



Orchidacea

Newsletter of the
Triangle Orchid
Society
Associated with Sarah
P. Duke Gardens

Speaker for Nov12,2007

**Denise Wilson, Amazon Rain
Forest Canopy Quito ,Peru**

**Orchids in the Tamshiyacu-Tahuayo
Reserve**

Denise C Wilson, from Golden, Colorado, will be presenting the Amazonian Peru Canopy Study that was conducted by Chicago Botanic Gardens this July and August at the Tamshiyacu-Tahuayo Reserve. This area is the first Peru State Park as of May 2007, and contains great diversity in plants and animals. There are 14 species of primates in the 800 square mile preserve,



Denise is a member of the Orchid Specialists Group of IUCN, and has been growing orchids in her passive solar atrium at 9000 ft altitude for 20 years. She worked for 5 years at Fantasy Orchids, a wholesale & retail orchid greenhouse. She has served on both the Board of Directors for Denver and Boulder Orchid Societies. Currently pursuing her Masters degree at the University of Colorado at Denver, she was funded by the Denver Orchid Society and the Colorado Native Plant Society to research the pollination of *Epipactis gigantea*, the stream

orchid this past summer. But that's another story! You may contact her by e-mail, denisewil@aol.com .

Denise C Wilson, 34316 Gap Rd., Golden, CO 80403, 303-64

Member Plant Sale

Speaker will not be bringing plants for sale.

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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.Triangle
OrchidSociety.org**

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Minutes of the Last Meeting

Triangle Orchid Society Meeting Minutes for 10/9/2007

President Michael Wagner called the meeting to order at 7:34 PM. He extended a special welcome to the 5 guests: three from the Chapel Hill Newcomer's Club, one local Durhamite who had always wanted to attend, and one woman with a sick cattleya.

Old Business:

The Minutes from the September meeting were accepted as published in the newsletter with two corrections: There was only one first place winner for each category of the Jack Webster Awards, and Lee Allbright is actually named Lee Allgood.

Raffle tickets are \$1/each, and you will receive a free raffle ticket for each plant you bring to the show table (limit 5).

If you haven't already, please look at the Newsletter online. The pictures from the Fall Auction are in color, and look great.

The Fall Auction was wonderfully successful. Two hundred and seventy six plants were auctioned off, and more plants were sold at a fixed price at the end of the event, bringing in \$5460 to the TOS coffers. Thank you to everyone who participated. The majority of the TOS income comes from the auctions, and the proceeds are used to pay for speakers, refreshments, a nice place to hold the meetings and many more services. Good auctions allow the TOS to continue. President Wagner extended special thanks to the

Beischer for making the venue available to the TOS for the auction, to Judith Goldstein for organizing the event, to Nick Plummer and Mike Joehrendt for serving as auctioneers, and to the Gurlitzes and Mrs. Joehrendt for working the spreadsheets and cashbox.

Thank you to Lori Chapman for working the October welcome table, and to Creighton Humphrey and Sue Morand for the refreshments.

A plant was abandoned, probably at the last meeting. Please claim the abandoned plant if it's yours.

New Business:

American Orchid Society Calendars will be \$9 this year. They will be available on a first come, first serve basis, beginning at the November meeting.

The Speaker, Luiz Hamilton Lima presented the show tables. A brief social break followed the presentation of the show tables, and then Mr. Lima delivered a very animated talk about his favorite orchids, cattleyas. Mr. Lima held a brief question and answer session after his talk.

The Jack Webster Awards for orchids on the show table were as follows:

Greenhouse Grown:

1 *Phaiocalanthe* 'Kryptonite' grown by Mildred Howell

2 *Trichocentrum bractensis* grown by Paul Feaver

3 *Cycnoches Jean Moliere* grown by Bob Davidson

Non-Greenhouse Grown:

1 *Paphiopedilum* Marie Crock

2 *Vascostylis* Bob Meyer

3 *Liparis elmeri* Sally Carpenter

The raffle plants were raffled and awarded, and the meeting adjourned shortly past 9:30 PM.

Luiz Hamilton, Speaker Last Month now lives in Fort Lauderdale and works as a customer service rep in the aerospace industry. However, he calls himself as Brazilian. He grew up in Brazil with a grandmother that loved to grow roses and who gave him his first orchid when he was nine. When he was 12, he was living in Manus, in the heart of the Brazilian jungle where the Rio Negro flows into the Amazon. His father built a lath house and he began his first serious species collection. Years later, when he left Brazil to attend the University of Minnesota, he took the best of his plants with him – all 400 of them. He set up a growing area in his dorm room, utilizing space on the upper bunk and even under the bed. He says that now he cannot imagine life without his orchids.

