CENTRAL LOUISIANA ORCHID SOCIETY NEWSLETTER *VOL. 42 ISSUE 2 February 2021*

http://www.centrallouisianaorchidsociety.org

From the President

Another month has come and gone. I contacted St. James Episcopal Church about our meeting place and they are still not allowing us to meet at their Youth Building. Therefore, we will not be meeting this month. We hope to arrange a potting session late spring.

On another note, the Louisiana Judging Center met for the first time at the Guillory's home in Alexandria, LA. Nine judges met and judged 15 plants and awarded four plants. See the photos in the newsletter of the awarded plants. Next month, on Saturday, February 27 we will again be meeting at our home until the Westside Library opens. CLOS members interested in clerking are invited to attend. AOS President, Robert Fuchs will be attending this judging as well. CLOS member, Eron Borne has joined the LJC as a student judge.

As spring approaches, now is the time to look for new roots and decide what needs repotting. In the body of the newsletter, look for an article on ***Root Rot Caused by Rhizoctonia*** **by Sue Bottom.**

Regards,

Wilton A. Guillory, Jr., CLOS President

Meeting Time & Place

No Dues will be collected for 2021

Meeting canceled for February

Central Louisiana Orchid Society Officers

President –Wilton Guillory
Vice President – Al Taylor
Secretary –Andrea Mattison
Treasurer – Jim Barnett
Director –Al Taylor
Director- Connie Guillory
SWROGA Director#1 Linda R
SWROGA Director#2 Eron B
AOS Representative –Wilton
ODC Representative – Andrea Mattison
Conservation Rep-Jim Barnett
Newsletter Editor – Connie Guillory
Show& Tell –Rick Allardyce

Louisiana Judging Center January

Paph. St. Swithern 'Attention Chief Officer' HCC/AOS 86 pts. Presented by Sheila and Laurie Skov

Paph. St. Swithern ‘Attention Chief Officer’ HCC/AOS 86 pts.

Phaiocalanthe Liberty Creek ‘Louisiana’ HCC/AOS 77 pts. Presented by Al Taylor

Clo. Diane Drisch ‘Beauregard’ HCC/AOS 77 pts. Presented by John Schwarze

Clo. Diane Drisch 'Beauregard' HCC/AOS 77 pts

John Schwarze

Phaiocalanthe Liberty Creek 'Louisiana' HCC/AOS 77 pts. Presented by Al Taylor

Paph. Temptation 'Jane C. Williams' AM/AOS 81 pts. Plant presented by David Medus

Upcoming Orchid Events

Gulf Coast Orchid Society Show and Sale

February 26 - 28, 2021

Add to Calendar
Calendar-ico

Contact

Jo Ann Vaz
601-530-8778
joannvaz@bellsouth.net

Location

Gautier Convention Center, 2012 Library Lane, Gautier, MS 39553

The Gulf Coast Orchid Society Show and Sale is being held February 26 - 28, 2021 at the Gautier Convention Center, 2012 Library Lane, Gautier, MS 39553. Event was originally scheduled for January 2021.

Judging is being held on February 27, 2021 at 8:00 AM.

AOS Virtual Speakers Day
February 6, at starts at 11:00 am EST

Online Registration $30 https://www.aos.org/all-about-orchids/webinars/public/speakers-day.aspx

2021 **FEBRUARY AOS Corner** – for **A**ffiliated **S**ocieties

The AOS Corner is for society representatives and newsletter editors: Orchid societies are welcome to reproduce the AOS Corner completely, or in part, in their society publications.

We encourage use of the **AOS website** by all members. http://www.aos.org

FOR THE LOVE OF ORCHIDS from Florida

As hard as it may be to imagine in this time of COVID, there are places around the country that are returning to near normal activities. There are some groups that continue to prepare for orchid shows and plant festivals, all the while keeping fingers crossed that the show will go on. Since I am a show chair, I too am optimistic that my society's annual orchid show, scheduled for the first weekend in March will go on. I am pleased that the vaccine has arrived in our state. Many of our residents are receiving their required dose. There is hope.

