June 2019

http://www.centrallouisianaorchidsociety.org



From the President

I am thankful for the mild temperatures we had this past May and June brings us into the beginning of summer. It went from cool to HOT! The long days of summer are beneficial for our orchids to grow big and strong so that they can produce beautiful blooms later in the year. Let's start increasing our watering and fertilizing as most of our orchids are now in full growth mode. Also, if you see new roots emerging, don't delay repotting those orchids!

The annual repotting workshop last month was a fun time to exchange ideas and watch the "repotters" in action! Many orchids went home happy with fresh media to sink their roots into! If you weren't able to attend and are unsure of how to repot a certain orchid, you can always bring it in to any of our meetings, along with a pot and potting mix, and we will help you repot it. Have a problem plant? Need some help? Our experienced members are wonderful guides and can help.

Last month we welcomed another new member, Lavelle Evans, and we look forward to seeing you and ALL of our new members at our meetings throughout the year. If there is ever a topic anyone would like to hear as a monthly program, please let Wilton or I know and we will do what we can to find one.

This month Rick will discuss how to successfully grow Cymbidiums in the South. Rick grows fabulous Cymbidiums and many of our members purchased some at our show. Therefore, this is a great opportunity to learn more about growing them.

I hope to see everyone at our next meeting on Sunday, June 16 at 2:30 back at our normal location.

Eron



Meeting Time & Place Sunday, June 16, 2019 Plant Entry 2:00 pm Meeting time 2:30 pm

St. James Episcopal Youth Building 1546 Albert Street, Alexandria, LA

Refreshments-Potluck

Central Louisiana Orchid Society Officers

President –Eron Borne
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Guillory
Secretary –Janice Upton
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AOS Representative – Wilton
ODC Representative – Andrea
Mattison

Newsletter Editor – Connie Guillory Show& Tell –Rick Allardyce

CLOS JUNE PROGRAM

"How to Grow Cymbidiums in the South"

Presented by Rick Allardyce

Rick will present to us on how he successfully grows his beautiful Cymbidiums in our area. Many members have purchased Cymbidiums over the past months and this is a great opportunity to learn how Rick grows them.

Upcoming Orchid Shows and Events

Date/Time	Event
06/15/2019	Orchid Growing Seminar Silkier botanical garden, Austin TX
07/12/2019 - 07/14/2019	Baton Rouge Orchid Society's Show and Sale Burden Museum and Gardens, Baton Rouge LA
08/02/2019 - 08/03/2019	2019 Houston Orchid Society 40th Consecutive Workshop First Christian Church, Houston TX
09/13/2019 - 09/15/2019	Galveston Bay Orchids Society SWROGA Show HILTON HOUSTON NASA CLEAR LAKE, Houston Texas
03/13/2020 - 03/15/2020	Calcasieu Orchid Society Show and Sale Historic City Hall, Lake Charles LA /USA
04/10/2020 - 04/11/2020	The Shocking Beauty of the Orchid World Fort Worth Botanic Garden, Fort Worth Fort Worth
04/18/2020 - 04/19/2020	Tulsa Orchid Society Annual Show and Sale The Tulsa Garden Center, Tulsa OK
05/02/2020 - 05/03/2020	OKlahoma Orchid Show and Sale Will Rogers Garden Exhibition Center, Oklahoma City OK

MAY POTTING SESSION



May Potting session at Andrea Mattison's home











Show and Tell Plants for May Potting Session

Beginners' Newsletter



Welcome to the AOS Beginner's Newsletter. We will be sending you monthly tips on how to grow orchids and help you get them to bloom again. In addition to the information presented here, we invite you to visit the AOS website at www.aos.org and check out the information found under ORCHID INFORMATION > ORCHID BASICS.

So You've Been Given an Orchid Plant by Ned Nash (abridged)



It looks so lovely and exotic sitting there on the book case. Wonder how long the flowers will last? Will it ever flower again? The plant is not much to look at without flowers, is it? First impressions such as these usually accompany that first orchid plant received as a gift. First of all, welcome to what is probably one of the world's most rewarding avocations. Yes, "avocations." There are very few who begin with orchids who do not find it a lifelong love affair.

