



Orchidacea

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

Inside this issue:

This Month's Speaker	1
Minutes of the Last Meeting,	2
Speaker Presentation	2,3
Announcements	4
Jack Webster Show Table Awards	5,6
Growing Tips	7
Meeting Agenda	8
Map and Directions to Meeting	

Speaker for August 8, 2005

Stan Hutto

President of the South Carolina Orchid Society

My first orchid was a phalaenopsis purchased 27 years ago. That first plant was followed quickly by a variety of Cattleyas. My collection rapidly grew to encompass most of the major genera including Vanda, Ascocenda, Phalaenopsis, Cattleya, Dendrobium, and Paphiopedilum. Shortly thereafter I developed an interest in a wide variety of species from large angraecoids to the miniscule pleurothallids, the more unusual the better. My present collection is significantly more focused and consists of 95% Paphiopedilums and Phragmipediums. I also have a variety of Cattleyas, Bulbophyllums, Phaius, Cyrtopodiums and a few pleurothallids.

For the last 19 years I have been employed as a biologist with the South Carolina State Park Service, where I manage the diverse habitats on over 88,000 acres of natural areas in South Carolina. In 2002 I turned my hobby into a small side business, Sandhill Orchids, which I operate from my home. Specializing in Paphiopedilums and Phragmipediums, I have a large quantity of young seedlings in the greenhouse as well as several hundred flasks of my own breeding in the lab. In the past, I have grown orchids in the windowsill, under lights and currently in a greenhouse. A new larger greenhouse has been purchased and awaits installation.

Over the many years I have been growing orchids I have often toyed with the idea of becoming an AOS judge. This year I finally took the step of applying to the Carolinas Judging Center as a student judge and have recently been accepted.

5 Free Raffle Tickets if you bring up to 5 orchids for the show table.

Have Dinner with the speaker.

5:30 PM, Monday before the meeting, at the Neo China Restaurant behind Staples at the South Square Mall.

4015 University Drive Durham. Call Alan Miller 969-1612 before 5PM Monday to make your reservations

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

TOS Officers and Board Mem- bers

President

Terry Moorhead

(919)-688-9235

transichun@aol.co

Vice President

Michael Cory

(919)-929-9917 April -March 2006

mcory@nc.rr.com

Secretary

Judith Goldstein

(919) 732-7622

Orangegr@earthlink.net

Treasurer

Michael Wagner

919-692-3965

mjwagner@bellsouth.net

Board of Trustees: 2005

Past President

Nicholas Plummer

nickplummer@nc.rr.com

(919) 969-9741

Board of Trustees: 2005

Amy Marshall

(919) 461-1251

amy_marshall@urscorp.com

Thom Reincke

(919) 363-8798

Minutes of the Last Meeting

The July 2005 meeting of the Triangle Orchid Society was held on Monday the 12th, at Duke Gardens in Durham, NC. The meeting was called to order by President Terry Moorhead at 7:30 PM. The Treasurer's Report and the Minutes of the Last Meeting were approved as represented in the July monthly newsletter. Terry announced that the spring auction was a success with over 150 plants auctioned at an average price of \$17.50 per plant. Terry announced the Second Annual Growers Day would be held on Saturday Aug 6th at Durham Technical Community College in the Educational Resources Center Auditorium, from 10-4PM. Cost is \$20 per person which includes lunch and an orchid seedling. For newcomers it will include a free membership in the TOS for the rest of the year 2005. Jack Webster reported that the Indonesian order was to be shipped on July 22nd. The speaker John Stubbins presented the plants on the show table. Jack Webster awards in the Non Greenhouse category: First Place Ribbon went to Lc Loog Tone 'African Beauty' grown by Paul Virtue. Second Place to *Habanera bractensis* grown by Richard Turner. Third Place Ribbon went to

Neofinetia falcata grown by Nick Plummer. In the Non greenhouse category, First Place Ribbon went to *Encyclia cochleata* grown by Terry Moorhead. Second Place Ribbon went to *Brassavola cucullata* x sib grown by Terry Moorhead. Third Place Ribbon went to Phal Lin Jessica (Phal Abendrot x P. Spirit House) grown by Nolan Newton. Following the raffle, the Jack Webster Ribbons were awarded. The meeting was adjourned at 9:15 PM.

