

# *Triad Orchid Society*

*November 2014*

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**Triad Orchid Society  
meets the second Sunday  
of each month at the  
Greensboro Council of  
Garden Clubs Building  
on the campus of the  
Natural Science Center  
4301 Lawndale Dr.  
Greensboro, NC 27455  
at 1:00**

## **November Program**

### **David Off, Waldor Orchids**

David Off was born into the family orchid business in 1979. He grew up in a home on property adjacent to the greenhouses in Linwood, NJ. Dave has been taught in a hands-on environment from an early age. He is currently Assistant Greenhouse Manager for Waldor Orchids. The Off family has been growing plants since 1925. In addition to his personal collection, David oversees the care and maintenance of Waldor's renowned classic cattleya collection.

David married his wife Sarah in 2002. They have two sons, Daniel and Clayton, who are being cultivated as the fourth generation of orchid growers.

David's talk will be on heirloom cattleyas and he will be bringing plants for sale.

### **Triad Orchid Show**

Plans are underway for our annual orchid show next winter. The dates will be February 27- 28, March 1, 2015. Don Richman will be the show chair and he is actively recruiting members to help with the show. Wednesday afternoon, February 25 will be setting up the show. We will need some folks to come in and set up tables and chairs and put plastic down on the floor for the exhibits. Members can also bring in any plants they want to put in the show that afternoon between 2 and 6.

Thursday will be putting in the TOS exhibit and helping visiting societies unload their plants. We will need someone in the kitchen setting up for lunch on Thursday and breakfast and lunch on Friday. We will also need clerks for judging on Friday morning. During the show we will need some members to be present as hosts and to answer any questions our visitors may have.

We will also need lots of plants and greenery for the TOS exhibit. More details will be forthcoming.

## Show Table Results

October 2014

### Cattleya Alliance Species

- 1 B. nodosa Goldberg
- 2 Laelia pumila J. Curtis

### Small Cattleya Species

- 1 Iwan. Apple Blossom x Blc Bouton Star Brogdon
- 2 Bc Binosa 'Kirk' Bottoms
- 3 C. Lizz Feather A. Curtis

### Large Cattleya Species

- 1 Blc Malworth x Blc Wainae King J. Curtis

### Phalaenopsis

- 1 Phal bellina A. Curtis
- 2 Phal Samera A. Curtis
- 3 Dtps Kenneth Schubert x Doritis pulcherrima Goldberg

### Paphiopedilum

- 1 Paph henryanum Brogdon
- 2 Paph primulinum var purpurea Bottoms
- 3 Paph Doll's Kobold Brogdon

### Dendrobium

- 1 Den Hibiki A. Hastie
- 2 Den oligophyllum A. Hastie
- 3 Den Yuki Stripe Bottoms

### Oncidium

- 1 Onc. onustum

### Vandaceous

- 1 Neo falcata x Ascda Teerarur — tied for first with
- 1 Neo falcata 'Shutennon' Brogdon
- 2 Asctm Sagarik's Gold 'Wanderlust' Goldberg

#### Miscellaneous

- 1 *Spiranthes odorata* J.Curtis
- 2 *Coelogyne ovalis* J.Curtis
- 3 *Masd gutierrezii* Goldberg

Best species — *Spiranthes odorata* J. Curtis

Best flower — Iwan Apple Blossom x Blc Bouton Star Brogdon

Best specimen — *Neo falcata* x *Ascda Teerarur* Brogdon

## Speaker's Notes – Tom Harper

Tom said he has been growing orchids for forty-six years. He retired from day job in 2002 and began his business, Stone's River Orchids, then became his full time job. He travels extensively, always on the lookout for interesting plants that he can incorporate into his hybridizing program. Over the years he has made numerous contacts here in the US as well as abroad. Attending the Taiwan Orchid Grower's Show seems to have become an annual event for him. This has put him in contact with a number of the Taiwanese growers and hybridizers, giving him a firsthand opportunity to see, and acquire, some of the latest crosses. Tom's specialty has always been Phalaenopsis. He probably knows more about their history and culture than any other grower in the US today. It was a real treat for us, therefore, to have him speak to our society and share his experience as a grower.

Tom began by listing the fundamentals – light, water, fertilizer, temperature, and humidity. He stated that Phals do best in natural light. A home windowsill grower, therefore, will do well by placing plants in a West or East facing window. Windows with southern exposure, Tom said, are generally too hot. If a phal leaf feels warm to your touch, that plant is getting too much light. A south facing window can be okay if it only gets morning light. In nature, Phals grown under the canopy, in dappled light. This is significantly less than required by Catts, for example. Artificial light, especially from e-glass, knocks the heat out of direct sunlight but allows the light to pass through. No shading is required as the sun light passes directly onto the plants.

