



Orchidacea

Newsletter of the
Triangle Orchid Society

Associated with
Sarah P. Duke Gardens

Speaker for November 8, 2010

Bob Davidson

Bob Davidson was given his first orchid plant while living in southern California in the early 1980's. During the ensuing year he was a member of no less than six orchid societies, built his first greenhouse, and spent every weekend searching for plants and orchid information. Please remember that back then you could not just pop in at your local store to pick up an orchid plant and since there was no Internet, information about orchids was much more difficult to come by. During that decade he was on the board of multiple orchid societies and was the president of the Long Beach Amateur Orchid Society. In 1989 he bought an orchid nursery in central Florida with about 20,000 square feet of greenhouse space. He spent a decade there making hybrids and running the business. During those years he wrote several articles that were published in *Orchids* magazine and in the *AOS Orchid Culture Guide*. In 1999 he sold the business and his orchid collection and moved to North Carolina. He now has a single greenhouse where he makes hybrids and grows plants that he sells at the Carrboro Farmer's Market on weekends.

T.O.S. Members: bring your orchids to our Member Sale this month.

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



Christieara Boonyarit "Moonlight"

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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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Minutes of the Last Meeting 10/11/2010

The October meeting was called to order at 7:30 pm by the president of the TOS, Robin Gurlitz. Members and three guests were welcomed. Both the September minutes and financials were accepted and approved. Remember, we have a page on Face Book and the website is updated. Raffle tickets were available for \$1 each. Bring a plant for the Show table and receive a free raffle ticket for up to a maximum of 5 tickets. Remember, if you **purchase** 5 raffle tickets, you will receive a 6th one for free.

Thanks to Lori Chapman and Bob Molter for providing refreshments and the festive Halloween decorations, Lee Allgood for hosting the Welcome Table and Paul Feaver for setting up the show tables.

Our Fall Auction was held on Sunday, September 26th at Lake Crabtree County Park in Morrisville. A potluck luncheon started at noon and the auction at 1:00 p.m. Sally Carpenter, Chairperson of the event reported that the Society netted about \$2272.00. There were 167 plants auctioned with an average sales price of \$19.83. Thanks to Sally for chairing the event. Sally thanked Nancy Harvey for setting up the potluck, Michael Joe-hrendt, Phil Warner, and Bob Meyer for being the auctioneers. Bob Meyer also transported orchids to the auction site. Thanks to Lance Carpenter and Josh Gurlitz for recording bids, and Melissa Bullard and Robin Gurlitz for being runners. Thanks for the generous plant donations from Jaimie Graff, Bob Meyer, Phil Warner, and, Mack & Mildred Howell. Thanks to David Ladd for splitting the money with us on his orchids that we auctioned. A very special "thank you" to John Stanton for his help with the orchids and Paul Feaver for his help at the greenhouse with sorting.. Robin asked for a few more volunteers for the State Fair exhibit.

John Myhre, Paul Virtue, and Alan Miller comprise the Nominating Committee for new board members. Alan Miller presented the list of 2011 nominees: President – Leo Sagasti, Vice President & Program Chair -- Ralph Sears, Treasurer – Melissa Bullard, Secretary – Armando Nevis, Board of Trustees Term Expiring 2011 – David Devine and David Pickett, Board of Trustees Term Expiring 2012 – Lee Allgood and Sally Carpenter, and, Board of Trustees Term Expiring 2013 – Paul Welty and Manuel Monserrate.

Robin Gurlitz introduced our speaker, Alan Koch from Gold County Orchids.

Nick Plummer and Paul Feaver did an excellent job of discussing the beautiful plants on the Show tables. Time prevented every plant from being discussed. (You may bring to the attention of the presenter a question about a specific plant if that plant has not been discussed.)

The Jack Webster Award Plants were: Greenhouse Grown Awards:

- 1st Place: Habenaria myriotracha -- Paul Feaver;
 2nd Place: C. maxima -- Paul Welty;
 3rd Place: Phal. unknown – Olivene Virtue.

The Non-Greenhouse Grown Awards:

- 1st Place Cyc. Jean E Monnier – Lee Allgood;
 2nd Place: Paph. Spicerianum – Lee Allgood;
 3rd Place::Bulbophyllum unknown – David Pickett.

The meeting adjourned around 9:30 pm. Minutes submitted by David Pickett, Secretary, TOS.