Speaker Presentation: Our speaker was Mr. John Stubbings whose topic was *Unusual Relatives of Cymbidiums*

He began by saying the first orchids he grew were phalaenopsis. He thought they were easy to grow. I began breeding those white with red lips and some breeding with small flowers. I like phals but phals normally bloom in the spring and don't bloom much in the summer and fall. So I started buying (orchids) that bloomed in the summer and fall. It turns out this group I'm talking about blooms in the summer and fall and with similar light and temperature requirements to phals. In the Cymbidium tribe are four subtribes. You have Cyrtopodiums; they are mostly tall growing plants from Africa with strange flowers with upright inflorescence. You have the Catasetum subtribe which you have probably heard about. You have the Stanhopea subtribe and you have the Oncidium subtribe.

In the Catasetum subtribe you have Catasetum, Cycnoches, and Mormodes. In the Cyrtopodium sub-

tribe you've got your Cymbidiums (why it's a subtribe I don't know), Galeandras, along with Gramatophyllums (a huge plant), and several others. So they are all related and these four genera, the Catasetum, Cycnoches, Mormodes, and Galeandras will all breed with each other which is a clue that they are related. All of these four genera are deciduous and tend to lose their leaves. When they lose their leaves they don't want to be watered. That is the key to growing them. Many of the Catasetums keep their leaves year round. This happens more often in the greenhouse than in nature where they go through a dry spell. Because of the greenhouse you feed and water them, they keep leaves and you should continue to water them. With no leaves, there is no way for the water to get out of the plant and you are just asking for it to rot. What many people do for Catasetum is they take them out of the pot and lay them on the bench with their nametag and wait for something to happen. What he does because it is more convenient for him is he unputs them, takes all the mix off the roots and puts them back in the pot. That way they are upright. Culture wise, he grows all these in clay pots and in a bark mix. Then when they start growth and he sees roots are coming out he starts watering again and fertilizing. They only grow for six to eight months at the most and they can get very large. They need a lot of water. *Galeandra batemanni* is about an inch across on the lip and all Galeandras are similar in that you have the sepals and the petals behind the lip and they are in a plane. Galeandra comes from a Greek word meaning helmet and if you look at it from the side, the lip part looks like a helmet. All come from Central America and maybe Mexico. They don't go very far into South America. The better the culture, the more female flowers you get. Next shown were *C cristatum*, *C expansum* (it has the largest flowers and is the most frequently

used flower as a parent, along with *C pileatum*, has good color and a big lip). The lip is over 2 inches across. *C fimbriatum* you can grow and get culture awards. Divide plants into one or two pseudobulbs and they will make new growth and bloom the next year. If you want a profusion of blooms, don't divide. But, you don't have to do threes and fours like cattleyas. A species can have male or female flowers. Next was Cycnoches. They are deciduous and from South America. He showed *C barthiorum* which he had to have when he first saw it. Flowers are 2-3 inches across. You have the same problem with this genus. You may or (may not) get female flowers. On a good plant you can get 3 or 4 flowers per inflorescence. When these plants were sent to Europe and were named, it was not known that they could produce male and female flowers. (and were named as different species) He showed *C cooperii* which may have 40 flowers per inflorescence. Next was *C haagii*, one of the few of these species with an erect inflorescence. (When) he was asked how you get Cycnoches to keep its bulbs, as they tend to die off. He answered you tend to get one old and one new bulb.

Mormodes are different because they are perfect flowers (both male and female parts borne on each bloom) but they are not symmetrical flowers. All the others could give two identical parts if cut down the middle. Mormodes are crooked so that the pollinator does weird things to get up to the pollen. They have some interesting colors. He showed *M andreettae*, *badia* (used in hybridizing a lot, some are yellow and some are red-orange) *colossus*, *resolutum*, and several others. The slides illustrated how different and weird they are. *M warscewiczii* is used for hybridizing. He mentioned some results of crosses, ending with 'Midnight Magic' which is a cross of Cycnoches by Mormodes. *Transcription by Cara Hayes, Secretary, Sandhills Orchid Society*

Schedule for the Growers Day

10:00- 10:10 AM Welcome: Terry Moorhead, President TOS

Alan Miller, Past President of TOS will introduce the speakers.

10:10 – 10:55 What is an Orchid? Jack Webster, Past President TOS

1:00 – 11:45 Growing Orchids in your Home, Nicolas Plummer Past President (TOS)

11:45 – 12:00 Questions on two previous talks.

12:00- 1:00PM Lunch at the Cafeteria

1:00 – 1:30 Open Period for more Questions

1:30 – 2:15 How to grow Oncidiums Jeff Baldwin, Hanks Chapel Greenhouses, Pittsboro, NC

2:15 – 3:00 How to grow Phalaenopsis, Jack Webster

3:00 – 3:15 Questions on two previous talks

3:15 – 4:00 How to grow Dendrobiums, Paul Feaver. TOS and Orchid Trail, Morrisville, NC

4:00_ 4:15 Distribution of Orchid Seedlings and Adjournment.