To better understand care and maintenance of the gift plant, it will be helpful to trace just how that plant came to you. Chances are very slight that the plant has come directly from where it was grown. Most orchid nurseries do offer gift plants, usually in bud to bloom soon, to be shipped direct via common carrier. But it is much more likely that a secondary or tertiary supplier has been involved. Many of the flowering orchid plants that ultimately reach the "public at large" are grown by large nurseries that are not accessible for direct purchase � either by design (intentionally) or location. Plants may either be

for relatively quick turnover, or may be sold at some earlier stage to an intermediate grower who will bring them into bud and subsequently market them directly or indirectly.

Traditionally, smaller orchid growers served as the final step between the larger wholesale grower and the public. Flowering orchid plants would be made available both for on-site purchase at the nursery and at smaller, local orchid shows. This type of market still accounts for a good share of indirect sales, especially for products grown by the intermediate-size



wholesale growers who cannot supply larger markets. Florists have also been one of the more traditional outlets for flowering orchid plants, although because of their low volume, they have not had access to the larger growers. More recently, two higher volume markets have begun to be exploited. These are the "green plant" section of supermarkets and the growing number of garden center chains.

How does this chain of supply affect your plant? The bottom line is that the plant that you are enjoying has not been obtained fresh off of the bench on which it was grown; it has been packed, shipped, and unpacked at least once and possibly several times before reaching you. So, while it will still have a flower-life expectancy at least equal to that of most other flowering plants, it will probably not last to its full potential. The question then becomes how best to maximize flower-life in your home.

Orchid plants are, in general, sturdy and forgiving of neglect. However, their flowers are subject to bruising and other damage. It is a good idea first to examine the general condition of the plant and blooms. Remember, if the plant has been shipped to you by common carrier, it is less likely to have open

flowers than if hand-delivered and will usually have buds to open shortly.



The foliage should be firm (turgid) and unbroken. If the foliage is limp, and doesn't respond to watering, the plant has probably lost its roots. Root loss can also be brought on by temperature extremes in transit, especially if the plant is wet. The plant may be salvageable by removing the flower spike and increasing humidity in the immediate area, but the floral display is lost. If the foliage is slightly damaged, the plant will not suffer except in terms of appearance, so there is no cause for great worry.

Flowering orchid plants are best kept in a relatively bright and airy location and should not be allowed to dry out while in the home. Prevent direct sunlight from striking the leaves. Heat, whether from heat registers or otherwise, is the enemy of orchid flowers. Overly warm temperatures are almost always associated with low humidity and this will cause accelerated flower aging. If house plants are already being grown, placing the flowering orchid plant in the same area will not only

make a nice display, but make the orchid plant happier due to the microclimate created by the collective transpiration. For maximum flower life, try to maintain orchid plants at an even moisture level. The should never be sopping wet (do not place pots directly on a saucer of water!), but they should not be allowed to get bone dry either. The potting media should be moist enough to be springy and leave a residue on your finger when pressed into it. Blooming orchids do not need to be fertilized because they already have expended the energy required to produce flowers. It is a good idea to give them a rest, allow them to approach dryness, after the flowers have faded.

The best news is the same for orchids as it is for most plants grown in the home: it is more a matter of letting them grow than getting them to grow.



Resources



If you are looking for more in-depth information on a broader range of specific orchid genera we invite you to join the AOS for members-only access to Orchids A to Z. We have updated the interface for this section to make it even easier to use. This compilation covers over 200 orchid genera. Full descriptions and photos of each genus are provided by experts hand-picked for their knowledge of select genera. Culture requirements are presented in an easy to understand "recipe-style" format. Not only do we provide phoenetic spelling, but a playable soundfile (soundcard & speakers required) of the proper pronunciation of each genus so you can talk like an expert. You would easily pay more than one year's AOS membership dues for such a book and it would not have the spoken word. Join the AOS today and get twelve great issues of our award-winning Orchidsmagazine PLUS members-only website content like Orchids A to Z, AOS Award Index and select magazine article reprints.

ORCHIDS magazine upcoming features...



THIS MONTH

New World Slipper Orchids, part 2: Long-petaled hybrids and the Influence of Phragmipedium kovachii

Conservation update and what you can do to help preserve orchids in the wild.

More Jewel Orchids: Macodes, Dossinia and Goodyera

left: Phragmipedium Suzanne Decker 'Emmy' AM/AOS

FEBRUARY

Wardian Cases: Growers in Western Canada Show Off Their In-Home Growing Areas

Orchid Adventure in the Land of the Thunder Dragon

send comments to - newsflash@aos.org

Click here to join the AOS today - become a better grower!

