
**Volume IV Issue 1**
**January-February 2023**

Orchid Society of Greater Kansas City

OSGKC.ORG

*As a non-profit organization to..*

*...Promote interest in and to disseminate information in culture, development, and hybridization of orchids.....*

**The Orchid Society of Greater Kansas City meets the 2nd Sunday of each month. Annual dues are $25 for Individuals and $30 for Household.**

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**What's Inside**:



# January-February News!

## Comments from Kristy Charland, President

Welcome to 2023! We're looking forward to a very busy early winter/spring. I'm hoping that you have bloom spikes galore in your grow space. Mine are shaping up nicely. Take extra good care of them, so that we can take them to a show to be judged and displayed. Speaking of shows. Begin to make plans to attend one or more of the shows that we're exhibiting in during March. Please see the schedule later in this newsletter. It's very fun to see people ooo and ahh over the hard work you've done, encouraging your plants to put on a show for all! And, it's also so much fun to enjoy other grower's hard work, and put new plants on your wish list from seeing them on display. Vendors are also there, happy to fulfill your hopes of adding to your collection. And in other "Show News", there are new developments concerning our Fall Show. The Merriam Community Center has informed us that the rooms are not available on Sunday mornings in the future. The OSGKC Board met on Sunday 1/22/23 to discuss and approve a new plan. The attending members (Crystal Remington, Mark Prout, Joy Prout, Megan Mayo, Kristy Charland, Jean Rogers and Susie Hanna) voted in favor of running the show from Thursday-Saturday proposed as follows: Schedule: • Thursday October 26th 2023 3-9pm Show set-up • Friday October 27th 2023 ○ 8-12pm Continued set-up for show and vendors ○ 12-3pm Judging ○ 3pm AOS Judging ○ 3-8pm Show open to the public ○ 5-8 pm Show Grand Opening Costume Halloween Orchid Bash ○ Grand Opening Halloween (Costume?) • Saturday October 28th 2023 9am -4pm show and vendor hours ○ 4pm- 6pm Tear down Notes: In addition on Friday 1 extra room will be rented for judging spaces. It was also discussed and approved by the board to offer stipends of up to $75 each to a maximum of three members per show for travel expenses. The member will fill out a form to request the stipend. The show chairperson will administer the application process. It's an ambitious plan. Let's work together to celebrate our love of orchids!

Be well,
Kristy

In January, we gained another new membership.

Please welcome:
**Elizabeth Townshend** who was at the January meeting with us!! So glad to have you!!!

***Comments from Jean Rogers, Editor***

***Louise Hicks, Yearbook Chair, and I have been diligently working on updating the yearbook for 2023. A part of that involves showcasing the Orchid of the Month from our monthly meetings. From those, the Society membership picks an Orchid of the Year for the front cover. The votes are in; every plant received at least 1 vote – thank you to all who participated!!! It was a very close race between the top 4 with 2nd place having two less than 1st place, 3rd place having 1 less than 2nd place, and 4th place having 2 less than 3rd place. The following 4 were hands-down favorites of the Society membership. Congratulations!! And in no particular order……***

Dendrobium gregulus
- February 2022
- Brian Donovan

Barkeria (Oaxacan Showers X Marchmaze) 'mdyl-1'
- November 2022
- Kristy Charland

Dendrobium Razzle Dazzle
- August 2022
- Arial Paulson

Angraecum sesquipedale
- December 2021
- Joyce Moulis

***Please check out AOS news at the end of the newsletter – There is another Culture Day with 4 amazing speakers and the cost is only $30 – focusing on 'blue orchids'.*** **Webinar available post presentation**

***Fred Clarke – Sunset Valley Orchids: "Modern Blue Cattleyas"***
***Carson Whitlow, hybridizer: "From the Beginning, Blue Cattleyas"***
***Dr. Leslie Ee: blue Phalaenopsis and how Indigos can help in their hybridizing***
***Dr. Rob Griesbach: the culture & hybridizing of blue flowers***

***Once Again, please send me your "Members' Bio". I'm including the questions here so you can just copy, paste, answer, and send to me jeanierogerswarren@gmail.com I love getting to know you and the easiest way is with the Bios. With over 130 members, it's nice to be able to see face and name together and get to know each other. Thanks in advance!! Remember, you can just answer the questions or write a paragraph.***

1. **When did you join OSGKC, and how long have you been growing orchids?**
2. **What got you hooked on orchids?**
3. **What type of orchid is your favorite?**
4. **Where and how are you growing orchids? (please include a photo of yourself and of your setup!)**
5. **What was/is your profession or training, and are you still working your job or retired?**
6. **Complete this statement: "One surprising fact about me is..."**
7. **Do you have any pets?**
8. **What is your birth date (Month and Day)?**