Pointing to a huge pie chart, Luiz introduced his presentation by showing that wholesale Orchid sales now generate \$130 million each year in the US alone. They are the second most popular pot plant sold, second only to Poinsettias. Eighty percent of the Orchid market is now made up of Phals and Dendrobiums from the various Asian markets, and the once popular large flowered Cattleyas have lost market share. Luiz however remains committed to Cattleyas, and will be speaking at the World Orchid Congress in Miami next year on their Conservation. His message will be that the best way to save these wonderful species is to cultivate and propagate them in private collections. He believes that by Selling the best specimens, by utilizing Sib Crossings, Back Crossings and Polyploid genetics, we can maintain living populations of these plants.

To understand the cultivation needs of Catts, Luiz says that we must remember that they come from two basic environments – the hot and steamy Amazon basin and the rolling mountains of the Brazilian highlands. Catts from these two widely differing climates require significantly different care. We can only grow our orchids well if understand their different requirements. Most bifoliate Catts come from the Amazon Basin where the climate remains uniformly hot with no significant night time cooling, and where one can count on daily late afternoon rains. Unifoliate Catt, however, come from the Highlands, from elevations between 2 – 3,000 feet where there is always an appreciable night time cooling. Regardless of origin, all Catts have five basic requirements. They need constant, gentle air movement. Your growing area must have fans running constantly to keep the air circulating. Secondly, they require high light conditions, with no more than 40% shading. Third, the unifoliate especially, require a night time drop in temperature of 20 – 25 degrees, something very hard to achieve here in North Carolina. Fourth, they require high humidity levels. Luiz explained that by humidity he does not mean that we need to water frequently, but rather that we need to increase the percentage of humidity in

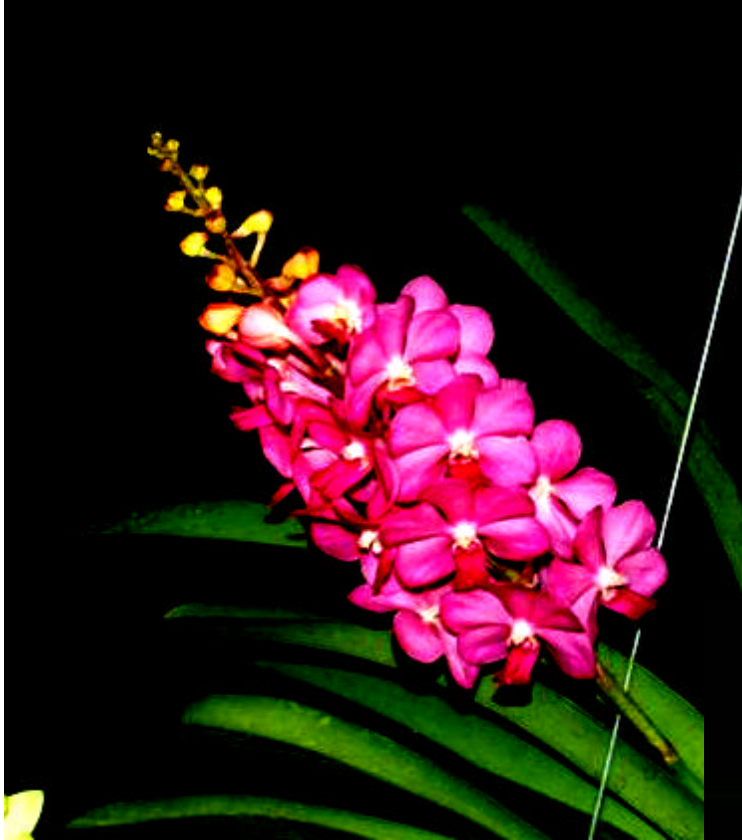
the air around the plants by misting several times a day during our very hot summers. Fifth, and perhaps most important, orchids required good quality water. Luiz described the daily root flushing that is given to orchids in the wild, when the afternoon rains drench the plant and flush away any accumulated salts that could potentially contaminate the roots. The water you use, says Luiz, should be slightly acid, with a Ph of 6 – 6.6 ppm dissolved solids. Additionally, because the soil in Brazil has a very high iron content, our Cattleyas do better if we provide iron through our watering regime. The addition of calcium will also help prevent fungal infections and black rot.