Where I live, there are three AOS affiliated orchid societies within a thirty-minute drive. One is meeting in-person, limited to 50 members by RSVP; the other two are meeting remotely via Zoom. My own society members chose to meet by Zoom, with a reevaluation after our orchid show, of meeting type for the second quarter of the year. We have figured out a way to hold wildly popular online orchid drawings for members and guests to purchase tickets in advance of our monthly meetings using our society Square account. We have had dynamic guest speakers that otherwise would have cost hundreds of dollars to fly in and host for an in-person presentation. Each step has helped to keep our society finances afloat while we wait for the time that we meet with our members face to face once again. In December, we had a drive-by Holiday Gathering outdoors at a local park pavilion. We distributed goody bags with orchids, sweet treats, society logo facemasks, AOS applications, and a new printed membership directory. We collected non-perishable food, cash donations and new toys for our local charity. Members dropped by (with masks on) for two or ten minutes, or whatever they were most comfortable with, to share some holiday spirit.

To the delight of our orchid loving population, several commercial vendors up and down this Florida peninsula have recently hosted mini orchid festivals on their property with guest orchid and supply vendors.

Following local health guidelines, AOS judging centers are also opening up. My region has been judging orchids on site, in pe rson since June.

It is hard to believe that it has almost been a year since this virus was classified a pandemic. We have learned many alternate and safe ways to interact and keep in touch with our orchid friends. There is proof that we will find a way through, or around this pa ndemic, to continue sharing our love of orchids. How are you connecting with your members?

SPECIAL WEBINAR - SPEAKERS DAY - ORCHID CULTURE
The AOS is excited about holding our first online orchid speakers day!
All About Orchid Culture

REGISTER NOW! Date: February 6
Featuring the following speakers:
Kristen Uthus of New World Orchids- Growing Miniatures 11 – 11:45 AM
Francisco Miranda of Miranda Orchids – Brazilian Habitats and Species 12—12:45 PM
Ron McHatton Chief Science Officer, AOS – Those Pesky Bugs 1—1:45 PM
Dave Sorokowsky of Paph Paradise – Growing Paphs Successfully 2-2:45 PM
Alan Koch of Gold Country Orchids — Dendrobium Culture 3-3:45 PM
Online Registration $30 https://www.aos.org/all-about-orchids/webinars/public/speakers-day.aspx

*From the AOS website…***ORCHIDS THAT FLOWER IN THE WINTER MONTHS**
C= 50F minimum, I = 55F minimum, W = 60-65F minimum

Cattleya percivaliana (KAT-lee-ah purr-sih-VAL-ee-an-ah) and many of its hybrids (I)
Coelogyne cristata (see-loh-GUY-nee KRIS-tah-tah) (C)
Laelia superbiens (LAY-lee-ah sue-PURR-bee-enz) [also known as Schomburgkia superbiens](C)
Lycaste skinneri (lye-CASS-tee SKIN-er-eye) and many of its hybrids (I)
Trichocentrum cavendishianum (try-koe-SENT-rum cav-en-DISH-ee-an-um) [also long known as Oncidium - Oncidium is pronounced

as on-SID-ee-um] (C)
Phaius tankervilleae (FAY-us tan-ker-VILL-eye) [the Nun's Orchid] (I)
Phalaenopsis (fail-en-NOP-sis) Many species and their hybrids (W)
Angraecum eburneum (W)
Angraecum sesquipedale (an-GRAY-kum sess-kwih-PED-ah-lee) (W)
Brassavola nodosa (bra-SAH-voe-lah NOE-dose-ah) (I)
Cymbidium (sim-BID-ee-um) Early flowering species and hybrids (C)
Dendrobium nobile (den-DRO-bee-um NOE-bee-lee) and its hybrids (C winter)
Epidendrum ciliare (sil-ee-AH-ree) (I)
Laelia anceps (LAY-lee-ah an-SEPS) (I-C)
Masdevallia (maz-dee-VAHL-ee-ah) Many species and hybrids (C-I)
Rhynchostylis gigantea (rink-oh-STY-liss jye-gan-TEE-ah) (W)
Cattleya coccinea (KAT-lee-ah COCK-sinn-ee-ah) (C) and many of the miniature cattleyas developed from this species.
The names above are derived from the Latin and Greek languages and can, at first, be daunting to pronounce. It's easier if yo u remember that, with few exceptions all letters are pronounced. You will often hear names pronounced somewhat differently than indicated as a result of regional differences. There are also pronunciations that are not technically correct but have found their way into common usage. The common pronunciation, stan-HOPE-ee-ah rather than the technically correct stan-HOPE-ah for Stanhopea is an example. This pronunciation has no doubt evolved because of the "pronounce every letter rule" although that would sound mo re like stan-HOPE-AY-ah.
https://www.aos.org/orchids/seasonal-orchid-care/winter-flowering-orchids.aspx

