



CLUB NEWS



December Party and Auction

Tom Sullivan welcomed 56 members and guests to the December party and auction at 6:45 pm. Dianne Batchelder planned a Mexican themed dinner, so she

made chicken enchiladas and Laura Kissee made pork fajitas. Every one contributed to the food fest, bringing salads, sides and desserts. The food was yummy. A big thanks to Dianne, Laura, Dottie Sullivan and Ann McKenna for organizing the food and cleaning up in the kitchen. Orchid growers sure can cook!

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CLUB NEWS



Upcoming Orchid Events

December

- 9 JOS Christmas Auction
Timaquana Country Club
- 13 Florida North-Central AOS Judging, 10 am
Bob Foster Center, Mt. Dora 32757
- 13-14 Fort Pierce Orchid Society Show
Riverwalk Center

January

- 6 SAOS Meeting, Miniature Orchids, 6:30 pm
Luis Ortiz, Orchid Hobbyist
- 9-11 Fort Lauderdale Orchid Society Show
Charles Dodge City Ctr, Pembroke Pines
- 10 Florida North-Central AOS Judging, 10 am
Clermont Judging Ctr, 849 West Ave.
- 10-11 Sarasota Orchid Society Show
Sarasota Municipal Auditorium
- 13 JOS Meeting, Cattleyas of Brazil
Speaker Francisco Miranda, Miranda Orchids
- 14 Virtual Show Table
Courtney Zooms into Cyberspace
Invitation Will be Sent by Email
- 16-18 Tamiami International Orchid Festival
Dade County Fair Expo Center
- 23-25 Apopka Int'l Winter Orchid Show
Krull Smith Nursery, Apopka
- 31-1 Florida West Coast Orchid Society Show
Seminole Recreation Division

February

- 3 SAOS Meeting, 6:30 pm
Eric Milstrey and Linda Stewart, SAOS
Tips and Tricks for Growing Orchids
- 7 SAOS Repotting Clinic, 10 am til noon
Southeast Branch Library
6670 US-1 N, 32086
- 7-8 Venice Area Orchid Society Show
Venice Community Center
- 10 JOS Meeting, Orchids of Jamaica
Speaker Claude Hamilton

- 11 Virtual Show Table
Courtney Zooms into Cyberspace
Invitation Will be Sent by Email
- 13-14 Greater Orlando Orchid Society Show
Orlando Garden Club
- 14 Florida North-Central AOS Judging, 10 am
Bob Foster Center, Mt. Dora 32757
- 14-15 Boca Raton Orchid Society Show
Safe Schools Institute
- 20-22 Naples Orchid Society Show
Moorings Presbyterian Church

March

- 3 SAOS Meeting, 6:30 pm
Jim Roberts, Florida SunCoast Orchids
Spring Pendulous Dendrobiums
- 6-8 Martin County Orchid Society Show

St. Augustine Orchid Society Organization

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CLUB NEWS

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Tom and Dottie were given the Diamond Award in gratitude for all the things they do for the Society. Tom has been the president for the last 6 years and is passing the torch to Eric Milstrey. Eric is an avid orchid grower who will bring new ideas and fresh perspectives to the club.

Janis Croft will continue as Communications Veep, preparing the monthly minutes of the meeting for the newsletter, creating the Instagram posts for upcoming events and putting together the PowerPoint presentation for the virtual show table. Karen Ford is Janis' go-to person for backing her up. If you would like to get involved in any of these projects or would be interested in helping with social media posts and publicity, talk to Janis.

Dianne Batchelder will continue as Events Veep, organizing the annual picnic and holiday events and monthly meeting refreshments. She has recruited Laura as her back up. Dottie, Ann and Kym van Konijnenburg always help with setting up the refreshments. If this is something you are interested in, talk to Dianne.

Linda Stewart will continue as Membership Veep, maintaining the membership list, welcoming guests and new members, making nametags, managing the mentoring program and sending well wishes to members. Director Rachel Biello is learning all of Linda's tricks. If you want to welcome guests or link up mentors with mentees, talk to Linda.

