



Orchidacea

Newsletter of the
Triangle Orchid Society

Associated with
Sarah P. Duke Gardens

Speaker for July 11, 2011 *Bill Thoms*

Renowned orchid grower, world traveler and internationally recognized speaker Bill Thoms will be presenting a talk on Bulbophyllums (the largest genus in the orchid world!) Be prepared to learn more about this fascinating group of plants than you ever dreamed!

Bill Thoms and his wife, Doris Dukes, have been growing orchids around Central Florida for almost 40 years and have received almost every award granted by the AOS as well as more Awards for Culture than anyone else in the world, (83 in over 26 genera, including 36 in the bulbophyllum alliance (capped off with a 96 pt. Certificate of Cultural Excellence for Bulb. Frank Smith 'The King').

Bill is the only person to receive an Award of Quality for a Bulbophyllum hybrid (named for Doris) as well as receiving the hybridizer's dream; an Award of Distinction for a new avenue of breeding (a Trias hybrid). Many of his crosses are winning awards around the country. The AOS has just added a yearly award named for him for the best Bulbophyllum exhibited.

His talks are spiced with funny stories and funny associations. Whether you grow thousands of orchids, only a few, or none at all, you will have a wonderfully entertaining time and be able to grow anything better. Many of the most important requirements for growing world class plants are made easy to understand and remember.

Don't miss this great opportunity to learn how to grow these fascinating plants and to hear one of the most knowledgeable, interesting and funny speakers in the orchid world.

His new book, Bulbophyllums; the Incomplete Guide, From A to WHY? will be available for purchase (\$44.95) and he will sign them for free!

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

The speaker will bring
plants to sell at this
meeting.

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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 May TOS Meeting 6/13/2011

The June meeting was called to order at 7:30 pm by the president of the TOS, Leo Sagasti. Members and guest were welcomed. The financials were accepted and approved. 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 Robin Gurlitz for providing refreshments, Lee Allgood for hosting the Welcome Table and Paul Feaver for setting up the show tables.

Thanks to Josh Gurlitz for putting together a digital slideshow with photos of the TOS Orchid Show.

Leo Sagasti communicated to the members about the new storage facility rented by the society in order to have a central location to store all of our assets. The Green Swamp expedition was very successful and we thank all members involved in its organization and also the participants.

Ralph Sears introduced our speaker, Steve Frowine, who discussed the genus *Phalaenopsis*.

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: *Ascofinetia* Cherry Blossom. Grown by Bob Meyer;

2nd Place: *Bulbophyllum* Frank Smith x *echinolabium*. Grown by Armando Neves;

3rd Place: *Paphiopedilum* Lynleigh Koopowitz. Grown by Robin & Josh Gurlitz.

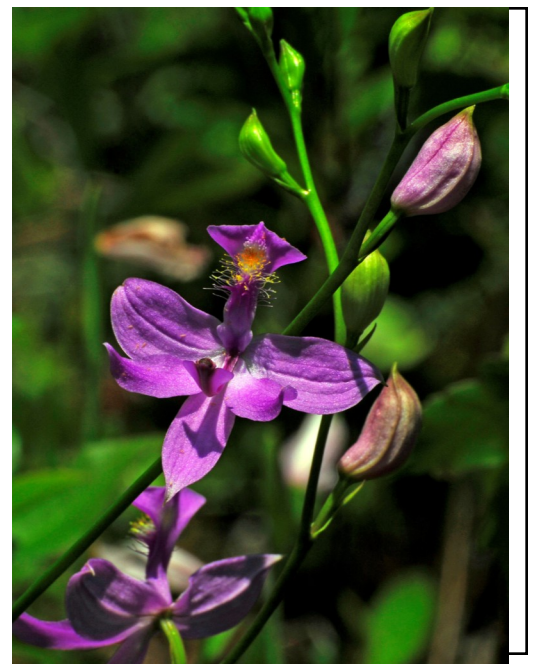
The Non-Greenhouse Grown Awards:

1st Place : *Miltonia* Bert Fields. Grown by Mildred & Mack Howell;

2nd Place: *Bulbophyllum* coincinum. Grown by Alan Miller;

3rd Place: *Catasetum* Ten Dragons. Grown by Bob Meyer.

The meeting adjourned 9:30 pm. Minutes submitted by Armando Neves, Secretary, TOS.