Benefits include award-wining Orchids magazine,

"Members Only" website content, reciprocal gardens access and more!

Taken from http://www.aosforum.org/newsletters/pages/jan10.html

White Phalaenopsis Ringspots

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

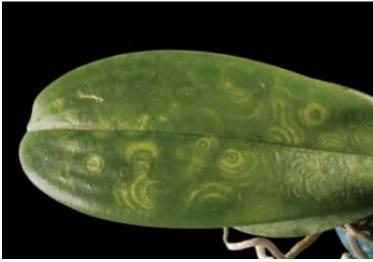
SINCE 2000, ORCHID GROWERS have sent white Phalaenopsis spp. orchids with necrotic/chlorotic target spot symptoms to the Division of Plant Industry (DPI). The samples always arrived during the late autumn and early winter. Although it was suspected that these plants were infected with a virus, all serological 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.

Taken from http://www.aos.org/orchids/orchid-pests-diseases/white-phalaenopsis-ringspots.aspx

Whiteflies

By Susan Jones

Whitefilies (Aleurothrix) are sucking insects, related to aphids and scales, that feed on plant sap. The adults are small (approximately 1/16 inch ([1.5 mm] long), with a fine white powdery wax over their four white wings and body. Both the adults and immature whiteflies are found on the undersides of leaves. In sufficient numbers, whiteflies will weaken and eventually kill this host plant.



Whiteflies can reproduce rapidly in the enclosed area of a

greenhouse and make c cloud of white when disturbed.

Life Cycle

Female whiteflies lay eggs on the undersides of a plant's upper leaves. Following an incubation period of four to 12 days, those eggs hatch out into crawling nymphs. The nymphs commence feeding by piercing the leaf cells and sucking the plant's sap. Within approximately six weeks, depending on temperature, the nymphs grow, molt and reach their four-winged adult stage. The adults live for one to two months.

Symptoms

Among the many possible causes of an orchid's failure to thrive, whitefly is a significant consideration. Although they are quite small and not necessarily immediately obvious, they can eventually kill a plant if left unchecked.

Signs of whitefly on orchids include weakened plants, damaged or unhealthy new growth, yellow

mottled leaves that eventually drop, the presence of sooty mold or ants and, most especially, a cloud of tiny white insects arising from an affected plant when it is moved or disturbed.

Because the whitefly larvae feed on the plants' sap, plant vigor is severely impacted. The honeydew (a sugary liquid) excreted by the larvae encourages growth of sooty mold, is unsightly and reduces the light available to the plant for photosynthesis, thus further weakening it. Ants are also attracted to this honeydew and will farm whitefly in much the same manner as they farm aphids.

Control

A clean greenhouse or growing area will help to minimize potential insect pest problem. A minimum of two weeks' quarantining any new plant or cutting that enters the growing area can also help curtail the introduction of new pests and diseases.

According to the University of Connecticut's Integrated Pest Management department, certain nonorchid plants make excellent host plants for whitefly. Among these are astilbe, chenille plant, columbine, chrysanthemum, dicentra, flowering maple, gerbera daisy, glory bower, hibiscus, lavender, lantana, malva, monarda, mints, Martha Washington geranium, primula, salvia, scaevola, tomato, rosemary (and many other herbs), verbena and zinnia. To eliminate a whitefly problem, it may be necessary to remove these other favored hosts from the growing area.

For the overall health of an orchid collection, it is a good idea to check each plant (for smaller collections) or spot-check plants or groups of plants (in a larger collection) and the growing area at least once a week for signs of anything unusual - pests, disease, environmental damage, etc. In this way, an invading insect can be detected and treated before it becomes an infestation. For whiteflies and some other flying insect pests, yellow sticky cards are a useful part of that monitoring program. The insects are drawn to the color of the card and become adhered to its sticky coating. The cards can be placed among plants, and, in a greenhouse, should also be placed near doors and vents. Whether purchased or homemade, these simple insect traps can provide early warning of new pests in the growing area.

TREATMENT OPTIONS

Several natural enemies including predators, parasitoids and insect pathogens are commercially available for use in controlling whitefly populations.