Sue Bottom will continue as the Programs Veep, scheduling speakers for our monthly meeting, organizing the potting clinics, virtual show tables and auctions, with the assistance of Director Judie Armstrong. Tom and Dottie, Bob Schimmel, Ann and Dianne are integral members of the potting clinic. Christine Peterson handles the Members Choice Awards for the show table. Courtney Hackney talks about the plants brought to the show table each month, as



well as the monthly Virtual Show Table. Steve Hawkins has been a great back up for Courtney at the monthly meetings. If you would like to interact with our speakers, talk to Sue.

Cathy Mayo will continue as Treasurer collecting money at the meetings, handling banking arrangements and regulatory filings, and preparing financial statements. Dianne, Director Kay Payne, Sherrie Jenkins and Linda help with the supplies table, raffle table, and auctions. If you would like to help with any of these items or sell raffle tickets, talk to Cathy.

Howard Cushnir is retiring as our librarian. If you are interested in bringing a selection of books to the meeting for members to borrow, talk to Howard or Sue.

Sue and Terry Bottom are our newsletter editors and webmasters. Sue writes the words and Terry creates the music with his photographs. They are responsible for sourcing articles and reporting on orchid events. If you are interested in help with education programs, talk to Sue.

Sue Bottom organized the auction, obtaining a nice selection of plants donated by Allen Black, Eric, Tom, Janis, Sue, Vicki and Andrew Bridgham and George Hausermann of EFG Orchids. The auction was tons of fun with Courtney at the helm. Courtney was in rare form and his good humor spread through the group, encouraging lively bidding. A beautiful thing, because the proceeds from the auction fund our speakers' honorarium and travel expenses. We also had our 2026 calendars and seedlings from Allen Black and Ben Oliveros.

Thanks to all our volunteers that planned the event and made the auction a success. We are really lucky to have such a fun loving group. Enjoy your friends and family over the next few weeks, and here's hoping 2026 is the best year yet!



CLUB NEWS

Orchid Digest Diamond Award

Tom and Dottie Sullivan

The St. Augustine Orchid Society is honored to present the Diamond Award of Excellence to Tom and Dottie Sullivan. Tom and Dottie are a great team, who have worked tirelessly in support of the Orchid Society. For the last 6 years, Tom has served as the president, overseeing our monthly meetings, with humor and good cheer. He is an invaluable member of the repotting clinic team, where members of the club and the general public bring in their orchids for a little tender loving care and growing advice... he's a wiz making wire products. Not to be out done, Dottie makes sure everyone that comes to the meetings and repotting clinics is welcomed and feels at home. She keeps everyone fueled up on coffee and treats. We hope they both continue making everyone at the SAOS feel like family.



Tom Kuligowski

Tom Kuligowski departed this earth in November. He was an avid orchid grower and award-winning photographer, who spoke to the SAOS and numerous other orchid societies. Rest In Peace.



American Orchid Society Corner

Webinars

January 8, 8:30 pm, Everyone Invited
Greenhouse Chat - Ron McHatton

Orchids Magazine this Month

Sex Lives of Catasetinae - Günter Gerlach
Cattleya Hunting - Stephen Van Kampen-Lewis
Aganisia cyanea - Judith Rapacz-Hasler
What is a Species - Sue Bottom

January 6 Meeting

Tiny Treasures, Big Blooms

Luis Manuel Ortiz Jordán, Orchid Hobbyist

Luis will talk about how to grow cool growing miniature orchids in Florida. Every warm climate orchid grower has dreamed of growing plants that are considered impossible to grow because they do not have the right conditions. Luis will present some of this techniques, tips, and tricks to help orchid growers cultivate highland climate orchids in their home.