Steve Frowine—June Speaker

According to Steve, Phalaenopsis are the most popular orchid with the American public. Of the ten million orchids sold in this country every year, seventy-five percent of them are Phals. The reasons for this are fairly obvious – they come in a wide assortment of colors and sizes, and they remain in bloom for long periods of time. Even for the uninitiated, it is fairly easy to keep a phalaenopsis plant alive. Steve's presentation focused on the breeding behind today's hybrids, or the development of specific color lines and types.

Breeding began with the whites. Breeders wanted superior flowers, and realized that the result of crossing two species often resulted in more vigorous, easier to grow plants. The fact that the flowers were often larger was a bonus. Breeders also wanted to 'improve' the shape and form of species. They wanted rounder, flatter flowers, with smooth edges, with sepal and petals' overlapping so no light is visible between them. They also wanted the flowers to be arranged neatly and evenly on the stem, and they wanted more flowers, lots more flowers.

Early breeding was conducted with jungle collected plants. Initially, breeders focused on the species themselves. They carefully selected the plants with the characteristics they most desired, and crossed these selected plants over several generations. They were successful beyond their wildest dreams. If you compare a herbarium specimen with an example of virtually any species today, chances are the original species will be unrecognizable to any but the expert eyes of the trained taxonomists.

Breeding with Phals focused upon large whites. P. Doris was considered a major break through in the 1940s. It was a cross of P. amabilis, P. rimestadiana and P. Gilles Gratiot (P. aphrodite x P. rimestadiana). It had a natural spread of 3-1/4 in (8 cm) and was considered huge. It was a tetraploid (double chromosomes) so its flowers were larger, it had better substance which extended flower life. Breeding continued with the large whites well into the 1990s when folks began to feel that it couldn't get much better. In 1997 a Japanese grower, Kokubunji introduced P. Cygnus (P. Tokyo Bridal x P. Silky Moon). It had perfectly round flowers that are almost 6 in (15 cm) across. Since then the focus has moved from breeding large white to breeding smaller multifloral white. The flowers may be smaller (1 1/2 to 3 in or 3.5 to 7.5 cm) but the flower count can be as high as 40 blooms on a single branching inflorescence. The plants are generally compact, taking less growing space. The two more commonly utilized species in this line of breeding has been P. equestirus and P. stuartiana. When looking for a compact, multifloral hybrid look for P. Be Glad,, P. Brother Amar, P. Cassandra, or P. Timothy Christopher in the background.

Early pinks used P. schilleriana and P. sanderiana. In 1929 Vacherot & Lecoufle, the famous French orchid growers, registered P. Grand Conde (P. sanderiana x P. schilleriana). The early pinks were crossed with whites for size and color. In the 1950s, pinks began to equal whites in size and form. In 1968 the German breeder Fritz Hark registered P. Lipperose (P. Ruby Wells x P. Zada) which was to become the cornerstone of American and French breeding. It is currently credited with 5000 progeny.

Efforts to breed yellow phals proved elusive. The first two hybrids registered were Ph Golden Chief 'Candace Mary' AM/AOS (P. Chieftain x P. manii) and P. Gold Coast 'Vaughn's AM/AOS (P. Hymen x P. Doris in the 1950s. Unfortunately, these flowers were closer to cream than yellow, and the colors faded within a week. P. fasciata, utilized in the 1960s finally provided the breakthrough and established a gene pool of strong, non-fading colors. In the 1980s P. Deventeriana (P. amabilis x P. amboinensis) proved to be a major breakthrough in color fastness, form and flower count.

Despite improvements in breeding, clear orange flowers are still novelties. Fading continued to plague breeders. The early landmark plant was P. Mary Lillian Taylor (P. venosa 'Frank Smith' HCC/AOS x P. Red Devil 'Mona' AM/AOS, with its long lasting non-fading blooms, although it was recognized that the color was more red than truly orange. Phoenix Orchids, in Taiwan, are one of the primary players currently introducing rich orange colored plants. One of their outstanding contributions is P. Brother Sara (P. Sara Lee x P. Taipei Gold).