***Please remember that we'd like to see your blooming orchids. Feel free to take pictures anytime during the month and then send them when I let you know I'm working on the newsletter. We love seeing each others' successes.*** **They are "For Viewing Pleasure" only – not for judging which is done at the meetings.**

***If you find a new product or potting information, have an inquiry, or any other thing you think other members might be interested in, please send it to me and I'll include it in the newsletter. jeanierogerswarren@gmail.com Check out "Ideas, Items, and Inquiries" after the pictures.***

***If you have questions/problems, remember to bring your plant or pictures of it to the meeting.*** *If you don't want to wait till next meeting, you can always post to Orchid Growers of OSGKC Facebook page and get help from other members. And If you don't do Facebook but you are an AOS member, you can send pictures to the Greenhouse Chat (see AOS Webinar Chart below) and experts will help you during the Webinar Chat AND follow up with you. If you are not an AOS member, please consider becoming one. You can do that at their website. https://secure.aos.org/store/register-renew And for any help, please contact Mark Prout, AOS Rep for our Society.*
*Happy orchid growing,*
*Jean*

# Project Plant Update *from Kristy Charland*

"Project Plant" is a fun and educational group activity for society members. Here's how it works. I scout around for plant sources for first-bloom seedlings that members can all buy through a group order, and then we grow and compare techniques and the resulting flowers. It's a lot of fun, and I encourage you all to try it.

The plan is for our next 'project plant' to be a Paph. in low bud. Lehua Orchids will provide these in June or before if possible. This will be a new cross that we grow and compare and help each other. So fun to see how different the babies are (the flowers), just like with humans. The cost is estimated at $15-20. If you'd like to participate and haven't let Kristy know, please do at: charland.ek@outlook.com.

# Facebook Group

Our Facebook page, Orchid Growers of OSGKC, is a great place for us to communicate, share, learn from each other. All through the month we have orchids that bud and bloom and we get so excited and want to share it, and the meeting is sooooo far away!! Use the Orchid Growers of OSGKC Facebook Page. Here is the link: https://www.facebook.com/groups/909878999427064/?ref=share It is easy to post your precious orchids and get oooohhhs and ahhhhs from other members. Or something is going on and you want to ask someone – post it on this page. If you need Facebook help (I know I did and still do!!) contact Kristy (charland.ek@outlook.com). She'll be glad to help. **If you want to email us**, please contact Brian Donovan – Mentor Chair, bldonovan71@gmail.com to connect you with someone.

# Meetings

## Upcoming meeting(s) - From Susie Hanna, OSGKC Program Chair:

***Upcoming Programs and Events***

Here's what's happening next month for speakers!

**Orchids from Down Under, February 12 Merriam Community Center**

Our February 12 meeting of the Orchid Society of Greater Kansas City will feature Fred Clarke from Sunset Valley Orchids in Southern California. This will be a Zoom presentation that you can view on the big screens at the Merriam Community Center or from home if you can't attend in person.

I could write a book about all of the amazing accomplishments of Fred Clarke who is currently recognized as one of the top hybridizers of Cattleyas, innovator and popularizer of the Catasetinae group of orchids, and the leading importer of Australian Dendrobiums.

Here's what Fred has to say about the orchids from down under:

*"Australian Dendrobiums, also known as Aussie Dens, are popular orchids that are native to Australia. These hybrids are prized for their hardiness and ability to thrive in a range of climates, including hot summers with temperatures ranging from 75 to 95+ degrees Fahrenheit and cool winters with temperatures of 40 to 55 degrees Fahrenheit at night. They are also known for their fragrant flowers and ability to re-bloom from old pseudobulbs, which can lead to impressive floral displays. Some Aussie Dens have been known to produce up to 15 inflorescences from a single pseudobulb over a period of five years.*

*"Sunset Valley Orchids is a leading hybridizer of Aussie Dens in the United States, with a superior collection of breeding stock that has been carefully acquired over many years. We focus on developing plants that are quick to flower in a range of eye catching colors and shapes. Customers who have grown Aussie Dens from Sunset Valley Orchids have reported success in a variety of climates across the United States, thanks to the hardiness and adaptability of these orchids. Plants are known for their vigor, quickly forming beautiful specimens that will stand out in any collection."*

Check out the website and plant offerings at sunsetvalleyorchids.com

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## January Speaker Review by Crystal Remington

**Alan Koch, Gold Country Orchids**

Has been growing orchids since 1969, he is an AOS judge and longstanding member with a Master's degree in plant physiology. He reviewed tips for the Home Orchid Grower.