While his collection includes other larger growing genera, his greatest passion lies with cool-growing miniature orchids. Despite the challenges of cultivating them in hot, humid South Florida, Luis embraces the process and enjoys sharing his knowledge, teaching others how to help their own miniatures thrive. Beyond his orchid endeavors, Luis is a research scientist at UF-Scripps Biomedical Research in Jupiter. In April 2021, he published a paper on *Eurystyles luisortizii*, a species he discovered in Puerto Rico. He also serves as a student judge for the American Orchid Society, a role that reflects just how deeply orchids define his world.

When: Tuesday, January 6, 6:30 til 9 pm

Where: Memorial Lutheran Church

3375 US 1 South, St. Aug 32086



Renew Your Membership

It's that time of year! The dues are \$20 for an individual or \$30 for a family if paid by Zelle (904-501-0805) or check (mail c/o Linda Stewart, 1812 Diana Drive, Palatka 32177). For an extra dollar, use the PayPal link on our [website](#). Easy Peasy!



CLUB NEWS

Programs Scheduled for 2026



January 6 – Tiny Treasures,
Big Blooms
Luis Ortiz,
Orchid Hobbyist
and Student Judge



August 4 - Mounting Orchids
and Auction
George Hausermann,
[EFG Orchids](#)

February 3 – Tips and Tricks
Eric Milstrey & Linda Stewart,
SAOS Members



March 3 – Pendulous
Spring Dendrobiums
Jim Roberts,
[Florida SunCoast Orchids](#)



April 7 – Hybrid Bifoliate
Cattleyas
Ben Oliveros,
[Orchid Eros](#)



October 6 - Orchid
Survival Guide
José Expósito,
[Soroa Orchids](#)



May 5 – Cultivation
of Vanda Orchids
Serena Roman,
[Lady Vanda Orchids](#)

June 2 - Brassavola nodosa:
Fragrance and Form
Jason Mackey,
[Barefoot Orchids](#)



December 1 -
Christmas Orchid Auction
Spread Holiday Cheer
with Orchid Friends

July 7 - Orchids of
Tropical America
Ron Kaufmann,
[Orchid Conservation Alliance](#)
tentative



September 1 – Bulbophyllum
Species
Julien Baruch,
[Krull-Smith Orchids](#)



November 3 - Growing
Orchids in Florida
Mark Walters,
[Orchid Trail](#)



CULTIVATION



Orchid Questions & Answers

by Sue Bottom,
sbottom15@hotmail.com

Q1. I just noticed this black at the base of my cattleya. The pseudobulb is hard, not rotten. I guess it's best to chop it off so it doesn't spread?

A1. That looks an awful lot like the fast moving black rot coming up from the roots into the pseudobulb and next through the rhizome into the other pseudobulbs. Cut, sterilize and keep cutting until you don't see any more discoloration in the rhizome. You can treat with something like Banrot, Subdue or Aliette if you have them, and then keep it on the dry side for a couple days.



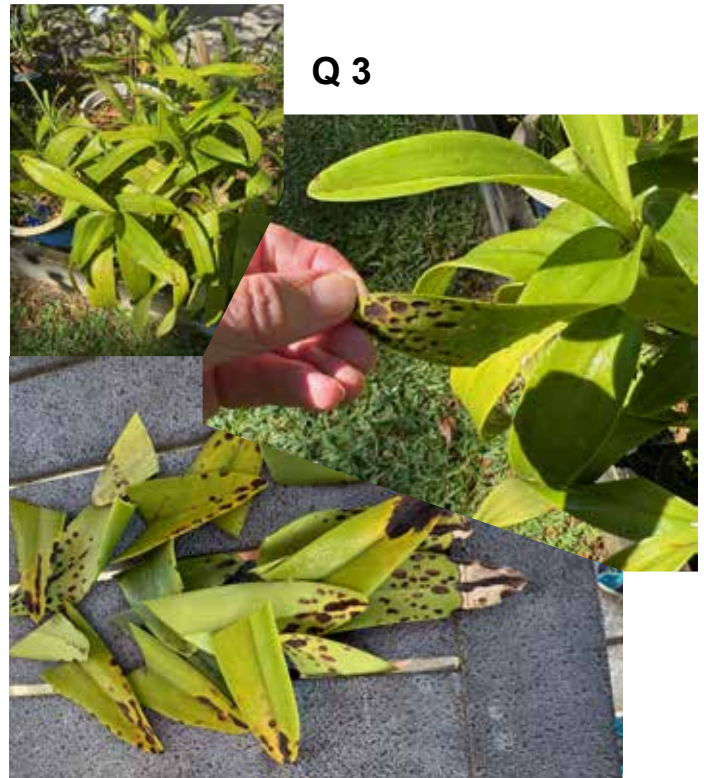
Q2. I've been dealing with I think spider mites for the past year or so. I don't see anything and there's no webbing but I will see something that looks like rust if I wipe under the leaves. This is only on my phalaenopsis growing in the house under lights. I would appreciate any help you can give me.