Treasurers Report Melissa Bullard

October 2010

INCOME

Plant Raffle..... \$ 66.00
Auction.....\$3,425.00
 Total Income..... \$3,491.00

EXPENSES

Refreshments.....\$ 33.93
 Raffle Plant.....\$ 25.00
 Auction.....\$ 829.43
 Speaker Exp.....\$ 133.74
 Subscriptions & Rental.....\$ 308.00
Duke Garden Rental..... \$ 450.00
 Total Expense.....\$1,780.10
Net Income.....\$ 1,710.90



Speaker Notes—Alan Koch

Notes from Joy Lemieux on Alan Koch's talk. Thank you, Joy.

I don't know about you, but Alan presented so much information, so fast, that my head was spinning. I was writing furiously as he talked, and sure hope I got it all!

Alan recommends that you always pre-water your plants before you fertilize. He said that in his greenhouse they water everything, then return and water again but the second time they add fertilizer. The reason for this is that fertilizer can burn tender root tips if applied to dry roots.

Alan also recommends foliar feeding. He said that orchid plants have macro-pores on the underside of their leaves through which they absorb 90% of their nutrients. In nature orchid plants are buffeted by wind and rain and they hang at weird angles. This exposes the underside of the foliage. However when we water at home we tend to water from the top down, or directly into the pot, so we generally miss the underside of the leaves.

Most orchid fertilizers contain the traditional combination of nitrogen, potassium and phosphorus. Alan maintains that what orchids really need is the trace elements, especially calcium. Calcium is critical to the development of flower buds. Calcium can be applied at any time, in any amount. In fact, here in the south plants require more calcium than in northern environments. Alan recommends the Michigan State University (MSU) fertilizer mix (or Cal Mag, a very similar commercial blend) because these offer a wide range of trace elements, including magnesium. However, Alan cautioned that the MSU mix has insufficient calcium for our summer heat and Alan recommends supplementing with calcium nitrate. Calcium content is apparently slightly higher in Cal Mag. Alan recommends 2 parts calcium to 1 part magnesium in any fertilizer mix. He pointed out that when we have more day light hours, plants need more fertilizer, while during our winter months, when there are less daylight hours, plants require less. This is because plants photosynthesize more while in active growth, which is generally spring and summer. You may have noticed that root tips grow more rapidly in the spring. Alan says that root tip growth produces an acid that signals the plant to photosynthesize.

For pest control, Alan recommends a mix of 1/3 rubbing alcohol, 1/3 Murphy's soap and 1/3 water. This mixture can be sprayed directly onto the foliage, but be careful not to spray the flowers or buds as it will leave spots. The fungicide Alan recommends is hydrogen peroxide. He stated that hydrogen peroxide promotes elongation and branching of the root system. Alan pours hydrogen peroxide directly into the pot each and every time he repots. He also sprays it on foliage with bacterial damage. It is important to remember that once you open the bottle, it must be used immediately because once it is exposed to the air the oxygen it contains dissipates and it is no longer effective. Alan recommends that you buy the standard 3% variety available at your drug store, and that you pour it onto your plants without diluting it in any way. It is also very effective for leaching salt building up out of media with established plants that you don't necessarily want to repot just yet.

Plants need good air movement. Alan warns against crowding plants too closely on the bench, or putting the up against walls or fences where circulation can be restricted.

If you are using a bark mix, soak your bark and rinse several times before placing your plants in the bark. This removes any residual salts that may be present due to processing. Alan said that when using bark, the harder the bark the longer it will last. There is now a New Zealand pine bark available that is extremely hard and some growers claim it will last seven years before breaking down. You can add 20% perlite to your bark as it lightens the mix and also has some antifungal properties. Alan believes that charcoal is wasted on Cattleyas, but can inhibit the break down of media for other genera.

If you like growing in sphagnum moss, Alan advises against using the cheaper Chilean varieties. Often it is full of weeds. The New Zealand varieties have longer strands and last far longer than the Chilean counterpart. When Alan grows with sphagnum, he uses only enough to make a collar around the top of the pot to hold the plant in place. The bottom of the pot is left empty to encourage the roots to stretch and fill the space. Additionally, the empty pot provides for better air circulation around the roots. New Zealand moss can be obtained from Cal West Tropicals, US Orchid Supplies or directly from Alan at Gold Country. I know that he brings it in by the ship load from New Zealand and distributes it directly from his green house.

Alan stressed that it pays to use quality media, and to repot in a timely manner. As media begins to break down it becomes soggy and loses its ability to hold oxygen – a must have for every plant.