Water is the most important component as the biggest enemy to the grower is salt build-up. He recommends to water 3 times, with water that has pH from 6-7.

To treat insects use : ⅓ pure water, ⅓ Murphy's Oil Soap, ⅓ 70% alcohol. To treat fungus and bacteria use: Hydrogen Peroxide.

The longer the day length the more fertilizer is required. Macro's are captured in the roots, the Micro's are captured in the leaves.

Always pre-water, prior to using fertilizer. Burned leaf-tips are an indication of salt build-up. Remember to water freshly potted plants more often! When using moss, use clay pots, this is similar to bark in a clear plastic pot.

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# *Judging Notes…*

## *Upcoming Shows & Judging Around Our Region*

If you have an orchid blooming that you think is FANTASTIC – Contact Mark Prout. If it is time for a meeting at the Judging Center – they could take your plant to be evaluated for an award (and/or give you their best opinion if it indeed should be looked at). There are Judging Centers all-across America. The one closest to us is the MidAmerica Judging Center in St. Louis, MO. It holds monthly judging on the 2nd Saturday of each month. The mission of the Judging Centers is to provide orchid growers in the region with the opportunity to have their plants evaluated and judged for AOS awards. These include HCC, AM, FCC, JC, AQ, CBR, CHM, CCM, and CCE.

**January 28-February 26, 2023**
Missouri Botanical Garden Orchid Show, Jack C. Taylor Visitor Center, Emerson Conservatory, 4344 Shaw Blvd, St. Louis, MO 63110 (314) 577-5100

**January 28 & 29,** St. Louis Orchid Society Show and Sale, Missouri Botanical Garden

**February 11, 2023**
Mid-America Judging Center monthly judging, noon, Missouri Botanical Garden, Commerce Bank Center for Science Education, 4651 Shaw Blvd., St. Louis, MO

**February 18, 2023**
Great Plains Judging Center monthly judging, 10:30 am, Beech Science Center, 100 College St., Winfield, KS

**March 3-5, 2023**
Orchid Society of the Ozark's 12th Annual "Orchids in the Garden", Botanical Garden of the Ozarks, 4703 N. Crossover Rd, Fayetteville, AR

**March 10-12**, 2023
Greater North Texas Orchid Society & SWROGA, Water Land and Resource Building, Texas A&M AgriLife Center, Dallas, Texas, 75252

**March 17-18, 2023**
Springfield Orchid Society, Springfield-Greene County Botanical Center, 2400 S. Scenic Ave., Springfield, Missouri, 65807

**March 25 & 26**
Omaha Orchid Show and Sale, Lauritzen Botanical Garden, Omaha NE, 68108

**April 15, 2023**
Tulsa Orchid Society, "Orchids Wild and Wonderful" Annual Show & Sale, 10am-4pm, Ribbon judging 8am Saturday, a SWROGA show, Tulsa Garden Center, 2435 S. Peoria Ave, Tulsa, Oklahoma, 74114

**May 6-7, 2023**
Oklahoma Orchid Society, "**Orchid** Kicks on Route 66" Annual **Show** & Sale, a 'bench and full exhibit' show, 10am-4pm,a SWROGA show, Will Rogers Garden Center, 3400 NW 36th Street, Oklahoma City, Oklahoma, 73112

# ***OSGKC Judging***

**Ribbon judging at our meetings at the Merriam Community Center are not official AOS judging events, but are an introduction to the judging process and a way for members to share and learn more. *Any plant you enter, you should have owned and cared for, for at least 3 months (not just bought and brought recently and brought in. Also, bring the same flowers in for judging only once. For example, if you enter a Paph. one month and the next month it is still in bloom, please do NOT enter it again.***
**Seeing orchids in flower is one of the greatest joys of our meetings and we are so happy to be able to do this again. Please bring in your blooming orchids, even if you don't think they are "award quality". You will always learn something by bringing plants in to discuss and share with other members. And, ribbons count for points which build through the year for our year-end award presentation each December.**

## *January Meeting Judging Results* ***by Cindy Meyer and Anh Rongish***

Thanks to all who brought orchids to enter and show: Kristy Charland, Katerina Jenkins, Amh Rongish, Ken Plahn, Dipti Solanki, Ariel Paulson, Jean Rogers, Dan Schlozman, Jill Cross, Jeff Howell III, Donna Klehm, Susie Hanna, Al Clinton