A2. That sure looks like mite damage, they thrive in the dry environment under lights. You don't always see webbing, but the stippling on the upper leaf surface and the poop you see when you wipe the leaves are indicative of mites. If you get a loupe or a magnifier, you should be able to see them crawling around on the leaf underside. I use Avid for mites, you can get a generic abamectin that is a little cheaper. You'll spray thoroughly the upper and lower leaf surfaces at weekly intervals for a month. While you are waiting for the chemical to arrive, you can take the phal to



the kitchen sink and wash it using dish detergent rubbing the leaves top and bottom. Then start your spraying program. You might also consider spraying everything that's under lights cause the mites will travel from plant to plant.

Q3. This plant is important to me. I left for three weeks and when I came back, many of the leaves had these spots, which go right through the leaf. What shall I do?



A3. That looks like a schombocatt and they're pretty tough customers, but you don't know how fast the damage occurred or whether it was concurrent with excess leaf wetness. I'm debating whether it's a bacterial problem, which is what the damage on the leaf tips looks like, or anthracnose, which is what the damage close to the leaf axil looks like. I think I would cut away the severely damaged leaves and spray the plant with copper and see if that doesn't stop any further damage. Mary cut off lots of leaf tips but decided to leave some of the leaves with minimal damage.



CULTIVATION



Beginner Orchid Grower by Dr. Courtney Hackney

Orchids are viewed by the public and many new hobbyists as very exotic plants; difficult to grow. There are certainly many orchid species that fit that category. However, most orchids given as gifts designed for the mass market are very easy to grow if one remembers the “KISS” principle. This axiom

(keep it simple stupid) works well for those of us that like to think that we have advanced beyond beginner status too. The following is my list of orchid growing rules that follow the “KISS” principle. Pass this list on to friends who receive an orchid gift this season.

1. Water only when dry. Even if you under water, your orchid will not die. Over-watering kills roots, degrades the potting medium and attracts insects. All of these problems are difficult to reverse even for experts. Under-water your orchid, and one simply needs to water more frequently and your orchid will grow and flower.

2. Under-fertilize or don't fertilize. Every orchid growing manual recommends a particular nutrient formula or brand. Newly purchased orchids usually come in a medium loaded with nutrients (fertilizer). Many new orchid growers purchase “orchid” fertilizer with their plant and feel obligated to use it regularly. Few orchids die from being under-fertilized, but many die from too much fertilizer. Over fertilizing is the second leading cause of death of orchids, often accelerated when the orchid starts to show signs of stress from over-watering.

3. Repotting. As soon as an orchid begins to look stressed many growers decide to repot. If over-watering and over-fertilizing have not killed your orchid, this will usually finish the job. Repotting can save an orchid if the first two rules have been violated, i.e., roots are dead, and the medium shot. Rarely, however, is this effort successful once this stage is reached. There is a greater chance of success if the mistreated orchid and its medium is carefully transferred to a clay pot of the same size and allowed to dry thoroughly. Most orchids come in a plastic pot, often poorly drained, and sometimes have no drainage at all.