Many orchid growers kill plants by overwatering. Tom explained that plants that sit in water are vulnerable to bacteria and fungus infections. Especially during the winter months, the plants are prone to root and crown rot from overwatering. Tom recommends allowing the medium to dry out between waterings, and only use water that is at room temperature.

Phals need fertilizers. Tom pointed out that most fertilizers are essentially salts, and that they can build up in the medium and around the roots of plants. It is the buildup of these salts that destroys roots. Tom recommends a flushing every 3 – 4 weeks to prevent fertilizer buildup in the pots. Tom cautioned us to read

the labels carefully so that we can understand how we are feeding plants. He uses a Michigan State University (MSU) formulation, which is thirteen parts nitrogen, three parts potassium and fifteen percent phosphorous. However, he states that any brand of fertilizer works, but just be sure to keep the concentration level at half to one third of the dose recommended on the label. Tom does recommend that a water soluble product, not granular, as it may be difficult to dissolve the granular product.

Phals especially like the same temperatures that humans like so they are very comfortable in our homes. Tom pointed out that many Phals are now bred thrive in normal household temperatures of 72 degrees. If Phals are not happy in their environment, especially if they are too cold, they simply will not rebloom. While it is true that Phals like cooler evenings, they cannot tolerate extremes in temperature overnight. Tom said that most Phals bloom best with a ten degree drop overnight, anything more extreme can result in insect infestations such as thrips. Any sudden, precipitous drop in temperature can set disease mechanisms in motions leading to pitting on foliage or crown rot.

Air Movement is critical to Phals. Tom recommends directing fans away from Phals. Pointing the fan directly at the plants can cause the plants to dry out too quickly, leaving the plant vulnerable to diseases.

Humidity is another important factor to consider when growing Phals. They appear to be happiest when the surrounding temperatures are about sixty degrees. Humidity naturally rises at night and combines with the air movement, rising at night. When the humidity is too high, Phals in particular, will be too wet which frequently leads to their decline. Tom recommends that Phals be watered early in the day, allowing time for the plants to dry out thoroughly before nightfall. Plants left in standing water, or with water left in their crowns after dark are the most vulnerable, as they can develop crown rot. He recommends that Phals be grown on the dry side. When asked about Phals that require a “down time”, Tom responded that this is best answered by checking with a good orchid nursery to determine the culture for that particular plant, with the caveat that some species always bloom during a specific time. Just when this is can be determined by checking growth charts and seasonal monsoonal patterns where these plants come from.

To rebloom a Phal, Tom recommends cutting the stem once the flowers have fallen off. Initially cut at the second node if the stem is green and still viable. If a plant is strong enough, it will throw out a new stem at the end of the cut. Expect the second flowering to be smaller and fewer than those from the original flowering. Generally, when your Phal has finished blooming, it is best to cut the stem one and a half or two inches from the trunk. This helps to reduce the spread of diseases. When the stem has died and turned brown, you can simply break it off.

Phals appear to be willing hosts to a number of “critters”. Tom recommends keeping sprayers available in your growing area so plants can be sprayed as soon as you find them. Although hydrogen peroxide and alcohol are not specifically labeled for orchids, they are safe to use. If you are using hydrogen peroxide, buy the label that says three percent concentration. Alcohol can be used at seventy percent. You will know that your hydrogen peroxide is fresh and viable, when you pour it out of the bottle and it foams. It does decompose when exposed to sunlight so don't store it too long. After spraying plants with hydrogen peroxide, follow up with a dusting of cinnamon, also a disinfectant, which will dry out the wound. If using alcohol, dilute it to half and half with water. It does kill bugs, but it also evaporates very quickly and may require several applications to wipe out an infestation.

Oil based products are best for treating mealy bugs and scale. It coats the insect, and virtually smothers them. Like hydrogen peroxide and alcohol, it is safe for human use. Neem oil is readily available, but does smell bad. There are several horticultural oils that are readily available either through your local home

center or hardware, or on the web. If you are using Neem oil, use one teaspoon per one quart of water, and stir to combine well. You can add a squirt of liquid dish soap to help the oil stick to the foliage of your plant. If you want something stronger, Tom recommends the Bayer products available at all local hardware and home center stores. Bayer Complete acts as a systemic as well as on contact. Merit is an effective Mitecide but it must be used outdoors and you must suit up to protect yourself when handling it. Tom recommends buying this as a hose attachment because it's so easy to use. Orthene is another highly effective product when first used, but insects do become immune to its use. Also, it does smell bad! It is critical to remember that not all of these products will be effective on all insects. Also, repeated use of one product can cause your insects to develop resistance. Tom suggests staggering or rotating the products you use to keep them effective.