**Blue Ribbon Winners**

Cattleya: Bl. Yellow Bird by Kristy Charland
Phal. NOID by Katerina Jenkins
Paphiopedium: Paph. villosum by Anh Rongish
Phragmipedium: Phrag. besseae X Andean Fire by Ken Plahn
Oncidium: Ons. Eye Candy 'Pinkie' by Katerina Jenkins
Vanda: V. Robert's Delight by Dipti Solanki
Species: Coel. usitana by Kristy Charland
Other: Gptm. Arlene Armour 'Candy' by Ariel Paulson

**Red Ribbon Winners**

Cattleya: NOID by Dr. Dan Schlozman
Paph. Hsinying Alien by Jean Rogers
Oncidium: Onc. Aka Baby 'Raspberry Chocolate' by Kristy Charland

**White Ribbon Winners**

Cattleya: Bc. Maikai by Dr. Dan Schlozman
Phalaenopsis: Phal. NOID by Scott Howell III
Epi. porpax by Jeanne Smith

**January – Orchid of the Month**

Ons. Eye Candy 'Pinkie'
by Katerina Jenkins

# *For Fun and Learning!!*

## *Orchid Growing Tidbits (How I Grow It…..)*

**January Blue Ribbon Winners and special orchids and –*" How I grow It"*:**

**Phrag. besseae X Andean Fire by Ken Plahn**
Light - LED grow light, medium light
Water - RO, daily
Temperature - 70 day, 65 night, 5deg colder in winter
Humidity - High 50-70%, with peak during middle of light period
Potting Mix - bark, rock, charcoal, large perlite, rockwool cubes
Fertilizer - Ray's K-Lite, ¼ tsp to 15 gal, in water used daily.
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**Paph. villosum by Anh Rongish**

Growing in orchid bark mix under LED lights. Fertilizing with First Rays

**Cattleya: Bl. Yellow Bird by Kristy Charland**
High Light! I had it outside for the summer, and I think that's why it's flowering again after taking a two year break. It got full morning sun and afternoon shade. It was brought in before temperatures went below 50F. I use tap water, used the hose outside, let it get a lot of water once a week and let it dry between. I used Norman's Nutrients which is 20-16-15 and I occasionally use Megathrive or Quantum Probiotics from First Rays. I really don't have a schedule, but I try to spread out these type of treatments at least 2 weeks. I have a calendar that I mark when I use a special treatment. It's potted in a medium bark mixed with perlite and charcoal, and I add oyster shell (buy it at farm supply stores from the chicken feed section) for a calcium supplement

**Phal. NOID by Katerina Jenkins**
I grow it in the bathroom next to a small window (east). It's about 68 degrees during the day and about 64 degrees at night. I water it about every 10-14 days and use MSU orchid food by Repot Me and time release orchid fertilizer. I use purified water (it's only 39 cents per gallon at Hy-Vee for e refill). It grows in a mix of bark and moss (layers). This is the 4$^{th}$time that it has bloomed for me.

**Oncidium Category: Ons. Eye Candy 'Pinkie' by Katerina Jenkins**

I grow it in the kitchen next to a large window door (east). I also use growing lights (4 hours in the morning and 4 hours in the evening). It is about 65 degrees at night and about 68 degrees during the day. I water it every 10-14 days and use MSU orchid food by Repot Me and time release orchid fertilizer. I use purified water and rain water. Sometimes I take it outside when it rains in the summer. It grows in a mix of bark and moss (layers).This is the 2nd time that it has bloomed for me.

**Vanda Category: Robert's Delight by Dipti Solanki**

**Species Category: Coel. usitana by Kristy Charland**

I have my Coelogynes on the top shelf of my grow room. The light is a softer led, so not as bright as the "grow type" leds. I mist them with RO water every other day. If they get too dry, I pour RO water into the drip tray for them to absorb as needed. I use First Ray's Klite fertilizer very sparingly. They get mild extra treatment from Quantum Probiotics or MegaThrive. They like 50% humidity or higher. Mine are potted in a mix of medium/fine bark and sphagnum moss.