4. Use the water you have! Buying mineral water or distilled water may make you feel better, but it generally offers no better chance of survival for your orchid than water from the tap. Some folks have even installed water softeners for their orchids, a sure-fire death warrant. Good



water quality is extremely important, but not critical for most orchids. Thoroughly soak your orchid at least once a month. This can involve setting your orchid in a sink full of water for 15 minutes or so or allowing water to run through the pot for a while. This removes any salts, including excess fertilizer. Use water at about the same temperature as the air.

5. Humidity. Many beginners insist on misting their plants constantly to maintain a proper humidity and provide water. Often this seems necessary because some aspect of rules 1-4 above has been violated and the orchid appears to be wilting or suddenly drops all of its flowers and buds. If humidity is kept at the ideal for people, 50-60%, your orchids will lose water at an appropriate rate. Consider the location of your orchid and if you would be uncomfortable there, so would your orchid.

6. Light. Orchid books spend lots of time describing the ideal light environment. All plants need light to grow. However, orchids can adapt to a variety of light conditions and grow and flower there. They cannot grow in the dark. Orchids in windowsills often experience bright light for short periods of time and then low light levels for the rest of the day. As long as leaves do not become hot to the touch, this setting is appropriate as long as one does not violate rules 1-5 above.

Note: Dr. Courtney Hackney wrote a monthly column of his orchid growing tips for about 20 years; we are reprinting some you might have missed, this one from December 2008.



CULTIVATION

Orchid Flowers and Their Pollinators

Birds and bees are not the only ones making music with orchids

by Dr. Tim Wing Yam, reprinted with permission



Cycnoches pentadactylon 'Sunset Valley Orchids' – grown and photographed by Fred Clarke. The peculiar-looking, 3-inch flowers of this South American species hang on the 10-inch long inflorescences. Brown spots decorate the slender greenish-yellow sepals and petals, which contrast with the curious cream-yellow lip. *Euplusia superba*, a bee, pollinates this species' chocolate-scented flowers

One of the most interesting aspects of orchid biology is their pollination, whereby pollen is transferred from the anther to the stigma. Most orchids are cross-pollinated, requiring some pollinators to transfer the pollen from one plant to another. They have many extremely complex and ingenious pollination mechanisms to ensure effective and efficient pollination. Most orchids are cross-pollinated by a variety of vectors, such as ants, bees, beetles, wasps, moths, butterflies, flies and birds.

Some species produce nectar to attract a pollinator. The sugary liquid may be produced in spurs, as in species of *Angraecum* and *Aerides*, or in nectar tubes as in *Cattleya*. The nectar produced by the host plant is food for the pollinator while collecting the nectar, and the pollinator in turn transfers the pollen from one plant to another.

The lip of an orchid flower is often its most attractive part. It is adorned with decorative and sometimes stunning masses of calli. These calli and other floral parts may contain unicellular trichomes (hairs), papillae and scales that produce starch, proteins, oil drops, fragrances and other substances to attract the pollinators. Examples can



Phal. bellina 'Krull's Perfection' FCC/AOS, grown and photographed by Joe Sayers



Phal. violacea var. *tipo*, grown and photographed by Courtney Hackney
Two species have been known under the name *Phalaenopsis violacea* and have been referred to as the Borneo type and the Peninsular Malaysia type. The Borneo type, now recognized as the distinct species *Phalaenopsis bellina*, is more uniform in its shape, size and basic color, its individual flowers are about 1½ inches across, and the sepals and petals are white except for the inner half of the lateral sepals and lip, which are magenta-purple. The true *Phalaenopsis violacea*, native to Peninsular Malaysia and Sumatra, is more variable. Its flowers measure 2 inches across, and their color ranges from pure white to dark rosy-purple with green tips. Both species have a sweet fragrance. Flowers of *Phal. bellina* emit a rosy-floral scent, while those of *Phal. violacea* possess an additional blend of cinnamon.