Many greenhouse supply companies sell helpful insects (insect predators and parasitize pest insects. Those that
are useful for treating whitefly include ladybugs, praying mantids, assassin bugs and parasitic wasps. They are

- not usually a cure for the infestation, but instead reduce the whitefly population to the point where it is no longer a significant threat to your plants. These helpful insects are best used in a greenhouse or enclosed structure.
- Encarsia formosa and Eremocerus sp. Are small parasitic wasps that attack whiteflies. The adult wasp lays its eggs in whitefly nymph. The parasitized larvae then die. Caution must be exercised when using parasitic wasps, as they may be sensitive to pesticide residues on plants or in the greenhouse, and the adult wasps may be attracted to yellow sticky cards. Plan in advance so that insecticides with a long residual effect are not used before the wasps are released. Insecticidal soaps,; horticultural oils and many insect growth regulators are more compatible with the use of parasitic wasps than other stronger insecticides.
- A common fungus can also be employed as a control for whitefly. Beauvaria bassiania is available commercially as Naturalis O and Botanigard from garden and greenhouse supply firms. The fungal spores penetrate the insect's cuticle. Toxins produced by the fungus as it grows within the insect weaken the whitefly's immune system, eventually killing it. Spray the growing area thoroughly when using this pathogen, as it must actually contact the insect to work. Do not use any fungicides concurrently in the growing area, or even use a sprayer that has been used previously for fungicides, as this can severely reduce the effectiveness of the treatment.
- Like aphids, whiteflies excrete honeydew that attracts ants, and as with aphids, ants will "farm" whitefly to obtain this food. If ants are present, it is necessary to eliminate their population as well to eradicate the whiteflies. One method of ant control is to mix syrup of boric acid powder, sugar and water, and place small containers of it throughout the growing area. The sugar draws the ants just like honeydew. They will eat the poison and take it back to the queen. This should remove the ant colony within a few days. Another option is Orange Guard, a 100 percent biodegradable and water-soluble insecticide made from oranges that is considered safe for use around humans, pets and food, and is effective against ants.
- Systemic insecticides (those that enter the plant cells and affect insects that consume any part of that plant) registered for use on orchids and deemed effective against whitefly include Diazinon, Malathion and Pyrethins. Some of the topical remedies labeled for use against whitefly and safe for orchids are Spectracide Houseplant and Garden Insect Spray 1 and Safer Insecticidal Soap. Enstar II Insect Growth Regulator may also be used against whitefly. It employs excess juvenile-growth hormones to cause sterile eggs in adult whiteflies and incomplete development of immature-growth stages. An added benefit in using Enstar is that insects do not develop a resistance to this treatment. It is also considered safe around humans and pets

As always, use of any insecticide should be in strict compliance with the manufacturer's recommended dosages and safety precautions. In the spring, be especially observant for whiteflies that can injure the health of your orchids

References

This Web article "Orchid Pests and Diseases," from the book Growing Orchids in Canberra by Jane Wright provides a great deal of useful information about whitefly as well as many other insect pests

and diseases affecting orchids

Whitefly, by Carla Goodloe, shares a grower's experiences in battling this nuisance insect.

The University of Connecticut's Integrated Pest Management Web site is a gold mine of information about a wide variety of insect pests and pest-management strategies. "Managing Whiteflies in the Greenhouse," by Leanne Pundt, the Extension Educator for Commercial Horticulture at the University of Connecticut, contains helpful photographs, a lifecycle chart for the whitefly and links to other useful information about whitefly as well.

Susan Jones was the editor of Awards Quarterly and assistant editor of Orchids. American Orchid Society, 16700 AOS Lane, Delray Beach, Florida 33446

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Taken from http://www.aos.org/orchids/orchid-pests-diseases/Whiteflies.aspx



THE JUNE 2019 AOS CORNER – From the desk of Denise Lucero, Vice Chair, American Orchid Society Affiliated Societies Committee (Affiliated_Societies@AOS.org).

For newsletter editors: Orchid societies are welcome to reproduce the AOS Corner in whole or in part, in their society newsletters. We encourage promotion of AOS website use by your members.

AFFILIATED SOCIETIES

As societies we are continually reaching out to share our passion and love of orchids with the public and one of the best ways we are able to do that is by having spectacular Orchid Shows. It gives us the opportunity to display our beautiful and diverse orchid collections in stunning displays, to share our joy of the orchid world, and to educate the public about orchids. Plus, there's always all those wonderful Vendors.

Most of us have a Show Committee working on planning and organizing our shows, for up to a year in advance of the show date. Whether your society is large or small, or your society has one show a year or multiple shows, the Affiliated Societies Committee is a vehicle for you to share your successful practices like this one from Deep Cut Orchid Society in New Jersey.