Plants can be mounted rather than placed in pots. You can attach plants to almost any material. Alan uses gutter guard, wild grape vine, tree fern fiber and of course cork. Cork has become very expensive and is no longer generally available, but any type of hard wood can be used instead.. Just remember that the harder your material, the longer your mount will last. Plants are generally tied onto a mount with fishing line or other light weight material. Roots can be left exposed with a pad of gorilla hair (coir or shredded coco nut shell) or sphagnum to help hold them in place. Many plants respond well to being mounted because their exposed roots encourage photosynthesis. Similarly, clear plastic pots are very popular because they allow for photosynthesis from the roots. Alan believes that plants grown in clear plastic grow faster than plants grown in clay or more traditional green or black plastic. However, clear plastic pots also tend to produce lots of algae so you must repot frequently.

Returning to the issue of calcium, Alan said that some growers top dress plants with Epsom Salts (1/2 tsp sprinkled over the top of the medium). This, he feels is effective with *Phalaenopsis* but not with other genera. He prefers top dressing with crushed oyster shell or dolomite. Lime is not as effective because it changes the Ph of media, and changes the absorption rate of many plants.

Becoming more specific, Alan noted that *C nobilior* must dry out well between waterings, while *C aelandiae* does not do well in any kind of pot. *Leptotes bicolor*, which blooms in the spring does best if mounted or in a basket with a little support for the roots. While adaptable to either hot or cool growing conditions, *L bicolor* does best in low light. *Eurychone rothschildiana* is an *Angraecum* which hates repotting. It grows with a latent fungus that is always present on its root system. When it is repotted, and the roots broken or damaged, the fungus becomes active and can destroy the roots. Alan recommends drenching the plant with hydrogen peroxide.

If you have *Phal pareshii* var *lobbii*, don't be alarmed if the foliage all turns yellow and drops off – this is a deciduous plant and needs a rest period during which you do not water it at all. *Dockrillias* like to be placed on horizontal mounts, growing much faster this way. Many *Dendrobiums* need a rest period during which they receive very limited moisture. This is especially true of the *nobile* and *aggregatum* varieties. With the *aggregatum* varieties especially, do not water until you see new growth, which can be as long as 3 – 4 months. If you are growing *Latourea Dendrobiums*, (the neat weird ones with the black hairs on the canes) repot only when you see evidence of new root development. These plants produce new roots only once during the year, and repotting can stress or retard root development.. Most *latourea* varieties come from Papua New Guinea and need copious amounts of water in the hot summer months.

Oncidiums need more calcium than any other genera of orchids. In fact the bloom size of *O psychopsis* can be enhanced significantly with the addition of calcium. *Vandas* must have their roots exposed, and require no ac-

companying media. The absolutely must have good air movement over the exposed roots. If you are growing Bulbophyllum, remember that there are two types – those with umbels and those with racemes. The types with umbels need a great deal of water, while those with racemes require significantly less.

Phalaenopsis need well developed roots systems to flower. If you see them in clear plastic pots you will notice that the roots wrap around and around the pots, exposing all the roots to sunlight for photosynthesis. If Phals produce aerial roots that can be a sign that the media has broken down and the roots are trying to escape into a less stressful environment.

Paphiopedulums grow naturally on limestone cliffs, and therefore absolutely need large amounts of calcium. They do best if repotted every year (or even more often!). Alan recommends pulling the bottom leaf off the fan. This, he says, stimulates new root production. Alan does not recommend growing Paphs in sphagnum as the moss tends to adhere to the roots, ultimately suffocating the plant.

For Cattleyas, which are Alan's specialty, he had lots of hints. If you are growing lithophytic varieties, such as the rock growing Laelia, he notes that they typically grow in cracks on rock faces. The roots establish themselves in decomposing leaf mould in gravel. Alan recommends growing these in aquarium gravel top dressed with sphagnum. If you use bark, use something very hard, such as the New Zealand pine bark. Hadrolaelias grow on mountain sides rich in iron ore. Alan recommends adding calcium and iron (iron chelate, available in most nurseries). C walkeriana likes to dry its roots between waterings. It is a twig epiphyte that grows in the tree canopy. Its roots run out along the tree branches, searching out the light so it can photosynthesize, while the plant itself remains in shade. It does well in a basket with its roots exposed. C intermedia is extremely variable. It grows in full sun at sea level to snow levels in mountain areas. The plant itself is extremely variable, and will adapt to extreme light and temperature conditions. C schilleriana is extremely hard to grow. It will suffocate in a pot, so put it in a basket or on a mount. It photosynthesizes and transpires through its roots, not its foliage. Alan closed his presentation by commenting that hybrids are generally much easier to grow than species. The one critical piece of information he wants everyone to understand is that ROOTS ARE NOT OPTIONAL!