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CULTIVATION

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be seen on flowers of *Cymbidium*, *Stanhopea*, *Oncidium*, *Dendrobium*, *Coelogyne* and *Vanilla*, among others. While feeding or scratching and gnawing at the calli, the pollinators may pollinate the plant.

Besides providing food for the pollinators, the callus masses may provide certain visual effects to attract the insects. It is believed that the ultraviolet (UV) and visible light-reflecting patterns of the flower provide such an attraction. Once a flower is pollinated, its color and image change so that the flower is no longer attractive to the pollinator. These reflective patterns, especially those of the UV range, cannot be detected by human eyes.



Brassavola nodosa 'Brecko-Nova', grown by Sue Bottom and photographed by Terry Bottom. This moth-pollinated species can be found from Mexico to Colombia on the Pacific coast and islands. All *Brassavola* species have remarkable similarity in their flower structures. The flower position is typically horizontal or slightly hanging, which aids the moths while feeding on the nectar. The prominent lip not only provides a landing platform for the pollinator in some cases but also functions in attraction as a visual clue and in positioning the insect for proper deposition of pollinia. The spade-shaped lip tapers toward the column and eventually wraps completely around it, forming a perfect guide to the nectary and column. A heavy fragrance is produced by the flowers, which have abundant nectar hidden deep in a cavity embedded in the ovary. The scent of the flowers is quite strong with a slightly medicinal, sweet odor. It is released beginning shortly after sunset, reaching maximum strength around midnight, and fading quickly after sunrise.

Owing to the differences in color vision between the different pollinators, orchid flowers pollinated by different groups of pollinators have different colors. For example, bee-pollinated flowers such as *Arundina graminifolia* and *Dendrobium crumenatum* may be of several colors, but are seldom if ever red. Butterfly-pollinated orchids such as *Disa uniflora* are mostly pink, red and yellow. Those pollinated by moths such as *Angraecum sesquipedale* are cream, white and pale green. The color of the flowers pollinated by flies such

as *Bulbophyllum gusdorfii* is variable. Orchids pollinated by birds, for example *Dendrobium secundum*, are bright yellow, red and pink, and are sometimes tubular in shape.

Certain orchid species possess some movable floral parts. The insect pollinator is attracted to the flower by the movement of such parts in an air current. An example is *Bulbophyllum barbigerrum* from Africa. Its hairy lip is sensitive to the slightest air movement.

Fragrance Plays a Role. To attract specific pollinators, orchid species produce a large number of compounds that generate odors and fragrances. Many people tend to think that orchids are not fragrant, but it is believed that as many as 75 percent of all orchids are scented. That is, they emit detectable chemical compounds, and some of them are extremely fragrant while in some instances they are extremely repulsive smells.



Habenaria rhodocheila – grown and photographed by Steve Dorsey. This attractive terrestrial is found throughout Southeast Asia. From its color and floral structures, *Habenaria rhodocheila* is most likely pollinated by butterflies.

Scent is a mechanism that some orchids use to lure pollinators. Unlike animals, most plants (except for some primitive ones) are unable to move sexual cells from one individual to another. To accomplish the vital movement of sexual cells, they rely on other vectors such as wind, insects, birds or other animals.

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For plants that are pollinated by animals, the pollinators are often attracted to the plants by floral colors, shape and fragrances. Of these attractants, fragrances are some of the most reliable and specific. For example, the only attractant that is useful at night is fragrance.



Bulbophyllum medusae – grown by Sue Bottom and photographed by Terry Bottom. This interesting species, which is native to Singapore, is pollinated by flies. About 15 flowers are arranged in a fan-shape whorl or in a circle on each inflorescence. The lateral sepals are 5 inches long and contribute to the plant's unusual appearance.

Insects are the most important pollinators of orchids. Insects have compound eyes. Because of the nature of the compound eyes, they produce a confusing and repetitive visual field. As such, they have great difficulty in seeing the colors of orchid flowers from any great distance, yet insects often have a preference for flowers of specific color. It is believed that when the insect approaches a flower of a specific fragrance, it ultimately gets close enough to be guided visually to a successful landing.