Some of the most common insects to affect our orchids include Mealy bugs, Scale and Mites. Mealybugs are easily identified as they are white cotton masses that cling to the back of a flower or a leaf. They kill plants by sucking the juices from the plants. Scale acts in much the same way. They can be brown or white with reddish spots. When spraying for scale or mealybugs, be sure to spray the backs of foliage and flowers and into the joints. Mites are microscopic in size and not visible to the naked eye. However, their presence is made known by the fine webbed material they produce on the back of the leaf. Also, if you wipe the back of the leaf with a white paper or cloth, you will produce a reddish material on your wipe. They are not affected by the Bayer products. While not entirely effective, washing and wiping off the underside of each leaf with a soap solution provides some control.

Another problem specific to Phals, and common to many other orchids, is the multiple bacterial and fungus infections that travel through a collection. The bacterial infections cause sunken areas on the leaf where the cell structure has collapsed. Removal of the affected foliage is the only cure. Bacterial infections also affect the roots when the plant has been kept too wet, or the medium is breaking down. Blackened or brown, spongy roots need to be cut away. Once into a plant, bacterial infections spread rapidly through the plant's vascular system, and if you are not vigilant, the plant can die. Tom recommends treating spots on foliage by cutting a cross hatched pattern on the leaf and then cleaning the wound with hydrogen peroxide followed by a dusting with cinnamon. Be careful to only use new or sterilized tools when repotting or treating plants as sap on your cutting instruments can spread infection from one plant to the next.

There are a number of viruses that infect orchids and these are basically untreatable. They quickly spread from plant to plant through contaminated repotting tools, recycled pots, or even recycled medium. When repotting, discard all the medium in the old pot. Do not be tempted to reuse it!! When reusing pots, wash them thoroughly in hot soapy water and then soak in a bleach solution before putting another plant into that pot. There are several types of virus, the most common being the tobacco mosaic. There is also the Odontoglossum ring spot virus, identified initially by rings of discolored material on the foliage. Another is the Cymbidium mosaic which causes streaking on the foliage. There are kits for home use that you can use to identify these viruses, but they only work for one or two of the most common varieties, and there are hundreds out there. The safest thing to do if you suspect a plant is virused is to steel yourself and throw it away. Do not put the plant material in your compost as that will only spread it through your entire garden.

Most Phals should be sending out spikes now. To initiate spiking, Phals need nighttime temperatures to be a minimum of fifteen degrees colder than their daytime temperature for a period of ten days to two weeks. This applies to most species. Hybrids are bred for household use and can tolerate sustained indoor temps but

may not rebloom as well as their initial blooming. Once in bloom, Phals will often stay fresh for three months or more.

Repot your Phals when the roots become exposed, or before the medium begins to break down. Tom recommends repotting every two years. The best time to do this is when new growth is initiated, when you see new leaves developing, or new root growth. Be sure to cut away all dead roots. Select pot size based on the size of the root ball, making sure the roots fit snugly into the pot. If the pot is too big, and the roots don't fill the pot, there is a higher risk of water retention and root rot. Always use the smallest pot possible, regardless of the size of the plant itself.

Potting medium should hold moisture and breath. Tom made the point that most mixes found in the big box stores should be avoided as they contain long leaf pine bark and decompose quickly. Also these mixes may contain unevenly sized particles and small rocks. As the smaller particles wash out during watering, the remaining media may shift and disturb any new roots that are developing. Commercial mixes also cause water retention which can cause root rot. Be careful not to break any of the roots when handling the plant, as water can get into the wound and leave the plant vulnerable to bacterial infections. Scoop your medium into the pot around the roots, and tamp it gently until the roots are held firmly. Tom recommends soaking media before use.

Tom keeps his Phals in sphagnum moss. He likes it because it retains moisture longer than bark, therefore requiring less watering and less frequent fertilizing. However, the cost of sphagnum has gone up significantly in recent years. Tom said that the moss he buys is from Chile, and feels it holds up as well as the more expensive variety from New Zealand. The disadvantage of using sphagnum is that it can stay wet too long. When repotting with sphagnum, wet the material first, then squeeze as much moisture as possible out of it before putting it in the pot. It is slightly acidic when wet and if it is too wet it retards the plants adaptation in the pot.

Tom feels that bark retains moisture unevenly in the pot and that it requires watering more frequently. But, like sphagnum, it is slightly acidic. The advantage of using bark is that it is less expensive than sphagnum, it drains quickly, but it may be more difficult to handle when repotting. Tom recommends wearing gloves when working with bark as it can stain your hands and fingernails. Currently, many commercial growers are recommending a pine bark from New Zealand. It is extremely hard and is said to last seven years before it decomposes. It is sold under the trade name Orchidata. It is available through the Orchid Trail in Morrisville and Tammy purchased a pallet for the members of our society. If you want some contact her.

Our thanks to Joy Lemieux for the speaker's notes.