Photographer: Deb Bodei

They have a new twist to the show/share table routine at Deep Cut Orchid Society. As they educate and comment on each member's plant, a member or two are invited to come up and create a small table display of the plants as they are being discussed. Members get a chance to show their talents in applying basic design principles using plants of their choice and everyone gets to see an amazing display using all of the member plants. Who doesn't love a great display of orchids using creativity to show off all of the hard work. It's like having shows all year long!

If yours is normally a show that only includes ribbon judging... Consider having your show sanctioned to include AOS Judging. It's really very exciting to win an American Orchid Society Award and it encourages and recognizes meritorious achievement! In a majority of sanctioned shows, affiliates create the show schedule, sign up clerks but request that AOS judges award ribbons and trophies. Plants are then identified and pulled for AOS judging following a lunch break. Some societies handle the ribbon judging on their own and AOS judging takes place shortly after or sometimes begins simultaneously depending on the format of the show.

It's an easy process that you can start by reaching out to your local AOS Judging Center.

Here's a link with Judging Center contact info: http://www.aos.org/orchid-awards-judging/aos-judgingcenters.aspx

You'll also need to complete A Request for AOS Judging form: http://www.aos.org/AOS/media/Content-Images/PDFs/ShowApp-Effective0418.pdf

Once the Request Form is completed you can e-mail it to TheAOS@aos.org and the process will begin.

Make sure to read AOS President Susan Wedegaertner's message in the June issue of ORCHIDS magazine. You'll learn all about what we accomplished and the fun that we had at the recent Spring Members' Meeting. She also invites everyone to join us at the Fall Members' Meeting to be held October 16-20 in Homestead, Florida.

Note: a correction is made for the e-mail address of Ms. Albita Flores — aflores@expoguayaquil.com

Reminder: There is still time before it goes to press...Order your copy of the Proceedings of the 22nd World Orchid Conference Before it's too late! At 886 pages, this is the largest WOC Proceedings to date and with your copy you will receive both the English and Spanish versions of the fantastic book on Ecuador and its orchids by Arcadio Arosemena G. -- ALL POSTAGE PAID! The price for all three books is \$175. Given the size of the main volume and the two additional books sent to you postpaid, this is truly a bargain. For those interested in bulk purchases, a special price of \$135/Proceedings volume is available for purchases of 10 or more copies. To order your copy for yourself or your society library, email Ms. Albita Flores in Guayaquil at aflores@expoguayaquil.com. Do so quickly because once it goes to print, no more copies will be printed!

We're always looking for ideas to bring kids into the world of orchids. While planning you next orchid show don't forget to check out the AOS Kids Corner for ideas. Here's the link to the main page: http://www.aos.org/orchids/kids-corner.aspx. See other articles for instructions on how to create activities we've tested out or make up your own great activities. Please share your ideas and experiences with the Education Committee at sstubbings@comcast.net.

Thanks again for all the pics that you are sending in for the Instagram feed. Our Instagram Administrator, Candace Hollinger, sends her appreciation to you all. It's wonderful to see such a variety of everything orchid that's enjoyed around the globe. Please remind your members that we would love pics of how they grow, what's blooming now or anything they love about orchids. Please continue to send your photos and short videos to: americanorchidsociety@gmail.com. Be sure to send a short caption explaining your photo. Also, if you are bilingual and can include your caption in English plus your other language(s)—it will help with our universal outreach.

Remember to check-in on our Facebook Group Page for Affiliated Societies of the American Orchid Society. The response has been great, many thanks to all of you who added pics of show banners. We can all learn from what has been successful for other societies. Let us know how your show went, and what was successful for you, or what didn't quite make the mark. Our administrator, Chad Brinkerhuff, monitors the feed and is a great resource for all that the AOS has to offer. Keep us up to date on what's going on at your local society and let us know how we can help you.

Don't forget to check out the NEW List of Speakers to help you plan society meeting programs. You will now find the Affiliated Societies link on the home page under the "About Us" heading.