TRIANGLE ORCHID
SOCIETY

N.C. STATE FAIR
EXHIBIT

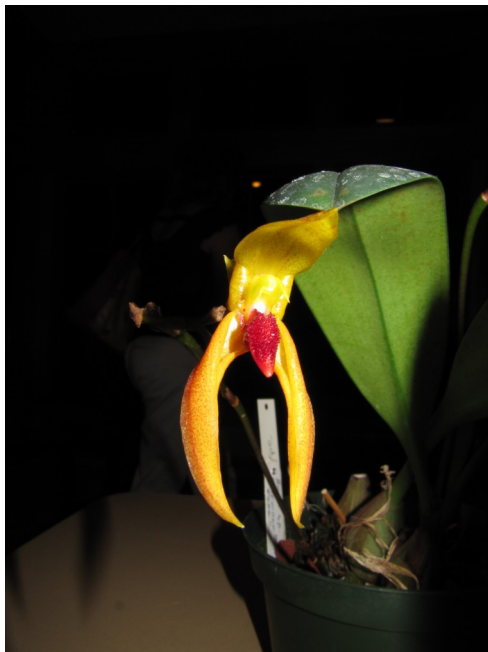
2010



1st Place Ribbon:
Cyc. Jean E. Monnier
Grown by Lee Allgood



2nd Place Ribbon:
Paph Spiceriana
Grown by Lee Allgood



3d Place Ribbon:
Bulbophyllum unknown
Grown by David Pickett

**Jack Webster Awards
Greenhouse Grown**



2nd Place Ribbon:
C. maxima
grown by Paul Welty



1st Place Ribbon:
Habenaria myriotricha
grown by Paul Feaver



3rd Place Ribbon:
Phal. unknown
grown by Olivene Virtue

Growing Tips for November

By Courtney T. Hackney EMAIL at Hackneau@comcast.net

Have you ever considered growing your orchids using natural controls for disease and pests. There are a number of articles in orchid growing magazines suggesting various ways to use natural mechanisms in managing an orchid collection, but they are difficult to use and certainly not 100% effective.

Commercial greenhouses typically go the other direction, trying to maintain as sterile a growing area as possible; no pests, weeds or disease. Their goal is to produce perfect looking plants that can pass any inspection when shipped. Most do a great job, but use many different control measures that are not always the best for the environment or people. They succeed largely because they only grow the orchids for a relatively short period of time and then they start over with new seedlings.

Those of us who maintain collections and plants, some of which may be a 100+ years old, do not have the luxury of starting out with pest or disease-free plants every season. We get whatever comes with the plant when we acquire these old clones and divisions. On the other hand, we are not in business to grow plants quickly or to produce perfect looking plants for sale to the public.

A few decades ago, farmers in the U.S. adopted a strategy of not using pesticides or herbicides until the problem reached the point where not treating cost more than letting the problem continue. As a result, pesticide and herbicide use declined and farmers made more money; a perfect win-win for farmers and the environment.

This has been my approach for many years. My greenhouse is home to several dozen anole lizards (brown and green), Mediterranean geckos (nothing like the GEICO one), hundreds of cricket frogs that are just a 1/2" in size, a few green tree frogs, 3 or 4 toads that frequent the damp areas under the benches, and a snake or two (which may explain where one of the toads went).

The fact that these predators seem to maintain a healthy population suggests that they have plenty to eat. When I visit my greenhouse at night, I find a few insects on the surface of the media, but not many. My predators feed on any small insect they find during the day and night. None of these predators impact cattleya's scale at all, so I use a hormonal pesticide (Distance) for control. This spray doesn't seem to impact any of my predators.

An orchid-growing friend asked me if I ever had problems with thrips. In the past, there have been one or two incidents, but the thrips just disappear fairly quickly. I found some on a Camellia flower bud last week and decided to try an experiment I hope I do not regret. I placed the flower bud, thrips and all, in my greenhouse in a flower tube. When I came back in 15 minutes or so one of the Carolina anoles (green ones) was on the bud and not a thrip was to be found. The lizard looked happy too.