Breeding of red Phals began with strong, lasting color, good form, and attractive flower presentation. In general the flowers were not as large as the white and pinks, and the flower count tended to be low. However, most have strong overtones of purple or yellow. One of the species that has proven most effective has been P. bellina, a yellow-green flower with vibrant red purple on the inner portions of the lateral sepals. P. violacea var bellina was crossed with P. lueddemanniana, producing a hybrid named P. Luedde-violacea that became the foundation plant for at least 19 AOS awarded plants, most notable of which were P. Malibu Imp and P. George Vasquez 'Eureka', which themselves became foundation breeding plants. Another valuable foundation plant was P. Golden Buddha (P. Cher Ann x P. Spica). Most of the early progeny of P. Golden Buddha featured star-shaped yellow flowers with red markings. Many of the early hybrids had poor form and faded significantly, but these have improved significantly in the past 20 years. Other early building blocks include P. Penang (P. Rosy Charm x P. amboinensis) and P. Strawberry Sundae (P. Sara Rose x P. Malibu Heir). Despite all the work that has gone into the breeding of reds however, most Phals described as "red" appear more orange than red, or have decided purple overtones. Two I personally like include P. Brother Precious Stones 'Tulsa' (P. Brother Fancy x P. Purple) and Dtps Taisuco Bloody Mary (Dtps Taisuco Firebird s P. Taisuco Spidra)..

Prime players in harlequin breeding include P. amboinensis, P. fasciata, P. gigantea and P. lueddemanniana. In the mid 1980s Evergreen Orchids in Taiwan purchased mericlones plants of P. Golden Peoker 'Brother' (P. Misty Green x P. Lui Tuen-Shen). One of these bloomed out with a unique pattern – the fine spots of the 'Brother's clone were solid, with heavier markings on the lateral sepals. This single plant, awarded as P. Golden Peoker 'Ever-Spring' won three awards in 1996 at the Taiwan International Orchid Show and an entirely new line of breeding was established. The most notable characteristic of Harlequins is that every single flower on the stem will be unique, and unlike any other.

Steve also touched on Phal culture. He assured us that Phals can be killed – most often by poor air circulation, low winter temperatures and/or crown rot or bacterial infections. They can also bloom themselves to death so it is important to cut off the bloom spike eventually and allow the plant to regenerate. Phals can also be grown mounted; with the crown of the plant facing down so no water accumulates. They like low light and do not require high humidity.

Insect predators include snails, grasshoppers, roaches who eat the root tips, mice who eat young emerging buds and mealy bugs. Mealies are considered the worst offenders are the crawl in between joints and into the base of foliage. There they are often difficult to spot and control. Their waxy exterior coating cannot be penetrated by most insecticides, making them difficult to control once they become established. Steve uses insecticidal soap, agricultural oils and systemics such Orthene in his greenhouse that one must be attentive to your plants if you are to grow them successfully.

As always, our thanks to Joy Lemieux for transcribing Steve's talk.



Growing Tips for July

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

Yesterday, I put small caterpillars on some newly emerging buds on a couple of orchids. Never before I have done such a thing, nor have caterpillars ever been recommended in this column as a cure for anything. So why was it done? It is a long story!

Almost two months ago, aphids arrived in my greenhouse on a recently purchased houseplant. You can imagine my horror because I had never had aphids before and they quickly spread onto Paphiopedalum buds. I treated with light oil and noticed that large red ants were also on the orchid buds. I assumed the ants were transporting the aphids around. This particular type of ant, however, is usually associated with rotting wood here in Florida, so I assumed they were “up to no good”. They were sprayed too, and that should have ended the story. Each day when I examined the plants that previously had hosted the aphids, the ants were present, but not the aphids. In fact, they seemed to be picking up the dead aphids and hauling them off.

Some tropical orchids are protected by vicious ants that live on and in epiphytes. Some, like the *Myrmecophila*, (previously known as the hollow-bulbed *Schomburgkia*), even provide housing for ants. With northern Florida’s almost tropical nature, I wondered if these new residents of my greenhouse might be helpful. That should explain the caterpillar experiment.

There have been many attempts to use natural predators to help with insect control in greenhouses, but none have proven successful. Releasing insect predators into the greenhouse typically results in them looking for a way out. After a few unsuccessful tries, I gave up the natural predator approach and resorted to pesticides.

Many very effective, but toxic chemicals are no longer available, so the control of pests has become harder. Fortunately, there are some new chemical approaches that attack the insect hormonal system and, which work very well on pests such as scale.

These products are much more expensive, but well worth the money, since spraying is greatly reduced, and the toxicity in growing areas is lessened.