The human nose can only detect some of the complex odoriferous compounds released by orchids and other flowers. What smells good for the pollinators may not necessarily have the same effects on people. In fact, my experience with scent is that not everybody likes a particular scent and very often, not all persons describe a given plant fragrance identically.

In terms of function, fragrant compounds can be classified into three categories. First, some compounds are food sources for the pollinators. This is usually associated with

nectar, a blend of highly nutritious water-soluble sugars that is eagerly sought by birds, bees, butterflies and moths. Secondly, some fragrant compounds are sexual attractants. These compounds are highly complex and often pollinator-specific. The fragrance is often interrelated with shape, color and movement of accessory features of the flowers. It is believed that some sexual attractants of insects may be manufactured from selected flower fragrances. Lastly, some of these compounds act as general attractants. They are readily detectable by sophisticated chemical analyses yet do not function in ways similar to other known attractants.

Depending on the species, all floral parts such as sepals and petals to petioles, calluses and basal spurs, are known to be able to produce fragrances. Fragrances are produced in specialized glands called osmophores that can be located in various flower parts. Osmophores can be distributed all over a flower as a general attractant or they can be confined to certain regions of the flower so that pollinators are attracted to these specific areas and remove or deposit pollinia in the process.

Fragrance production consumes energy. To use the least energy to achieve the maximum effect, the timing of scent production often coincides with the time of visitation of the pollinators. Bee-pollinated flowers are fragrant early in the day when bees are most active. The timing of fragrance production is so specific that most bee-pollinated orchids are not fragrant after the morning and are less scented on cloudy days.

Because orchid-pollinator interaction is so specific, orchids that are pollinated by a specific group of pollinators often possess some common characteristics. Bee-pollinated orchids are pleasantly scented and have bright colors of purple, violet, blue, yellow and green. Other characteristics of the flowers also help to guide the pollinators to have a perfect landing. For example, orchids that are pollinated by bees often have a prominent lip with colored nectar lines and osmophores at the base of the lip. Birds rely more on their superior vision to locate the flowers than insects. It is therefore not surprising that bird-pollinated orchids are often brightly colored, but not fragrant.

Orchids pollinated by butterflies are generally similar to bee-pollinated orchids, except that butterflies can perceive some shades of red. Visual cues are probably more important than fragrance, but many flowers pollinated by butterflies are fragrant. Moth pollinated orchids produce scents at night when their pollinators are most active. They also have plenty of nectar and are generally white or light green. Examples can be found in the genera *Angraecum* and *Brassavola*. Most of these orchids have a prominent lip so that it will be easier for the moth to locate and land when they follow the scent to the flowers.

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Once the pollinators are attracted to the flowers, many orchid species have other means to ensure successful pollination. One example is the ejection of pollinia by *Catasetum*. *Catasetum* is one of those unusual orchid genera that have separate male and female flowers.



Angraecum sesquipedale – grown and photographed by Courtney Hackney. Among the *Angraecum* species, this is one of the most beautiful and extraordinary. A native of Madagascar, inflorescences of this species can carry up to six flowers. The star-shaped flowers are fleshy and waxy. Each white flower measures 5 to 6 inches across, with a 12 to 14-inch-long spur. Charles Darwin predicted that the long spur in the flower must be pollinated by a moth with an equally long proboscis. His judgment was proven to be true when the plant was discovered to be pollinated by a hawk moth (*Xanthopan morgani praedicta*). The flowers are not fragrant during the day, but with the onset of darkness, they exude an attractive and powerful scent that continues until the following morning. The scent is fresh floral and some say it has a smell of honey.

