-mix. We tried all sorts of media over the years, but find lava rock the best for most groups. Bottom-bloomers such as Stanhopias are in wire baskets lined with sphagnum. We have a good Broughtonia species and hybrid collection and those and the dry growing Brazillian bi-folate Cattleyas such as Aclandiae are mounted on cork, as are the few Encyclias that we have had survive. I am a heavy waterer so lava rock works best, and the build up of salts on the rock over the winter leaches out in the summer rains.

Would you like to share any growing tips?

Giving each orchid the correct light, to my mind is probably the most important. Not everyone in my household believes this, but Cattleyas or Paphs that languish in bloom to long inside the house can be set back for years. Vandas are not allowed in the house because it is too dark and they are too difficult to water inside. Next, what works for me, an avid waterer, is growing in an open basket with rocks that dry out quickly and fertilizing at quarter strength every other day. We use rain water and believe that this helps a lot. Soft growth can come from such a watering/fertilizing regime so you need to be vigilant for black rot on new growths on cattleyas.

**PHOTOS OF THE VIRTUE'S
GREENHOUSE &
GROWING AREAS**



BENCH LIGHTS



GREENHOUSE & SHADE STRUCTURE



WATERING SYSTEM



GREENHOUSE



GREENHOUSE UNDERBENCH



**Jack Webster Awards
Non-Greenhouse
Grown**

1st Place Ribbon:
Cyp. formosanum
Grown by Richard Turner



3d Place Ribbon:
Sarcochilus hartmanii
Grown by Sarah Patterson



2nd Place Ribbon:
Epi. NOID
Grown by Eliot Anderson

**Jack Webster Awards
Greenhouse Grown**



1st Place Ribbon:
Den. primulinum
Grown by Armando Neves



2nd Place Ribbon:
Den farmerii
Grown by Paul & Olivene Virtue



3rd Place Ribbon:
Cymbidium NOID
Grown by Alan Miller

Courtney Hackney..Growing Tips for April 2012

Dept. of Biology, Univ. North Florida

Email: Hackneau@comcast.net

As promised in the last column, this month's discussion will focus on repotting orchids that do not have rhizomes, specifically phalaenopsis (phals). Phals store water in their roots and so need moisture on a regular basis. This requires different culture than other orchids and a different approach to repotting. Phals are generally repotted when they finish blooming, i.e. now, if they need it.

Phalaenopsis are the most common orchid around these days and often the first one new hobbyists try to grow. When purchased, they are usually in a plastic pot in sphagnum moss, but can be found in almost any medium. In nature, phals have roots more characteristic of cattleyas because they grow as epiphytes attached to trees, where roots dry out between rain events. Mounted or in a coarse bark medium, phal roots are hard and resistant to drying, unlike the nice soft roots found in peat or other wetter media.

Roots on phals grown in sphagnum will not easily adapt to epiphyte-like conditions, nor will roots grown in a coarse, dry medium adapt to sphagnum. Roots of both will die if the type of medium is changed, although new roots will grow and establish in any medium. This will, however, set the phal back.

Phals grow new roots to supply each new leaf with water and nutrients. The loss of roots from repotting will result in the loss of leaves near the base of the plant. The first step in repotting is to determine if your phal actually needs to be repotted or can wait another year. If your phal has started losing its lower leaves then it likely needs to be repotted because roots have died indicating poor media. If the phal has been in the pot for a couple of years it needs to be repotted.

Phals will grow in just about any medium as long as you adjust the watering and fertilizing regimen to suit the new medium, but for best results, do your best to match the new medium with the old. Most of the big box stores sell small quantities of Sphagnum moss.