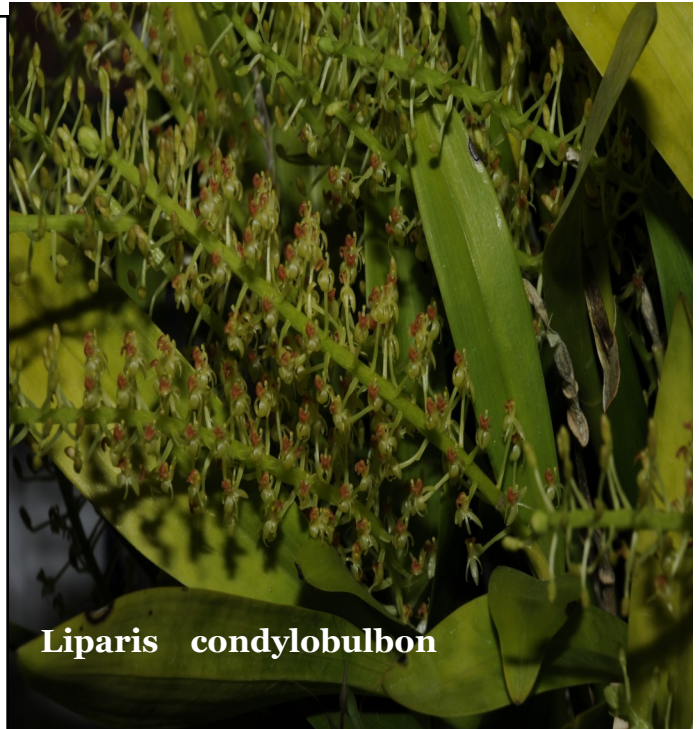
The only other pest problems my natural predators seem unable to handle are roaches (huge roaches, called palmetto bugs here in Florida) and slugs. While toads will eat slugs, toads tend to stay on the ground, while slugs love to get in the bottoms of pots. Both of these beasts love to eat new roots and flowers. Looks like I need to find just one more predator to add to my menagerie; one that is not afraid of palmetto bugs and slugs that feeds at night. Any ideas?

Announcements & Upcoming Orchid Events

REMEMBER DECEMBER

TOS Holiday Party, Dec.13,2010

Begins 1 hour **EARLY** at 6:30 with a member's Potluck dinner.



Liparis condylobulbon

Triangle Orchid Society Meeting Agenda:

7:00-7:30	Set Up Show Table and Chairs
7:30-7:40	Business Meeting Announcements
7:40-8:30	Program
8:30-8:50	Refreshment Break
8:50-9:20	Show Table Review, Show Table Awards
9:20-9:30	Raffle

Calendar 2010

Speaker

Topic

**Nov.
8**

Bob Davidson

Everything David feels like telling us about orchids

Member Plant Sale

**Dec
13th**

**Holiday
Party**

Auction

Welcome Table

Refreshments

November

Lee Allgood

Michael Arner

December

Need Volunteers

Holiday Party



Associated with

Sarah P Duke Gardens



**Dialaelia
Chantilly Lace**

TOS HOLIDAY PARTY

**Monday, December 11th,
6:30 PM**

**Sara P. Duke Gardens
Garden Center**

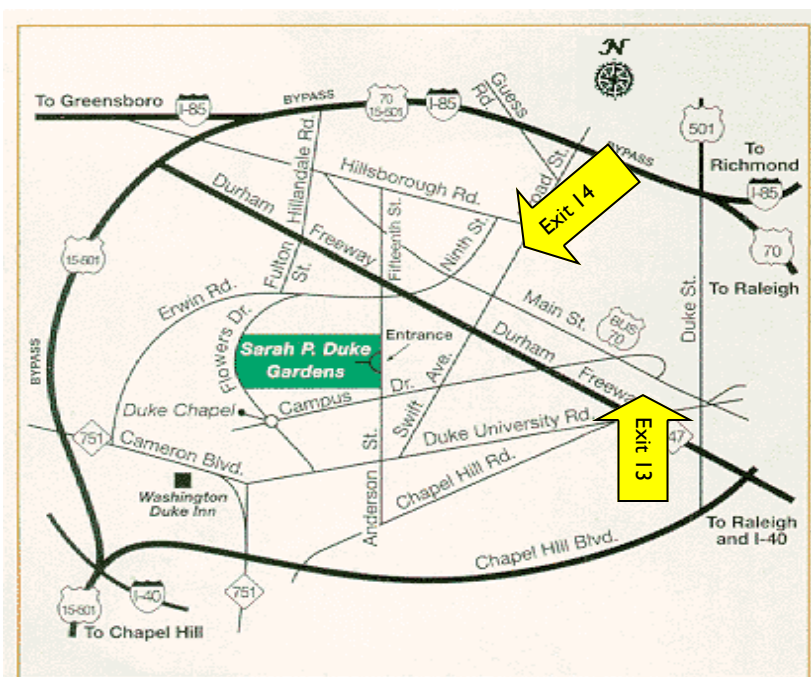
Durham, N.C.

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**Member Pot Luck Food
Pot Luck Dinner starts at 6:30 PM
Auction Starts at 7:00 PM**

Please bring your favorite covered dish to share



**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:

\$18 per year single, or \$24 per year for two persons living at the same address.

Mail to: Melissa Bullard, Treasurer 510 North Street Chapel Hill, NC 27514