**Other Category: Gptm. Arlene Armour 'Candy' by Ariel Paulson**

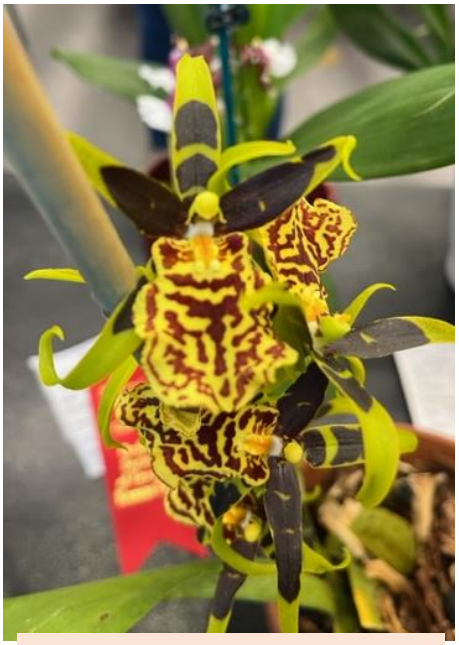
Light: 1000 Lumen LED bar about 6" away
Temp: varies from ~65 in winter to ~80 in summer
Humidity: 30-50%
Water/fertiilizer: weekly, tap w/ 1/4-conc all-purpose MiracleGro + 1/4 conc Botanicare Cal-Mag Plus
Media: semi-hydro with hydro-crunch

**Our pictures of Blue Ribbon Winners from the December Meeting are thanks to the photography of Jeanne Smith**

## *Blooming Orchids for Show*

**NOT for JUDGING – just for your VIEWING PLEASURE!** Thanks to members who donated!!

**Did you know we now have an amazing 134 members in our membership??? Yes, 134!!! It would be beyond my wildest dream if even ¾ of you sent a picture for 'Viewing Pleasure'!!! Share your beauties!!! Become involved in the Society as much as you can. It is so fun and rewarding associating with all of you!!!**



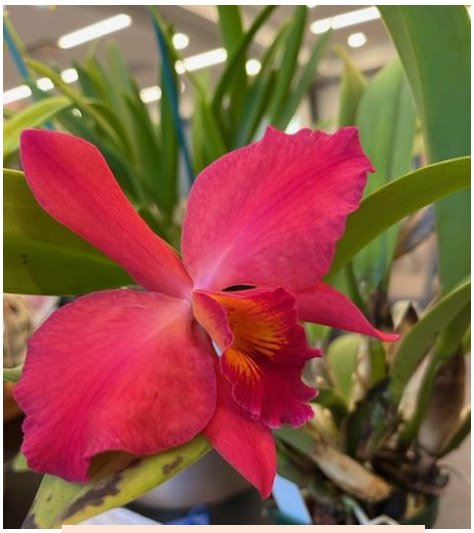
Bnfd. Gilded Tower 'Mystic Maze' by Donna Klehm

Onc. Aka Baby 'Raspberry Chocolate' by Kristy

C. NOID by Dr. Dan Schlozman

Bc. Maikai by Dr. Dan Schlozman

Pot. Golden Circle by Jill Cross



Slc. Circle of Life X Life's Melody by Donna Klehm

C. Warpaint, 1st project plant 2020 Susie Hanna

C. Taida Eagle Eye 'White Angel' FCC/AOS Susie Hanna

C. Guarianthe skinneri by Ariel Paulson

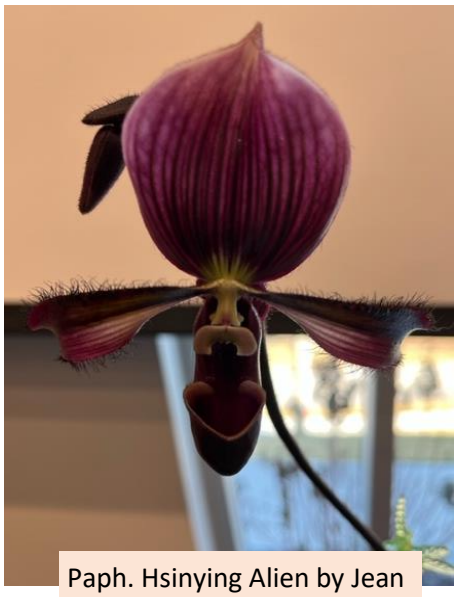
Phrag. besseae X Andeae Fire by Ken Plahn

Epi. porpax by Jeanne Smith

Rdrm. Pink Lace by Susie Hanna

Barleroa Rebecca Marsh 'With Love' HCC/AOS by Susie Hanna

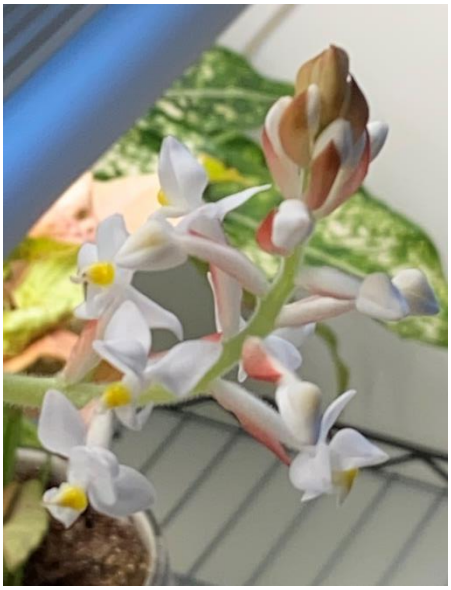
Masdevallia Cheryl Shanon 'Red Hot Mama'