To begin, soak the medium and remove the phal from the pot. I prefer to leave the old flower spike on the plant so that there is something to hold during repotting. Often new roots are also emerging now at the base of the plant and holding pressure there could damage them. Gently shake or wash the old medium from the roots so roots that remain are nice and white. Use a gentle jet from your garden hose. Remove black or soft roots, which are dead. If most roots are white and thick it is possible to place the phal back in the same pot. Put some plastic peanuts right under the stem and then carefully work the sphagnum in and around the roots. Wet the sphagnum first and then squeeze water from it before packing around roots. The object is to secure the phal in the pot firmly.

If many of the roots are dead, use a sterilized blade and remove all but the white firm roots. You should cut the live roots off, 4-6" length if you are changing to a new medium. This will encourage new roots to grow in the environment of the new medium. Cutting off live roots is hard to do, but necessary if you change media. Sprinkle cut and damaged roots with cinnamon powder. It is a natural fungicide.

**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.

TRIANGLE ORCHID SOCIETY AUCTIONS

Our TOS Spring and Fall Auctions are now being planned. Contact **Sally Carpenter** to volunteer for either or both of these wonderful events. The auctions are our principal fund-raising events each year. They promise great value and the opportunity to purchase some exotic species and hybrids. It is also great fun to volunteer and participate.

Sally can be emailed at scarp919@aol.com.

Triangle Orchid Society Meeting Agenda:		Calendar 2011	Speaker	Topic
7:00-7:30	Set Up Show Table and Chairs	April 9	Ray Barkalow Will sell plants	Semi Hydro Orchid Culture
7:30-7:40	Business Meeting Announcements	May 9	Gene Crocker Will sell plants	Cattleyas for the New millenium
7:40-8:30	Program	June 11	Geraldine Powell Will sell plants	The ABC of cool weather Orchids
8:30-8:50	Refreshment Break			
8:50-9:20	Show Table Review, Show Table Awards			
9:20-9:30	Raffle			

Welcome Table		Refreshments
April	Ann & John Myhre	Anne Williams
May	Nancy Harvey & Lee Allgood	Robin & Josh Gurlitz



Associated with

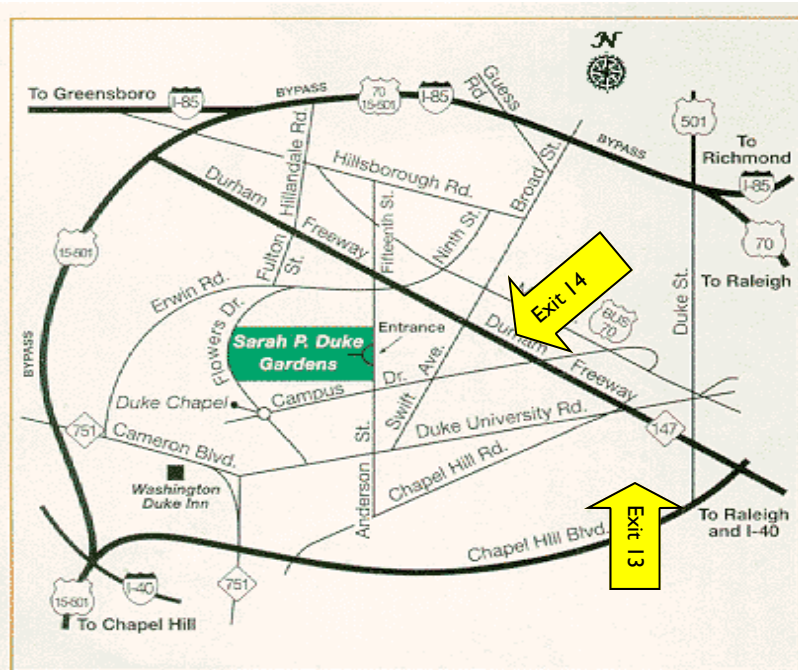
Sarah P Duke Gardens

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Josh Gurlitz

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Cattleya Bow Bells “Signal Mountain”



**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.

Mail to: Sally Carpenter, TOS Treasurer 412 Church St. Smithfield, NC 27577