This also allows some of the other natural predators to live among your orchids. Here in North-east Florida, I have two species of lizard that call my greenhouse “home”, as well as one nocturnal gecko and several species of tree frogs that also come out at night. Do they control all my pest problems? Unfortunately, the answer is no, but they clearly help. No natural control can eliminate all pests because that would involve eliminating the food source for pest predators. Will the same fate befall my newfound ants? As I observed the ants it was clear that they were using the tiny drops of sugary fluid that exude from certain tissues, especially on the flowering parts of orchids. The green anole lizards also use this resource, which allows them to survive in winter when insect prey numbers are small.

So what happened to the caterpillars I put on my orchids? The ants quickly took care of these pests for me. Are the ants good or bad? The jury is still out, but so far they have done no harm, short of a nasty sting when they are in an orchid pot that is being repotted. More on this as the experiment continues.



1st Place Ribbon:
Miltonia Bert Fields
Grown by Mildred & Mack
Howell

**Jack Webster Awards
Non-Greenhouse Grown**



2nd Place Ribbon:
Bulbophyllum cocoinum
Grown by Alan Miller



3^d Place Ribbon:
Catesetum "Ten Dragons"
Grown by Bob Meyer

**Jack Webster Awards
Greenhouse Grown**



1st Place Ribbon:
Ascofinetia "Cherry Blossom"
Grown by Bob Meyer



2nd Place Ribbon:
Bulbophyllum "Frank Smith"
Grown by Armando Neves



3rd Place Ribbon:
Paphiopedilum "Lynleigh Koopowitz"
Grown by Robin & Josh Gurlitz



Announcements & Upcoming Orchid Events

Growers Day

August 6th

Raulston Arboretum, Raleigh, NC. This is one of our signature events. Be prepared to come learn about orchid culture and volunteer to help out.

Fall Auction

Sunday Sept. 25

Lake Crabtree County Park, Morrisville. Beech Pavilion. Noon potluck lunch and auction begins at 1:00 PM. More information later, but put this on your calendar

"Wine and Orchids Evening"

Sunday, August 7, 2011

3:00 PM to 6:00 PM

Paul & Freddy Welty's home

Durham, NC

"Join us for a relaxing, entertaining Evening. Contribution of wine and/or appetizer optional"

Directions will be provided in the August Newsletter.

Save the Date

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 2011

July 11th

Aug 8th

September 12th

Speaker

Bill Thoms
Will have plants
And
Books for sale

Linda Thorne

Will have Plants

Manny Aybar

Topic

Orchid Problems and diagnostics.
A general 'how to' program

Mounted Orchids

Orchids of The Dominican Republic

Welcome Table

Refreshments

July

Lee Allgood

Michael Arner

Aug

Need Volunteers

Need Volunteers



Associated with

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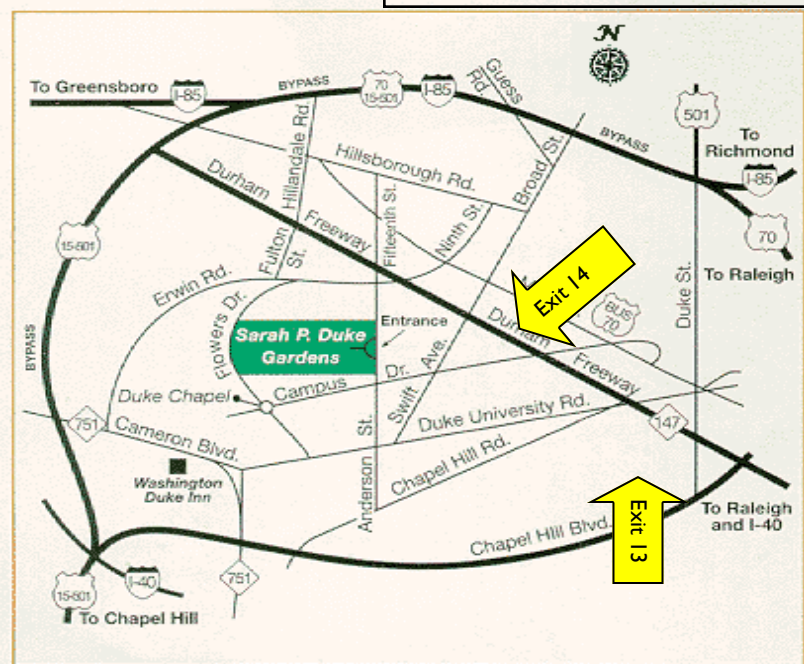


Trophy Ascocenda Zengyo

“Blue Spots”

grown by John Martin

TOS SPRING SHOW HIGHLIGHT



**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