AOS MEMBERSHIP DRIVE
AFFILIATED SOCIETY BONUS - EARN AOS MEMBERSHIP EXTENSIONS FOR YOUR SOCIETY

Affiliated Societies can earn a one-month extension on their AOS society membership for each new individual AOS member they recruit. If you start now, with twelve new AOS members, your Affiliated Society can obtain a FULL FREE YEAR OF AOS membership! Be sure and advise new members to note their society affiliation in the comments section online at checkout or on the printed membership form.
https://www.aos.org/AOS/media/Content-Images/PDFs/AOSJoinForm2020.pdf

AOS Representatives, please remember to let your society members know that we want to sweeten the deal and give them every possible reason to join the AOS today! Once they become an American Orchid Society member, they have considerably more resources available to help make orchid growing enjoyable and successful. *https://secure.aos.org/store/register-renew*

Individual society membership and AOS Membership are not the same. Although affiliated, each requires separate membership dues.

Webinars-Coming Attractions!




When	**February 09, 2021** 8:30pm EST Tuesday	**February 16, 2021** 8:30pm EST Tuesday	**March 02, 2021** 8:30pm EST Tuesday	**March 09, 2021** 8:30 pm EST Tuesday
Topic	Greenhouse Chat (Orchid Q&A) *Send in your Questions!*	Native Orchids of the Heartland	Greenhouse Chat (Orchid Q&A) *Send in your Questions!*	Star Search: Judging Angraecoid Orchids
Presenter	**Ron McHatton** Chief Education and Science Officer	**Doug Martin** AOS Associate Judge, Member - Native Orchid Conference	**Ron McHatton** Chief Education and Science Officer	**Beth Martin** AOS Associate Judge

REGISTRATION REQUIRED: http://www.aos.org/orchids/webinars.aspx
Cannot make it on the scheduled date or time? No need to worry. Register anyhow!
Webinar announcements are posted on Facebook,
Instagram, and in the AOS Corner of your Affiliated Society's newsletter.
We digitize the webinars and they are available to view at your leisure.
GREENHOUSE CHAT Webinars are indexed by topic for future viewing
Send your Greenhouse Chat questions and photos to greenhousechat@aos.org

From the AOS website… **WHAT SHOULD I LOOK FOR WHEN I BUY AN ORCHID?**
Many consumers, both retail and retailer, find themselves in a position today of having to make purchase-oriented decisions about an entirely new -- to them, at least -- class of plants: orchids. What should they be looking for? How can the purchase dollar be maximized? How can the best shelf life -- of vital importance for both the retail and retailing consumer -- be obtained?
Here are three helpful hints:
The Plant
Should be in proportion to the container, have roots in the media, be clean and unblemished, turgid and medium green, free of visible

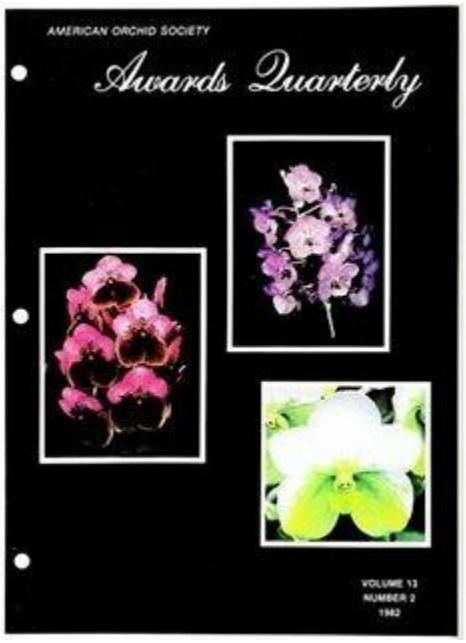
pests.

The Flowers

Should be lustrous and held well above the foliage on a strong, well-supported spike, be unblemished and free of fungal spotting, have some buds yet to open (never, ever accept a plant with flowers open to the tip of the spike, as it is impossible to judg e flower life after all flowers have opened), and have a generally appealing aspect that fits with your decor.