Paph. Hsinying Alien by Jean Rogers

Onc. Aka Baby 'Raspberry Chocolate' by kristy Charland

Rlc. Volcano Queen by kristy Charland



Mini Phal. by Nancy Kasparek

Oncidesa Cocoa Peach 'Cocoa' by Pat Bridgford

Phal. Tetraspis 'Chunfong' by Katerina Jenkins

Phrag. QF Makana by Katerina Jenkins

Phal. Sogo Vivien 'Leaf's Edge' by Katerina Jenkins

Phal. NOID #1 by Katerina Jenkins

Phal. NOID #2 by Katerina Jenkins

Phal. NOID by Alisha Cole

Phal. NOID by Jean Rogers

Masdevallia Cheryl Shanon ‘Red Hot Mama’

Cattleya NOID by Jean Rogers

Paph. Little Pink by Jean Rogers

Phal. KV Beauty ’T5701’ by Jean Rogers

Den. bracteosum X tanii by Jean Rogers

Phal. Mituo Diamond Canary by Susie Hanna

Vandoglossum Lemon Drop by Kristy Charland

Coelogyne Unchained Melody 'Taylor' by Kristy Charland

Phal. Timothy Christopher 4N 'Sakura'

Bc. Keowee 'Mendenhall' by Kristy Charland

Den Razzle Dazzle by Jen McAroy

Howeara Lava Burst 'Puanani' AM/AOS by Donna Klehm

Phal. NOID by Scott Howell III

Rth. Laughing Boy 'Flame' AM/AOS by Mark

by Kelly Dade

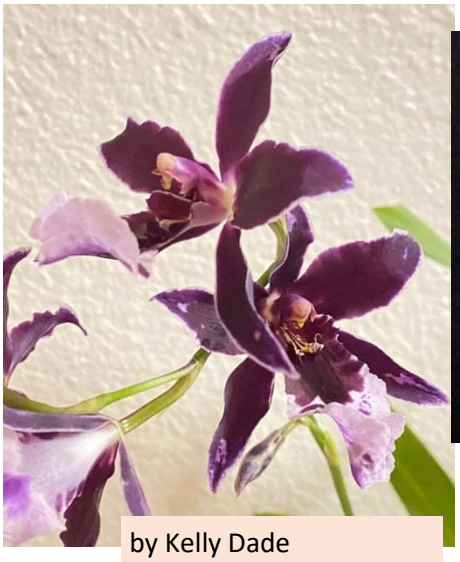
by Kelly Dade

by Kelly Dade

by Kelly Dade

Phal. Little Bit by Susie Hanna

Phal. Montclair Sunset by Susie Hanna



by Kelly Dade

Barkeria Rebecca March 'With Love' by Susie Hanna

C. "I Lost My Tag" by Susie Hanna

V. Charm Blue Star By Jen Winter

Den. Nobile, NOID By Jen Winter

Onc. Eye Candy ‘Pinkie’By Jen Winter

By Jen Winter

V. Lenavanat x Udomsri By Jen Winter

Den. Fire Wings By Jen Winter

C. trianae by Susan Tompkins

Phloephila pelecaniceps by Susan Tompkins

C. jenmanii by Susan Tompkins

Paph. NOID by Mike Rafferty

Phal. NOID by Mike Rafferty

Ianclarkara (Ink.) Cheyenne Marie “Green Gecko" by Mike Rafferty

By Jen Winter

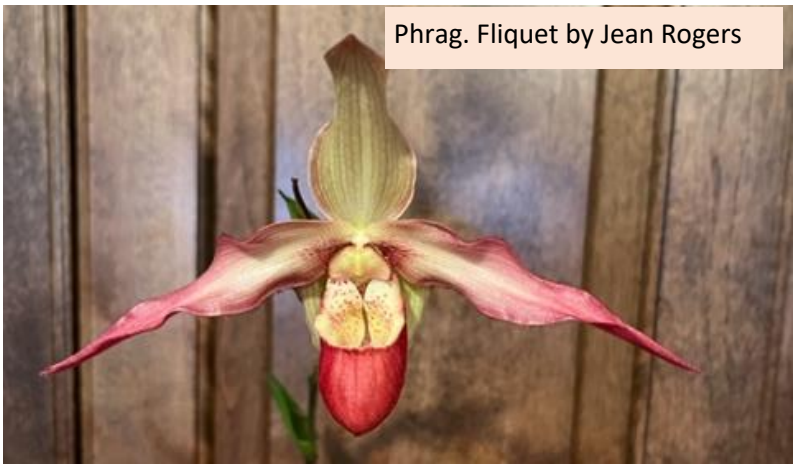
Galeopetalum Starburst ‘Parkside’ by Jean Rogers