Luiz classifies Cattleyas based on ease of culture and flowering. The most adaptable plants he says are for Beginners. These include amethystoglossa, intermedia, loddigesii, harri-soniana, guttata, labiata, and warneri. These plants grow over a large geographic area and have adapted themselves to different growing conditions. They are therefore the most flexible. Beginner Cattleyas like very bright conditions and can be grown with as little as 50% shade. They thrive at temperatures between 50 to 100 degrees. They prefer high humidity levels, but can adapt to drier environments. They like constant air movement, a well drained mix, and a dry spell after flowering. It is critical to cut back on your watering regime during the winter months or the roots will become water logged and rot.

Intermediate Cattleyas include forbesii, granulosa, leopoldii, porphyroglossa, schilleriana, schofeldiana, jenmanii, luteola and lawrenceana. They like bright light, warm temperatures, and lots of air movement. These species absolutely must have a dry rest period during the winter and they require a rapidly draining mix. They are not as tolerant of temperature variations and abuses in watering as the beginner plants.

The Connoisseur collection of Cattleyas tend to be plants that are only found in relatively isolated conditions and therefore have not adapted as well as other, more widely distributed species. They are by far the most difficult Cattleyas to grow and include aclandiae, bicolor, dormaniana, elongate, nobilior, tenuis, vestalis, violacea, walkeriana, eldorado, and araguiensis. Several of these species are now quite rare and exist only in specialty collections. Like Beginners and Intermediates, they like bright light (50% shade). They like night time temps no lower than 70 degrees and daytime temperatures no higher than 90. Nobilior and walkeriana are exceptions to this rule in that they can tolerate temperatures as low as 50 degrees. These plants need 50% humidity, and require a dry period after flowering or during winter. The exception to the dry period are violacea and vestalis, both of whom thrive with constant moist air. Nobilior, aclandiae, violacea and walkeriana grow best mounted, although there are hot and cool growing varieties of nobilior.

Laelia purpurata is another Brazilian native that is caught up in the taxonomic name changes that have occurred over the past several years. Currently classified as Sophronitis purpurata, Luiz stated that a case will be made (continued page 7) (continued from page 4) for reclassification to Cattleya pur-