And... Here's a link to check it all out - http://www.aos.org/

CULTURAL

Repot Your Plants By Ray Barkalow originally published in ORCHIDS June 2014

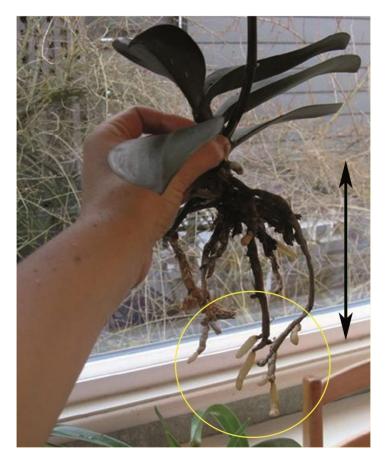
Like my earlier Water Your Orchids article (January 2014), this topic may seem to be awfully basic and pretty obvious, but I believe that if we understand some of the "why" behind the "what" or "how to" information we learn, it puts us way ahead in our efforts to become reliable caregivers to our orchids. The question of "when" to repot is another that arises frequently, and we'll address that, too. First, a little bit about our favorite plants.

Many of you may have heard that "healthy roots means a healthy orchid" — again pretty obvious, but do you know why that is? Terrestrial plants, with their roots buried in the soil, do the vast majority of their gas exchange processes through openings (stomata) in their leaves. Orchids, on the other hand, have adapted to having far fewer leaf stomata as an apparent evolutionary strategy to minimize water loss. Those that remain are concentrated on the bottom of the leaves, and in some cases, the plants have developed a thick, waxy "cuticle" layer, all of which shifts much of the gas exchange burden to the root system. If we stifle that, we cause stress and even death to the root cells.

Let me add a bit more about those root cells. As roots grow, they "tailor" themselves to the environment into which they are growing so that they can function optimally to support the plant, and once those cells have grown, they cannot change. We can see the implications of that with the following scenario:

A plant is potted up in nice, fresh medium, and gets great care, so it grows big and strong, sending its roots deep into the moist, airy medium. Those roots have "tailored" themselves on a cellular level to function optimally in that particular environment. Time marches on, and that potting medium starts to decompose, breaking down into smaller particles and becoming more and more compact, holding lots of water and starting to restrict air flow to the roots. Plus, minerals from your water and fertilizers, as well as plant waste products have been accumulating in the medium as well. The environment has definitely changed, but the roots have not and cannot.

The black, vertical arrow in the image mark the nice depth to which the roots grew originally, but judging by their color and condition, they are failing in that changed environment. You will note, though, that there are new roots that look entirely different (see the yellow circle) that have grown from the ends of those old roots. Those nice, plump roots have grown with their cells optimized for that environment, even if it is an environment that is bad for the original root system.



One might speculate that the plant will therefore be okay, as it now has well-functioning roots, but unfortunately, while those newly grown root segments may be fine for that environment, the older root system is not, so will continue to deteriorate, ultimately completely separating those new roots from the plant, leading to its demise.

That is why, when considering repotting a plant, it is best to do so just as new roots are emerging from the base of the plant, and not when the plant is dormant. Otherwise, root growth will resume only on existing roots. Those new, emergent roots will grow optimized for the environment and support the plant, while the old ones are expected to eventually fade away.

Keep in mind that the greater the difference between the "old" and "new" root zone conditions, the less optimal the old roots will be, so the more critical is the timing. One can avoid such setbacks by using good quality potting media components and repotting frequently, before the medium can significantly decompose and become compressed.

— Ray Barkalow is an engineer and scientist, and has been a hobby orchid grower for over 40 years. He has owned and operated First Rays Orchids since 1994, He can be reached at raybark@firstrays.com.

UPCOMING WEBINARS

It's easy to find the scheduled webinars and to register on the AOS website. You'll find the link under the All About Orchids tab. If you check there, you will find any webinars that have been scheduled after the production of this monthly Corner.

The Care and Feeding of Stanhopea with Inge Poot

Wednesday, June 5th, 2019 @ 8:30-9:30 EDT Members only

Join Inge Poot, AOS Judge Emeritus, from the Toronto Judging Center as she discusses how to grow Stanhopea.

Register now using this link: https://register.gotowebinar.com/register/3836839681157547778



Stanhopea Aiden 'Arya' HCC/AOS; Photographer: Tim Morton

American Orchid Society: Greenhouse Chat with Dr. Ron McHatton

Thursday, June 13th, 2019l @ 8:30-9:30 EDT Public

Please join Dr. Ron McHatton, AOS Chief Science Officer, as he answers your questions about all things orchid. He will discuss a variety of topics on orchid culture based on questions submitted by attendees. Please send your questions and pictures to Sandra Svoboba at greenhouse@aos.org by Tuesday, June 11th. Please include pictures as well.