When a euglossine bee visits a male flower of *Catasetum*, it touches the antenna of the column, triggering off the ejection of the pollinarium. The pollinarium sticks tightly to the back of the bee. As the bee visits another plant, on backing out of a female flower, the pollinarium is inserted into the stigma. Another interesting mechanism can also be seen in some *Cycnoches* species (also has male and female flowers). As the flowers of this species do not resupinate, the lip is situated above the column. When the euglossine bee lands on the lip of a male flower, the lip is pulled. As the abdomen of the bee touches the tip of the column, it triggers the ejection of the pollinarium. The ejected pollinarium sticks to the apex of the abdomen. As the bee visits a female flower, the pollinarium is placed in the stigma. Flowers of *Peristeria elata*, the national flower of Panama, have a hinged lip. When a euglossine bee lands on the lip of the flower, the hinged lip tends to counterbalance and throws the bee against the column. As a result, the pollinarium is attached to the thorax of the bee.

The bee inserts the pollinarium into the stigma of another flower.

Only a small percentage of orchid species self-pollinate. Some orchids self-pollinate while the buds are still closed. One of these is *Dendrobium mirbellianum*. Self-pollination is made possible by autolysis of the rostellum preceding pollination, thus allowing the pollinia to come into contact with the stigma. Although self-pollination results in reduced variability and genetic stability, it is a means of ensuring pollination. When seeds of a species are being carried to a new territory that has no natural pollinators, the ability to self-pollinate allows the plant to establish in the new location.

Certain species have both cross-pollinated and self-pollinated forms. Some examples are *Spathoglottis plicata*, *Arundina graminifolia*, *Phaius tankervilleae* and *Cattleya aurantiaca*.

Next time when you see an orchid, look for some of the species mentioned in this article. Try to find out how these species are pollinated. It will add a new dimension to your understanding of this fascinating family of plants. And if you are lucky, you may even be able to spot some of the pollinators in action.

This article appeared in the *American Orchid Society Orchids* magazine in May 1999 (Vol. 68:5, pp 462-471), reprinted with permission.



Caularthron bicornutum – grown and photographed by Michael Blietz. A South American species, the plant flowers almost year round. The inflorescence bears 10 to 20 flowers but only a few open at a time. The fragrant, spectacular white flowers are 2 inches in diameter. The strong and unusual scent resembles that of a mixture of fruits and candies.



ORCHID ADVENTURES



Christmas Shopping at EFG

We had lots of SAOS donations for the Holiday Party and Auction this year, but we thought we'd run down to EFG and pick up a few blooming orchids for variety. Wow, George and his son Quinn have really created an incredible tropical wonderland filled from top to bottom with well-grown plants... many propagated in house in the new greenhouse they just finished (and promptly filled up, twice!). Next up is a pyramid conservatory, in the blueprint stage now, to be filled with tropicals. The nursery was packed with shoppers when we arrived. When it was time to check out, George told us our money was no good, he donated all the plants to SAOS. He's such a sweetheart! If you want to beat the winter doldrums, make a trip down to DeLand for this slice of Paradise.



SHOW TABLE REVIEW



Grower Sue Bottom
Asca. Memoria Thianchai



Grower Steve Dorsey
Mps. Breathless 'Florence'



Grower Sue Bottom
B. nodosa 'Hackneau'



Grower Steve Dorsey
Cym. Enzan Sarah 'Albion'



Grower Courtney Hackney
Blc. Memoria Vivian Ramnarace



Grower Claude Hamilton
C. bowringiana forma alba 'Hamlyn' CHM/AOS



Grower Suzanne Susko
Blc. Goldenzelle 'Orange Pumpkin' HCC/AOS



SHOW TABLE



Grower Suzanne Susko
Pot. Kita Karano Hana 'Volcano Queen'



Grower Sue Bottom
Lc. Lilac Dream



Grower Allen Black
C. lueddemanniana 'Neon'



Grower Allen Black
C. lueddemanniana 'Crownfox Goliath' FCC/AOS



Grower Courtney Hackney
C. mossiae var. semialba 'C-227-1'



Grower Courtney Hackney
C. Triumphans