The Vendor

Is the overall aspect one of cleanliness and order? Do the production plants look good? Is the staff attentive and interested in your welfare? Can they answer the most elementary of your questions? Selecting an orchid plant isn't really that different from any other flowering plant purchase, including the satisfaction that comes with the proper decision. *The AOS thanks Ned Nash for this essay.*
https://www.aos.org/orchids/orchid-care/what-should-i-look-for-when-i-buy-an-orchid.aspx



AWARDS QUARTERLY to ORCHIDPRO

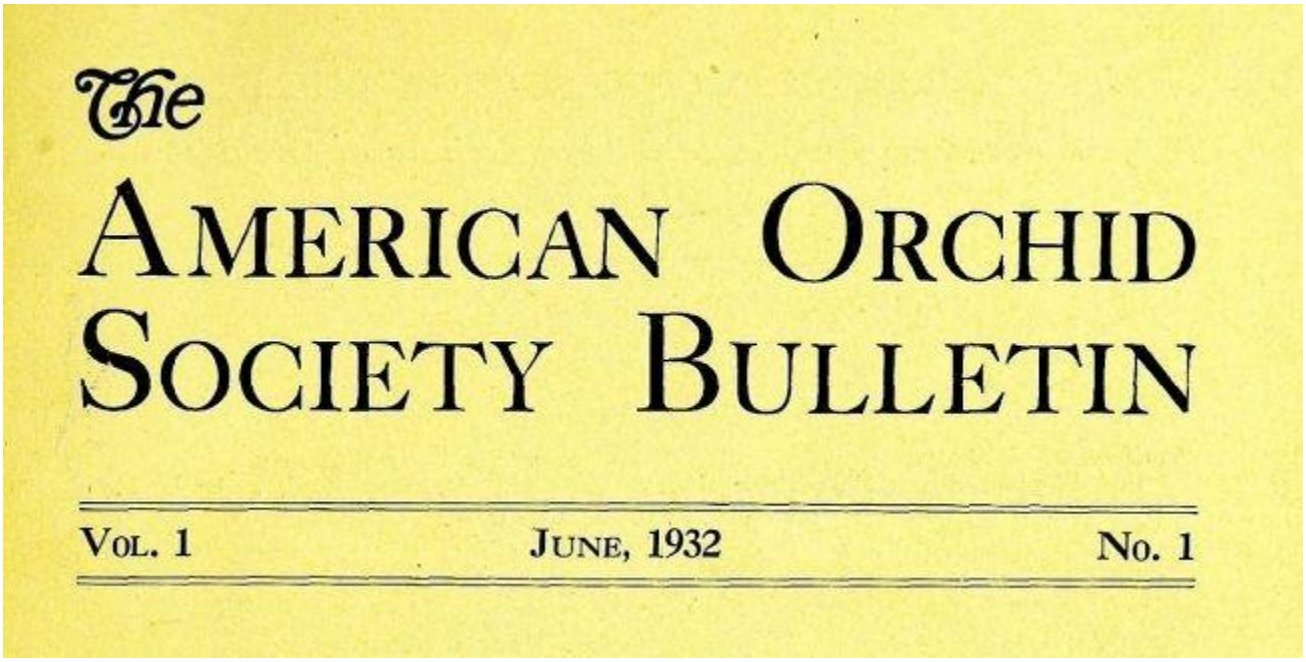
The judging system record of awarded orchids has come a long way, from its paperback black and white print version, available at an extra cost to judges and members, to a fully digital version included with every AOS membership.

*From OrchidPro…***Brassavola Little Stars 'Glen #3' CCM | AOS (84 points)**
Brassavola nodosa x *Brassavola subulifolia*
Award No: 20206602 Date: Dec 19, 2020, Exhibitor: David Medus, Photographer: Wilton Guillory
DESCRIPTION
Approximately 655 stellate flowers and 30 buds on 117 inflorescences on a robust, well grown plant 50cm wide and 30cm tall, g rown in a 36-cm slat basket; sepals and petals light green; lip white; substance average; texture matte.

The criteria for receiving a Certificate of Cultural Merit: A CCM is awarded to the *exhibitor* of a well-flowered specimen plant of robust health. The plant must have been in the care of the exhibitor at least 12 months immediately prior to the award and must score between 80 and 89 points inclusive on a 100-point scale. To date there are 8874 CCM AOS awards on record. https://op.aos.org/award

There have been nineteen AOS awards granted to this hybrid. The awards range from an HCC with 79 points to a CCE with 91 points. Congratulations to the grower of this well-grown specimen!
To learn more about the awards you and your orchids can win, check the Orchid Awards and Judging page on the AOS website. https://www.aos.org/orchid-awards-judging/aos-awards.aspx