**Jack Webster Awards
Non Greenhouse Grown**

**Vascostylis Pine River grown by
Bob Meyer: Second Place Ribbon**

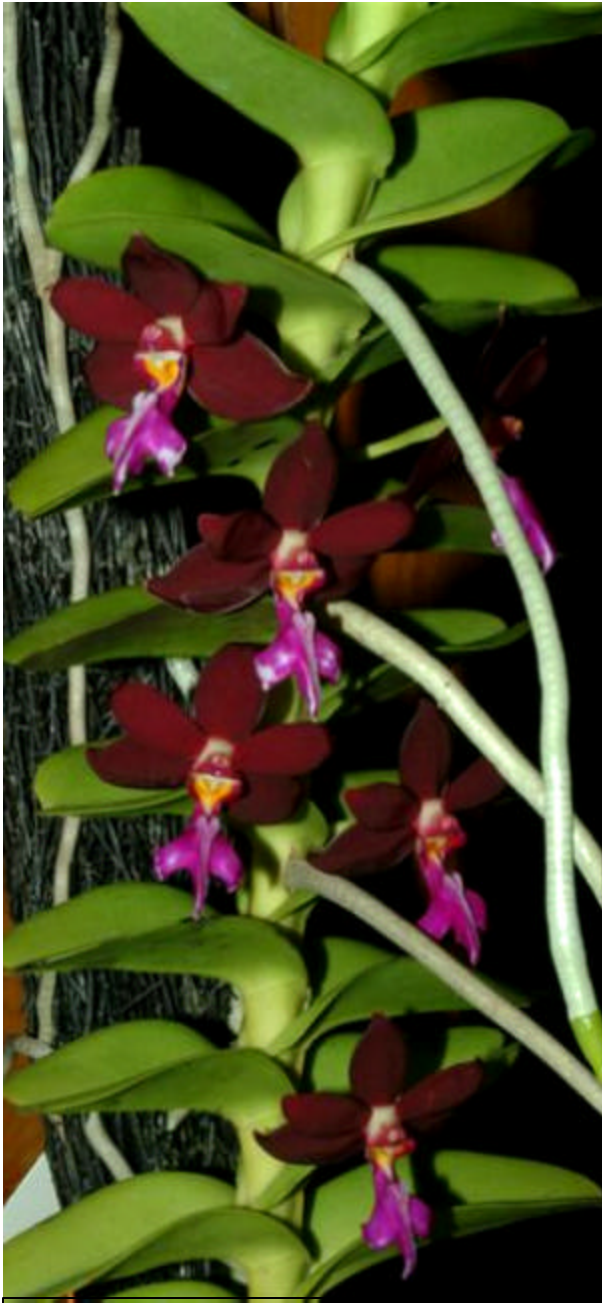


**Paph. Groeb X paph kolopak-
ingii grown by Marie Crock: First
Place Ribbon**



**Liparis elmeri grown by Sally
Carpenter: Third Place ribbon**

**Jack Webster Awards
Greenhouse Grown**



***Trichocentrum bractensis* grown
by Paul Feaver: Second Place Rib-
bon**



***Cycnoches Jean Moliere* grown by
Bob Davidson Third Place Ribbon**



***Phaiocalanthe 'Kryptonite'* grown by
Mildred Howell : First Place Ribbon**



Growing Tips for November

By Courtney T. Hackney

It has always been apparent to me that growing orchids well requires good water. This year's extreme drought has reinforced that view and impressed me with both the ability of some orchids to resist water with high dissolved solids and with the sensitivity of some types of orchids to salts in water.

The thin leaved orchids, such as the intergeneric oncidiums, Coelogyne, and Eulophia, are the first to show symptoms of salt stress. Brown leaf tips are "the canary in the mine" when it comes to water quality, but can also be induced by too much fertilizer. Cattleyas do not typically exhibit this type of symptom but may still be suffering when water quality is poor. Exactly what causes the symptom within plant cells is not clear. A number of growers claim that providing soluble dolomite lime will prevent this type of leaf tip burn, but water low in salts will always prevent this condition.

In my collection the most sensitive orchids to salt are the few phrags that have survived the summer heat. They may show a little tip burn, but mostly they get bacterial rots that ultimately lead to death, even if treated with bactericide or high quality water. Many of the phalaenopsis species as well as any species that comes from mist forests are also sensitive to water with high dissolved solid content.

Leaves, however, are not the only indicator. This year, the lack of rain has been accompanied by very low humidity. In this climate, orchid roots will shrivel and stop growing even if they are being watered with high quality water. If water quality is poor and humidity low, roots may seem thicker than normal at first, but the growing tips will turn black and shrivel. Eventually, the entire root will shrivel from the growing tip and die. Under normal conditions, the root may shrivel, but quickly thicken to its normal size when provided moisture. That does not happen when the root is subjected to high salt content.

The first significant rain fell in our area last week; filling my cistern and providing enough water to finally give my orchids a good soaking. Afterwards, it was clear which orchids still had good root systems and which did not. Most surprising was that the orchids in lava rock appeared to still have good root systems, despite the long held belief that salts tend to concentrate on that medium. Orchids in bark/charcoal-type mixes definitely lost roots during the drought when they were provided water high in dissolved

solids.

Like it or not, winter is finally here along with an array of things to do. With the exception of cymbidiums, all orchids need to be moved inside or into the greenhouse if they have been enjoying the "natural life" in your backyard under the trees. We are also just 1 month shy of the winter solstice so the sun is just about at its lowest point in the sky. Greenhouse growers that use shade cloth, often remove it, or at least reduce shading during the next couple of months.

Phals exposed to a week or two of cooler temperatures have initiated spikes and now need to be kept warmer, especially at night. A night temperature of at least 65 F will virtually eliminate winter bacterial rots, although some growers use 60 F as the absolute minimum to keep heating bills down. The key for phals is the minimum temperature and avoiding water in the crown of the plant especially when night temperatures are low.

Contrary to some of the published orchid growing books, apply high nitrogen fertilizer to your phals now, but at lower concentrations. At one time high phosphorus fertilizers were recommended, but studies have not been able to document a benefit. To obtain the best flower color use a high nitrogen cal-mag type fertilizer.

Cattleyas, especially species, need to be kept on the dry side now. Let them dry more thoroughly than you did in summer. There are a number of fungal rots that are around all of the time that really thrive on these cooler nights if the medium is moist. Some of these can kill a cattleya almost as fast as bacterial, crown rot kills phals.