Tea Cup Phal. Jiaho’s Pink Girl by Jean Rogers

Ddc. longifloium by Jean Rogers

Phal. NOID by Jean Rogers

Phal. NOID by Jean Rogers



Phrag. Fliquet by Jean Rogers

Phal. NOID by Jean Rogers

Phal. NOID by Jean Rogers

Phal. NOID by Jean Rogers

Den. gregulus by Brian Donovan

Phrag. Fritz Schomburg by Ken Plahn

Coelogyne ovalis by Kristy Charland

# Ideas, Items and Inquiries **(If you know of something for this section, please send to** ANH.VU@ucdenver.edu or jeanierogerswarren@gmail.com **for inclusion)**

It's the beginning of a new year and a **great time to join the American Orchid Society**. Not only does it support all things 'orchids' including research and conservation worldwide, it provides amazing orchid pictures of award winners, information of all sorts and tools to help any grower. Search aos.org. Select join. And when a prompt asks if you had a referral, please insert our **Society's account number which is 47151**. Below are a few examples of items in the January issue:

## From AOS Orchids Magazine

### PRONUNCIATION GUIDE

Pronunciation of orchid names can be daunting for the novice and experienced grower alike. Presented below is a simplified pronunciation guide specific to the names found in this issue of *Orchids* magazine. An attempt has been made to represent each syllable using easily recognized sounds or words separated by hyphens and not standard phonetic symbols. Check out the Orchidist's Glossary on our website at https://www.aos.org/orchids/orchidists-glossary.aspx.