You are invited to attend the AOS VIRTUAL SPRING MEMBERS MEETING Saturday, March 13
It is recognized that many members of our community may be reluctant or unable to travel due to institutional mandates and other external factors and this year's virtual event ensures that you won't miss out.
AOS Committee Meetings will be held at various times prior to the Members Meeting. If you'd like to attend one or more of these, kindly contact the Committee directly for details. (https://www.aos.org/about-us/committees.aspx) *To attend the Affiliated Societies Committee meeting during this event, send us a message with your contact information by March 03 and we will add you to our meeting list.*
Current AOS members will receive an email notification and coordinates to attend the Meeting of the Members, aka Virtual Town Hall. Keep an eye out for it! There will be no charge to attend this event.
https://www.aos.org/news-and-events/event-calendar/2021/2021-03/aos-2021-spring-members-meeting.aspx



Originally, a quarterly publication, each member now receives a monthly magazine either in print or digitally. https://www.aos.org/about-us/orchids-magazine.aspx

ORCHIDS MAGAZINE

Coming in February 2021

WHERE IT ALL STARTED The AOS turns 100 on April 21st and our February magazine is dedicated to this historic event. The February edition will feature the Society's history and the many changes in the orchid world over those hundred years. Watch your mailbox for this commemorative issue.

AOS CENTENNIAL CELEBRATION NEW DATES! October 27th - 30th, 2021

In order to ensure a safe and successful event, the Board of Trustees and the Centennial Celebration Committee have deci ded to reschedule the Centennial Celebration including the Members Meeting activities and Gala Banquet to the Fall of 2021. As previ ously announced, it will take place at the beautiful landmark location - The Biltmore Hotel in Coral Gables, Florida. We look forward to welcoming you as we celebrate this momentous occasion.

Events include:

- AOS Judging - Thursday, October 28, 2021
- Special Centennial Auction - Friday, October 29, starting at 7 p.m.
- Speaker Series - Saturday, October 30, until 3 p.m.
- Centennial Gala - Saturday, October 30, starting at 6 p.m.

You and your society can become sponsors of this event! Make your contribution here:
https://secure.aos.org/donate
Select "Centennial Celebration Fund" from the Distribution drop-down list.

*From the AOS website…***The AOS and ORCHID CONSERVATION**
Conservation of orchid species and their habitats has been a cornerstone of the AOS since our founding in 1921. Through its members and staff, the Society plays a major role in the formulation of world orchid conservation opinion and policies. By working to save orchids and their habitats here and abroad, we preserve their beauty and important role in the planet's ecosystem.

The AOS Conservation Committee serves as a communication point for conservation-related news and information. Its members are often called upon for expertise in matters relating to orchid conservation. The AOS's publications are in the forefront of communicating conservation-related news, particularly on CITES issues as well as import and export-related items. AOS Staff and Conservation Committee members have also played an increasingly important role as liaison with United States federal agencies, such as USDA and USFWS, in communicating the opinions of the orchid community.

The American Orchid Society grants awards for non-commercial conservation projects, as well as experimental projects of fundamental and applied research on orchids. The purpose of these grants is to advance the conservation and preservation of orchids in every aspect. Conservation projects supported have been in areas as diverse as CITES publication funding, a conservation program for an orchid reserve, establishment of a secretariat for the IUCN/OSG, and other informational resources.

Be sure to check out the sidebar with additional topics. Read about past conservation projects, view related webinars and see additional conservation information.
https://www.aos.org/about-us/orchid-conservation.aspx

CARE TO SHARE?

Please share a PDF copy of your society newsletter in the Files section of our Affiliated Societies Facebook page. Take a virtual visit to other affiliates. Exchange information with our online groups. We currently have 16.9K international followers on the AOS Instagram account. To participate on Instagram, please email your photos to americanorchidsociety@gmail.com. The grower or society gets credit/tag for photos. You may include any other information you wish to share about your orchid or event. https://www.facebook.com/groups/AffiliatedSocietiesOfTheAOS
https://instagram.com/americanorchidsociety?igshid=16ixfciczky01

If you would like to spotlight an issue or share news with other affiliated societies, we welcome your input. Let us know what you would like to see in this newsletter! If there is something within your society that is working extremely well – let's share it here. If there is something you could use help with – let us know. By chance, another affiliate may be able to offer a solution, or want to try something you have achieved. Your contributions are critical to bringing fresh, timely content to this publication each month . Please send your questions, solutions and submissions for the AOS Corner to eileenh@aos.org or askmasc@verizon.net