When: Saturday, August 6, 2005

10:00 am – 4:15 pm

Where: Durham Technical Community College, 1637 Lawson St, Durham, NC 27703..

For map, see <http://www.durhamtech.org/html/aboutdt/campusmap.htm>

The Grower's Day costs \$20.00, and reservation in advance is required. Check should be sent to Treasurer, Michael Wagner, 15 Wysteria Way, Chapel Hill, NC 27514-1637

Breckinridge Orchids Half Price Sale

All plants at Breckinridge Orchids are now half price.....not just Phalaenopsis, but many other genera, including some really great Paphiopedilums. I was at Breckinridge today and there are still many treasures to find there. Everyone should try to include in their collection at least one cross made by Mark Rose, one of the best known names in Phal. breeding. Don't miss out on this sale.....the end of an era.

Email from Orchoasis@aol.com

Letter to the Editor

Greetings,

I am writing to you today to share with you my orchid encounter. In the middle of May 2005 as I was preparing to depart from RDU airport to Florence, Italy where I would attend the First Symposium on Plant Neurobiology, I spotted a lady slipper type flower on the side of the road. Of course, I immediately veered onto the shoulder of the road for a closer inspection. There, growing unnoticed in plain sight were three or four *Cypripedium acaule*. The "sighting" occurred at the intersection of Gorman Street and xxxxxxxxx.



Regards,

Frank Meadows

Raleigh NC



Jack Webster Green-
house Grown Show Ta-



Second Place to *Habenera bractensis* grown by Richard Turner



First Place Ribbon went to Lc Loog Tone 'African Beauty' grown by Paul Virtue



Third Place Ribbon went to *Neofinetia falcata* grown by Nick Plummer

**Jack Webster Non Greenhouse
Grown Show Table Awards**



First Place Ribbon went to *Encyclia cochleata* grown by Terry Moorhead



Second Place Ribbon went to *Brassavola cucullata* x sib grown by Terry Moorhead



Third Place Ribbon went to Phal Lin Jessica (Phal Abendrot x P. Spirit House) grown by Nolan Newton

Growing Tips for August

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

The general mantra among orchid growers is that there is no such thing as too much air movement. Unfortunately, most hobbyists and commercial growers suffer from not enough air movement somewhere in their growing area.

In "Nature", most orchids growing on trees have continuous air movement around them. More importantly, the air is not recycled air, but is fresh air without loads of disease spores.

Good air quality and movement serves several purposes in a greenhouse or growing area. First it provides a continuous supply of carbon dioxide, from which plants make more tissues. At night plants require oxygen supplied by the same moving air. Airflow also pulls water vapor from small openings on the bottoms of leaves, which cools the leaf surface. This is especially important when the air temperature is high and the leaf is receiving direct light. The warmer the leaf's internal temperature, the faster it can photosynthesize up to some limit. Above that limit and chlorophyll stops working. Plants compensate for heating by cooling themselves via evaporation. The degree to which they can do this depends on the habitat in which they originated.

The degree of cooling at the leaf surface depends on the relative humidity of the air and the rate at which air moves

across the leaf. The higher the relative humidity, the less the cooling effect. In the dog days of summer here in the South, high humidity is normal, requiring as much air movement as possible. In the daytime, if you can keep a match burning in the greenhouse, there is not enough air movement.

Orchid leaves will burn if the orchid cannot cool itself adequately. This happens under a variety of different scenarios, not all of which require high light. Besides air movement, the plant must have water delivered to each leaf. Without water to evaporate, orchid leaves may burn, even under lower temperature and light conditions. In the wild, orchids have extensive root systems, thickened leaves, and even pigments on leaves to limit internal temperature. They also have only as many leaves as the plant can maintain under the ambient water and temperatures at that location. In cultivation, a very different situation occurs. The mass of roots changes dramatically after repotting, while the volume of leaves stays the same. Increased nitrogen levels lead to increased growth of leaves, which also require more water, especially under high light and heat conditions. Hence, the recommendation to lower light and heat levels after repotting.

Indoor growers can still burn orchids for the same reasons, but there is an additional problem. Humans prefer

lower humidity than occurs outside, meaning that orchids inside have a greater ability to cool themselves via evaporation indoors. However, increase airflow on orchids grown inside and the low humidity may increase the evaporation so much at the leaf surface, that there is not enough water getting to the leaf, resulting in leaf burn. This is commonly found on Phalaenopsis grown on the windowsill.