This is also the time to dry out catasetum and similar species and hybrids, which thrive on water during summer. They will rot if watered in winter. Some growers remove them from the pot shake the medium from roots and set them back in the pot to dry. Other growers just set them in a part of the greenhouse that does not get watered. A little mist on sunny days is all they need. There are any number of species that require the same approach and you may need to refresh your memory of their natural habitat for these unusual forms. If, the species comes from a wet-dry type habitat, drying is usually required.

purata at the WOC next January. Regardless of name, purpuratas are very adaptable. They can tolerate temperature ranges from 30 to 100 degrees, and can even be given a dry winter rest. They prefer year round watering, however, as they are endemic to areas with heavy rainfall. Luis pointed out that they require temperature variations up to 20 degrees between day and night.

In conclusion Luis made several predictions about the future of Cattleyas. He believes that selective breeding will produce more compact plants with larger flowers. The flowers will last longer and many will have the sparkle of diamond dust. Inflorescences will be longer and less crowded and many more varieties will be fragrant. The plants will be easier to grow and bloom, and many will bloom several times each year. These new improved plants will be disease resistant, and they will grow rapidly, adding multiple growths each year.

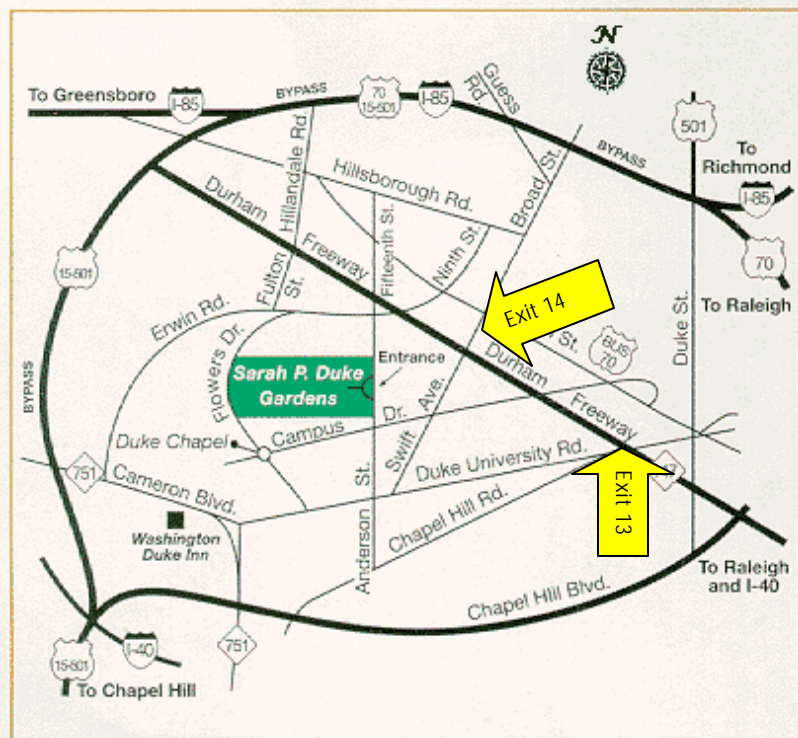
Transcription by Joy Lemieux , Sandhills Orchid Society

Triangle Orchid Society Meeting Agenda:	Calendar 2007	Speaker	Topic
7: 7:30 Set Up Show Table and Chairs	November 12 Member Sales tables	Denise Wilson Golden, Colorado	The Amazon Rain Forest Canopy Peru
7:30-7:45 Business Meeting, Announcements			
7:45-8:10 Show Table Review	December 10th Member Sales tables	Don Garliing Okemos MI	Magic potions, home remedies
8:10-8:30 Refreshment Break			
8:30-9:20 Program	January 14 2008	Alfred Manriquei	Peru Orchids
9:20-9:30 Show Table Awards, Raffle and Door Prizes			
9:30 P.M. Meeting Ends			

Welcome Table

Refreshments

Nov	Marsha and Tom Jepson	Melissa Bullard
Dec	Judith Shapiro	Holiday Covered Dish



From the East. **Exit 13 on the Durham Freeway(#147)** South on Chapel Hill Rd. right on Anderson St. Gardens on left.

From the West. **Exit 14 on the Durham Freeway (147)** South on Swift Ave right on Campus Drive , right on Anderson St. Gardens on left.



Associated with Sarah P Duke Gardens

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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
Visitors are Welcome!

[www.TriangleOrchid
Society.org](http://www.TriangleOrchidSociety.org)

Nov 12,2007
Election of Officers and
Board of Trustees for 2008

Triangle Orchid Society Dues are:

\$18 per year single, or \$24 per year for two persons living at the same address. Mail to
Peggy Bloodworth 2311 Hermitage Road, Hillsborough, NC 27278