Thanks for meeting me down at the Corner!
Eileen Hector, AOS *Corner - **A**ffiliated **S**ocieties Newsletter Editor*

American Orchid Society | PO Box 565477 | Miami FL 33256-5477
Telephone: 305-740-2010 | FAX: 305-747-7154

White Phalaenopsis Ringspots

Solving the Mystery/By Carlye Baker, PhD, David Davison and Carol Scoates

SINCE 2000, ORCHID GROWERS have sent white Phalaenopsis spp. orchids with necrotic/chlorotic target spot symptoms to the Division of Plant Industry (DPI). The samples always arrived during the late autumn and early winter. Although it was suspected that these plants were infected with a virus, all serological tests for known orchid viruses were negative. The cause of these particular symptoms on white Phalaenopsis orchids has remained a mystery until now. Samples from two different nurseries have tested positive for two tospovirus species. One sample tested positive for Tomato spotted wilt virus (TSWV) and another tested positive for Impatiens necrotic spot virus (INSV).

PATHOGEN

Tospoviruses (Adkins et al., 2005) belong to the virus family Bunyaviridae, which are primarily animal-infecting viruses. The genus Tosporivus is the only plantinfecting member of the Bunyaviridae. Fifteen to 18 different species of tospoviruses have been recognized, including TSWV and INSV. TSWV has a large host range (800 plant species) and is mostly, but not exclusively, a viral disease found in field crops. INSV has a smaller host range and is mostly a virus found infecting ornamental greenhousegrown crops. Both viruses have been reported in orchids since the early 1990s (Hu et al., 1993; Koike and Mayhew, 2001).

VECTOR

Tospoviruses are transmitted from plant to plant by several species of thrips. The most common species that vectors these viruses is the western flower thrips (Frankliniella occidentalis).


Symptoms of Tospovirus infection in a white Phalaenopsis species.

DETECTION AND DIAGNOSIS

The diagnosis of these viruses in Phalaenopsis has proven difficult. These viruses do not appear to spread systemically in this host. Serological tests with nonsymptomatic leaves of infected plants are negative. The lesions, though spectacular on some plant leaves, appear to be local lesions and the titer (amount of virus in a given amount of tissue) of virus is low and decreases with time. This means that serological testing should be done soon after the appearance of symptoms. Historically, the symptoms have disappeared during the summer and then reappeared in the autumn to early winter when the plants were blooming.

CONTROL

The best control of a plant virus is always avoidance of infection. Obtain orchids from clean sources and grow orchids away from any host that could harbor these two viruses or their thrips vectors (Pottorff and Newman, 2006). This would include plants such as chrysanthemums, which are susceptible to both TSWV and INSV, and impatiens and prayer plants, which are susceptible to INSV. The control of weeds that could harbor either virus or the thrips vector is also warranted. Any plants with symptoms should be removed or at least separated from plants without symptoms.

Although early serological diagnosis is possible, this appears to be one situation where a viral diagnosis can be made with symptoms. White Phalaenopsis with the symptoms shown here apparently have been visited by thrips carrying one of two tospoviruses, TSWV or INSV.

References

Adkins, S., T. Zitter and T. Momol. 2005. Tospovirus (Family Bunyaviridae, Genus Tospovirus), Fact Sheet PP-212. Plant Pathology Department, Florida Cooperative Extension Services, Institute of Food and Agriculture Sciences, University of Florida, Gainesville.

Hu, J.S., S. Ferrerira, M. Wang and M.Q. Xu. 1992. Detection of cymbidium mosaicvirus, odontoglossum ringspot virus, tomato spotted wilt virus, and potyviruses infecting orchids in Hawaii. Plant Disease 77:464–468.

Koike, S.T., and D.E. Mayhew. 2001. Impatiens necrotic spot virus found in Oncidium. Orchids — The Magazine of the American Orchid Society 70:746–747.

Pottorff, L.P., and S.E. Newman. 2006.Greenhouse Plant Viruses (TSWV/INSV).

(This article is reprinted courtesy of the Florida Department of Agriculture and Consumer Services, Division of Plant Industry, Plant Pathology Section.)