Greenhouse growers often have the same problem in late winter and early spring when the sun's intensity increases, but humidity is very low. Increased air movement under these conditions can increase water loss to such an extent that flowers wilt, buds drop and roots wither. Thus, air movement must be reduced, but only during the day when air is entering the greenhouse from outside. At night, high humidity in the greenhouse combined with cool nights causes water to condense on cool leaves; the perfect recipe for bacterial rots such as *Pseudomonas* on leaves and *Botrytis* on flowers. When nights are cool, air movement should be sufficient such that flowers move noticeably to prevent bacteria from establishing on wet surfaces. Windowsill growers often have the same problem because they often mist their orchids to compensate for heating or air conditioning. While this is generally a great idea, it should never result in leaves or flowers being wet at night.

Thus, the answer to questions about air movement is to adjust based on the problem you are attempting to solve and to remember that the amount of air movement needed changes with the season.

At this time of year most homeowners prepare for hurricanes. Dedicated orchid hobbyists also prepare for the associated power outages, heavy rains, and secondary damage from rots that show up on orchids days or weeks after a

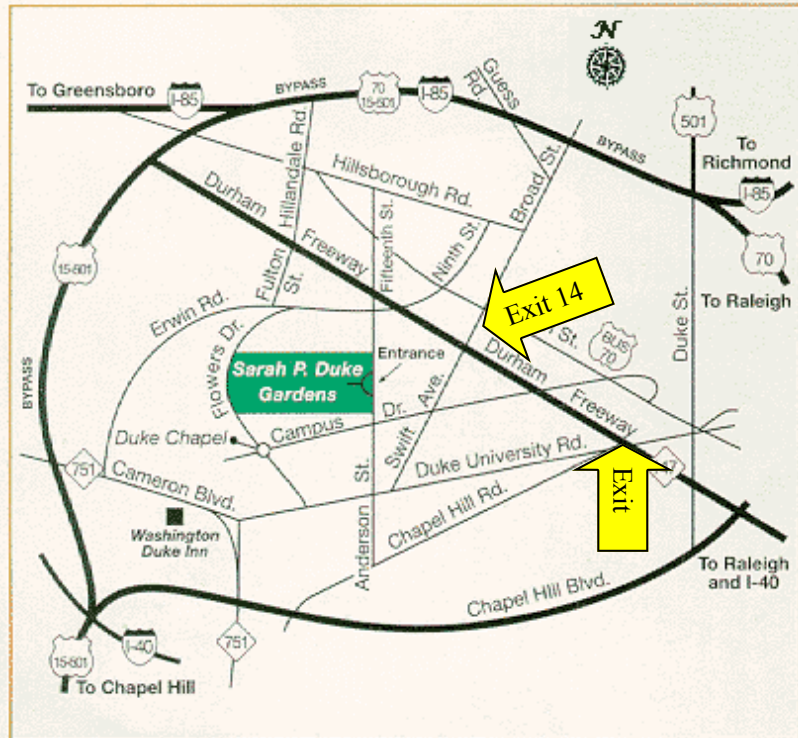
hurricane passes. One preventative measure is to spray plants with a general fungicide/ bactericide, such as Kocide, occasionally during Hurricane Season. This prevents exotic bacteria and fungi that always accompany hurricanes from invading your orchids when the power is off and there are no fans to cool or keep spores at bay.

Triangle Orchid Society Meeting Agenda:	Calendar 2005	Speaker	Topic
7: 7:30 Set Up Show Table	Aug 8	Stan Hutto Sandhill Orchids Lexington, SC	Basic Paphiopedilums
7:30-7:45 Business Meeting, Announcements			
7:45-8:10 Show Table Review	Sept 12th	Sue Fordyce	LOOK! Your Orchids are Talking to You
8:10-8:30 Refreshment Break			
8:30-9:20 Program	Oct 10th	Francisco Miranda, Boa Vista Orchids Rio, Brazil	Brazilian Cattleyas
9:20-9:30 Show Table Awards, Raffle and Door Prizes			
9:30 P.M. Meeting Ends			

Welcome Table

Refreshments

Aug 8	Thom Reincke	Judith Goldstein
Sept 12		



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



Associated with Sarah P Duke Gardens

Alan J. Miller, Editor
5703 Orange Grove Rd.
Hillsborough, NC 27278
(Fax (253) 550-5038
Phone (919) 969-1612
Email:Orchidacea @att.net

**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**

**Speaker Aug 8,2005
 Stan Hutto, Basic
 Paphiopedilums**

Triangle Orchid Society Dues are:

**\$18 per year single, or \$24 per year for two persons living at the same address.
 Mail to : Michael Wagner, Treasurer, 15 Wysteria Way, Chapel Hill, NC 27514-1637**