Register now using this link: https://register.gotowebinar.com/register/4925859770072372995

Note: After registering you will receive a confirmation e-mail information about joining the seminar.

WHAT ARE WEBINARS? Webinars are an Internet conference where you can hear the speaker and view the presentation, ask questions, and hear interactions from other members of the audience. You can join either on your computer or by phone. You can join from anywhere, via your Mac, PC or even your mobile device. Audio is included, so attendees can phone in or use VoIP (Voice over Internet Protocol). You will need a microphone for your computer to use VoIP.

WANT TO LEARN BUT CAN'T MAKE THE DATE? The live webinars will be recorded and posted on the AOS website, where you will find a link allowing you to view the webinars at your convenience.

THE JUNE ISSUE OF ORCHIDS MAGAZINE will feature great articles and beautiful pictures on:

- The New Refugium Botanicum Miltoniopsis warszewiczii by Franco Pupulin
- For the Novice Orchid Buying Tips by Larry Sexton
- Native Orchids of Montana by Ansel Fiddaman
- The Cat's Meow: Catasetum Breeding and Culture by Fred Clarke
- Maxillarias A Complex and Morphing Genus, Part 1 by Estaban (Steve) Gonzalez-Costa
- Lindleyana Studies in Oberonia by Daniel Geiger

YOUR SOCIETY CAN EARN FREE AOS MEMBERSHIP EXTENSIONS:

Upcoming shows are a good time to encourage new membership to AOS. Affiliated societies can now earn a one-month extension of their AOS society membership for each new AOS member that they refer (note: membership renewals don't count). Make sure to note your Society Affiliation in the comments section of the application.

With twelve new AOS members, your affiliated society can have a FULL YEAR OF FREE AOS membership! Be sure to have membership applications with your society's name already filled in and available at your club meetings!

Remember to let your members know, we want to sweeten the deal and give them every possible reason to join AOS today! If they become an American Orchid Society member, they have considerably more resources at their disposal making growing orchids even more enjoyable and successful.

Digital Access to Over 350+

past issues of Orchids magazine extending back to 1932!

ALSO FEATURED IN ORCHIDS MAGAZINE!

16-page award gallery of breath taking pictures of recently awarded orchids.



Rhyncattlianthe Sunset Sunrise 'Max' HCC/AOS; Photographer: Bryon Rinke

RECENT ORCHID AWARDS PICTURES ON THE AOS WEBSITE

See fabulous pictures of the most breathtakingly beautiful orchids receiing awards from the AOS! Visit the new "Latest Orchid Awards" page on the AOS website to enjoy these stunning photographs! Click on the thumbnails to see them in larger format. Free to members and non-members.



Cymbidium Sarah Jean 'Ice Cascade' CCM/AOS; Photographer: Duane Erdmann

Let's grow together,

Denise Lucero

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Native Orchid of the Month—June

Epidendrum magnoliae

(green fly orchid)

Epidendrum magnoliae, the green fly orchid, is encountered in swamps and hammocks, most often on live oak (*Quercus virginiana*) trees among resurrection ferns (*Pleopeltis polypodioides*). Other common host trees

include bald cypress (*Taxodium distichum*) and southern (*Magnolia grandiflora*). It is an epiphyte and the leaves all winter.

Since the plants are often the same height as the ferns, these orchids (even when in bloom) is often quite It is perhaps easiest to see them when it has not rained for of time. The resurrection fern leaves wilt and appear

color, making it easier to spot the shiny, green grass-like orchids growing on the branches.

magnolia remain green

spotting challenging. a brief period brownish in leaves of the



It is the most northern-growing *Epidendrum* in nature, being found wild as far north as <u>North Carolina</u>. They flower from June to January, sporadically in fall, and produce fruiting capsules from October to January.

Plants will often form large matted colonies of many dozens, perhaps hundreds, of growths, their fleshy roots buried in the layer of humus formed from decomposed remains of mosses, bromeliad roots, and fern rhizomes that cover branches of the trees.

The small, green flowers

1/2 to 3/4 inch in diameter, are usually green on the lip and petals from greenish to reddish brown on the sepals depending on light opening beneath the column is usually ringed with purple. The become intensely fragrant at night suggesting a night-flying moth pollinator.



range from and range levels. The flowers as its