Carlye Baker, PhD, is a plant virologist in the Plant Pathology Section of the Division of Plant Industry working on orchids and other plant species. (e-mail bakerca@doacs.state.fl.us). David Davison is a plant pathologist in the Plant Pathology Section of the Division of Plant Industry working on fungal and viral plant pathogens. (e-mail davisod@doacs.state.fl.us). Carol Scoates is a laboratory technician IV, who assisted both Baker and Davison on this project. Plant Pathology Section, Florida Department of Agriculture & Consumer Services — Division of Plant Industry, Gainesville, Florida 32608.

St. Augustine Orchid Society

www.staugorchidsociety.org

Root Rot Caused by Rhizoctonia

by Sue Bottom,
sbottom15@hotmail.com

The fungal disease Rhizoctonia slowly travels through the plant and can move up the lower part of the pseudobulb. If not controlled, the disease causes brown rot and eventually kills the plant.

When Dr. Courtney Hackney gave a presentation to our club, he showed a picture of a cattleya with a darkening pseudobulb and said it was *Rhizoctonia*, and then asked if others have ever experienced this problem. In the picture he showed, the disease looked like Black Rot but when Courtney said the tissue was hard rather than soft like it would be if it were Black Rot, I thought of some recent mortalities in the greenhouse.

Time for a little research. You won't find too much written about *Rhizoctonia* and orchids. Rebecca Northen's classic *Home Orchid Growing* contains a passing reference to this disease, stating "The brown mycelium infects the roots and progresses through the rhizome and the lower parts of the pseudobulbs." Margaret and Charles Baker's books on *Orchid Species Culture* have an Orchid Growing Problems appendix that contains a wealth of information, very helpful in diagnosing problems. They describe *Rhizoctonia solani* as primarily a root disease, though the symptoms typically are first noticed on the aerial parts of the plant that look shriveled, twisted and generally dehydrated similar to what you would see if the plant were infected with *Fusarium*. Then I turned to William Cullina's *Understanding Orchids* and looked at his pictures of a plant infected with

Rhizoctonia and had that aha moment. So that's what's been happening in the greenhouse! Luckily that was the day Terry and Courtney went out fishing, so I knew the Good Doctor would be making a house call. I took off my blinders and inspected each plant on the greenhouse benches and pulled any that looked unhappy, shriveled as if dehydrated and wobbly in the pot. I arranged them on the table from the least to the most sickly and waited for the fishermen, I mean the professor and the photographer, to return.

There were about a dozen cases of infected plants. Most required severe pruning and fresh potting mix, though there were a few that were so far gone they had to be discarded.

This plant has a very severe case of Rhizoctonia, so advanced that there was no hope for saving it. The earlier symptoms of *Rhizoctonia* are similar to those caused by Fusarium. The leaves and pseudobulbs become yellow, shrivel, thin and may become twisted.


You may think the damage from *Rhizoctonia* Root Rot and Black Rot is similar, but there are many differences. The plant on the left is infected by *Rhizoctonia*, a slowly moving fungal disease that travels from the back towards the front of the plant and can move up the pseudobulbs causing Brown Rot, although the pseudobulbs are relatively hard and ultimately shrivel into papery husks. The plant on the right is infected by Black Rot, a very fast moving disease caused by water molds. The pseudobulbs darken and collapse in a matter of days and the plant will die unless immediate action is taken.

Unlike the fast moving black rot caused by *Pythium* and *Phytophthora*, the brown rot caused by *Rhizoctonia* causes a gradual deterioration of mature plants as the roots rot. Plants that are overwatered or that are in decomposing mix are especially vulnerable to this brown rot. The rot tends to occur in the oldest part of the plant and moves slowly through the rhizome toward the younger part of the plant. Eventually, you might notice a brown discoloration line creeping up the pseudobulbs that will eventually brown, wither and die. Seedling and compots can be killed quickly from damping off.


An infected plant is very wobbly in the pot and if you lift it out of the pot, you'll see that the roots are dead starting at the oldest growth. The only live roots are those that are outside of the pot and potting mix. Severely degraded organic potting mixes can cause the roots to rot, but *Rhizoctonia* populations can also build up in inorganic mixes or organic mixes that are relatively fresh.

By Sue Bottom, sbottom15@hotmail.com

You'll most often notice the dying back bulbs as the disease progresses through the rhizome to the youngest part of the plant. The solution is to cut away the diseased part of the plant and repot in fresh mix, applying a protective drench of a suitable fungicide through the potting mix. You can see the dying back bulbs in the picture to the left, the rootless back bulbs removed from the pot in the center picture and the repotted front bulbs in the picture to the right.

When you find a plant that looks dehydrated, whose pseudobulbs are shriveled and yellowing or whose normally fat leaves are thin and limp, you know it's time to knock it out of the pot and check the roots. It is possible that you have overwatered and drowned the roots, particularly if the plant was potted in a water retentive mix. The potting mix could be degraded and this caused the roots to rot or the roots are rotted because the *Rhizoctonia* fungal population has exploded. Your solution is the same in either case, repot in fresh mix and then drench the potting mix with a protective fungicide, like the relatively affordable fungicides containing the active ingredient thiophanate methyl (e.g., Cleary's 3336, Thiomyl or Banrot). There are other more expensive fungicides that are also labeled for *Rhizoctonia* control such as those containing the active ingredients Pyraclostrobin (Empress),Fludioxonil (Medallion), Azoxystrobin (Heritage) and PCNB (Terrachlor). Keep the plant on the dry side while you are waiting for new roots to form.

Banrot is a great dual action fungicide for orchids because it treats both leaf spotting fungi and the more troublesome water molds that cause Black Rot (*Pythium* and *Phytophthora*) and fungi that cause Fusarium Wilt (*Fusarium*) and Root/Rhizome Rot (*Rhizoctonia*). Banrot is a mixture of the active ingredients etridiazole (marketed as Truban) and thiophanate methyl (marketed as Cleary's 3336 or Thiomyl) You'll have to find it online or at a specialty horticultural outlet at a cost of about $80 for a 2 lb. bag. At a dilution rate of 1 tsp/gal, one 2 lb. bag will make 280 gallons of Banrot solution. You can easily split the package four ways with friends so that for about $20 you can each make 70 gallons of treatment solution. Once you have added Banrot to your arsenal, you will find many uses for it to both treat problems and prevent problems from arising. For the last several years, I have applied a Banrot drench to each pot after repotting and have reduced the mortality rate of repotted plants to virtually nil.

Another preventative method is using one of the biofungicides after repotting and as a periodic preventative drench. Products containing the microorganisms Trichoderma harzianum (Plant Shield, Root Shield, etc.) or Bacillus subtilis (Cease, Companion, Serenade, etc.) may be antagonistic to the harmful Rhizoctonia solani making the plants more resistant to harmful fungi. This year I'm experimenting with one of the biofungicides, report to follow more resistant to harmful fungi.

This year I'm experimenting with one of the biofungicides, report to follow.

The hardest part of solving a problem in your growing area is recognizing the fact that you have a problem in your growing area. It is so easy to preferentially focus on those plants that are growing vigorously and blooming like mad that you don't even recognize that you are selectively ignoring the problem children. Some plants may be overdue for repotting and some may just be genetic weaklings that are more susceptible to disease problems because of their lack of growing vigor. Make it a habit to stroll through your growing area once a week looking only for plants that are wilted or just don't look happy. Check to see if they are wobbly in the pot. If so, move them to your repotting bench and get to work. Cut out the infected tissue, water blast the plant from top to bottom and repot into fresh mix (or just drop it into a pot with no mix). Then pour a solution of the protective fungicide of your choice through the pot. You may want to move the plant into your critical care area so you can retreat with fungicide in a week or two and monitor its return to health, which will begin when it starts to grow new roots.

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Native Orchid of the Month—February

Tipularia discolor
(crippled cranefly orchid)

Tipularia discolor or crippled cranefly orchid is widely distributed throughout the eastern United States and it is found across most of northern Louisiana (see map). Its habitat is in humus-rich soil of deciduous woodlands; frequently in sandy, acid oak-pine woods near streams.

The plant is easy to identify during the winter months because of its distinctive leaves. The dull to shiny green leaves (sometimes with raised purple spots) and purple on the bottom side show up well against a brown ground cover of dead leaves and needles. They appears as single oval shaped leaves that emerge in autumn (September and October), over-winter, and disappear in the late spring. There are no leaves at the time the orchid blooms.

Usually, the leaves wither away by the end of April. The flowering stem is 15 to 20 inches tall, erect, herbaceous, greenish-brown, glabrous, and essentially leafless. It originates from a small corm to flower from June to September and may have up to 40 small, greenish-purple flowers with a spindly, fly-like appearance. It is one of few orchids with distinctly asymmetrical flowers.

Moths pollinate the plant. The flowers have pollinaria. Pollinaria are specialized structures containing pollen found in orchids. The moth travels to the flower, the pollinaria attaches to the moth's eyes, and then the moth can transfer the pollinaria to another flower for pollination.

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