*Aerangis* (air-ANG-iss)
Aeridinae (air-id-EE-nee)
*aphyllum* (ay-FIL-lum)
*Athecebium* (ath-eh-SEE-bee-um)
*atroviolaceum* (at-roh-vye-oh-LAY-see-um)
*Barbata* (bar-BAY-ta)
*Brymerianum* (bry-mer-ee-AY-num)
*Bulbophyllum* (bulb-oh-FIL-lum)
*Cadetia* (ka-DET-ee-a)
*Caladenia* (kal-a-DEEN-ee-a)
*Calyptrochilus* (kal-ip-troh-KYE-luss)
*canhii* (KAHN-ee-eye)
*Catasetum* (kat-a-SEE-tum)
*Cattleya* (KAT-lee-a)
*Ceratobium* (ser-a-TOH-bee-um)
*Cochlioda* (koK-lee-OH-da)
*convolutum* (kon-voh-LOO-tum)
*cordifolia* (kore-dih-FOLE-ee-a)
*coronaria* (kore-oh-NARE-ee-a)
*Cymbidium* (sim-BID-ee-um)
*Cypripedium* (sip-rih-PEED-ee-um)
*Dactylorhiza* (dak-till-oh-RYE-za)
*Dendrobium* (den-DROH-bee-um)
*Dendrocoryne* (den-droh-kore-EYE-nee)
Diplocaulobium (dip-loh-kaw-LOH-bee-ium)
*Dracula* (DRAK-yew-la)
Epidendroideae (ep-ih-den-DROY-de-ee)
*Eria* (EAR-ee-ah)
*fasciatus* (fas-ee-AY-tus)
*forbesii* (FORBS-ee-eye)
*funingense* (foo-ning-EN-see)
*gaskelliana* (gas-kell-ee-AY-na)
*Gastrochilus* (gas-troh-KYE-luss)
*grandiflorum* (gran-dee-FIORE-um)
*Grastidium* (gras-TID-ee-um)
*Habenaria* (hab-ee-NARE-ee-a)
*Haraella* (har-a-EL-la)
*hatagirea* (hat-a-GEER-ee-a)
*himalaicum* (him-a-LAY-ih-kum)
*intermedia* (in-ter-MEED-ee-a)
*isobyliae* (ih-soh-BIL-ee-eye)
*johnsoniae* (john-SON-ee-eye)
*labiata*(lay-bee-AY-ta)
*Latouria* (la-TOUR-ee-a)
*leonis* (lee-OH-niss)
*Lepanthes* (leh-PAN-theez)
*longicornu* (lon-gee-KORE-noo)
*Lycaste* (lye-KAS-tee)
*macrophyllum* (mak-roh-FIL-lum)
*Masdevallia* (mas-deh-VAHL-ee-a)
*Megastaminodium* (meg-a-stam-in-ODE-ee-um)
*Miltonia* (mil-TONE-ee-a)
*Miltoniopsis* (mil-tone-ee-OP-sis)
*Monanthos* (mohn-AN-thos)
*mossiae* (MOSS-ee-eye)
*Myrmecobius* (mir-meh-KOH-bee-us)
*napalense* (na-pal-EN-see)
*Nephrolepis* (neh-fro-LEH-pis)
*nigricans* (NYE-grih-kanz)
*nobile* (NOH-bih-lee)
*noezliana* (noze-lee-AY-na)
*normanbyense* (nor-man-bee-EN-see)
*Odontioda* (oh-don-tee-OH-da)
*Odontoglossum* (oh-don-toh-GLOSS-sum)
*odoratus* (oh-dore-AY-tus)
Oncidiinae (on-sih-DEE-ee-nee)
*Oncidium* (on-SID-ee-um)
*Oncostele* (on-koh-STEE-lee)
*Paphiopedilum* (paff-ee-oh-PED-ih-lum)
*pescatorei* (pes-ka-TORE-ee)
*Phalaenanthe* (fail-en-AN-thee)
*Phalaenopsis* (fail-en-OP-sis)
*Pleione* (plee-OH-nee)
Pleurothallid (plur-oh-THAL-lid)
*polysema* (pol-ee-SEE-ma)
*praecox* (PREE-koks)
*purpurata* (pur-pur-AY-ta)
*purpureum* (pur-PUR-ee-um)
*Pyrorchis* (pye-RORE-kiss)
*retrocalla* (ret-roh-KAL-la)
*rhodostictum* (roh-doh-STIK-tum)
*roezlii* (ROZE-lee-eye)
*rungsuriyanum* (rung-sur-ee-YAY-num)
*Saccolabium* (sak-koh-LAY-bee-um)
*Satyrium* (sa-TEER-ee-um)
*schroederae* (SHROH-der-ee)
*spectabile* (spek-TAB-ih-lee)
*tigrinum* (tih-GRYE-num)
*trianae* (TREE-an-ee)
*trianaei* (tree-AN-ee-eye – an incorrect spelling of *trianae*)
*Vanda* (VAN-da)
Vandeae (VAN-de-ee)
*vexillaria* (veks-il-LARE-ee-a)
*Vuylstekeara* (vul-shteck-a-ARE-a)

## Fertilizer Baskets

THESE LITTLE BASKETS were first introduced to me by Desert Valley Orchid Society (Phoenix) member Karla Velasco who was using them with a timed-release fertlizer. Because I was using a liquid fertilizer at the time, I put it aside for future use. Then I read about a fertilizer called Purely Organic manufactured in South Carolina (purelyorganicfertilizer.com/about/how-to-order). Sue Bottom's article (2017) showed excellent results on struggling orchids. The instructions were to put it into a tea bag and place the tea bag on top of the medium. The fertilizer will slowly release its nutrients as you water. I used the tea bag approach, which worked but looked really ugly sitting in the orchid pot. So, I ordered these little fertilizer baskets (the small size is 0.8 inches [2 cm]) from Amazon, 100 for around $16.50. They were designed for pelletized fertilizers for plants such as bonsai and orchids. So far, they work beautifully. They blend in well with the plant and even fit into my small 2-inch (5.1-cm) pots. For my larger pots, I use two. You would think that the powdered fertilizer would fall through the small holes but if you press it down firmly, it does not leak out. — *Cindy Jepsen (email: cindyjepsen@cox.net).*

References

Bottom, S. 2017. Purely Organic. *Orchids* 87(5):344–349.

## From AOS Orchids Magazine

# GREATideas

Text and photographs by Daniel Duda

Alternative to Plastic or Terracotta Pots (Reprinted from *Orchids* 86[1]:30)

AS AN ORCHID hobbyist for the past 50 years, I have experimented with different growing pots of different sizes, shapes and materials. From experience and research, it became apparent that these variables are important from several perspectives in order to accommodate individual plant growth habit, plant size, media and moisture requirements. Equally important are pot structural durability, ease of unpotting or repotting, routine sanitation and suitability for long-term use and reuse.

With the general exception of baskets and slab mounts, most containers used today by hobby growers are either plastic or terracotta pots of varying diameters and depths. Some of the advantages and disadvantages of either are familiar.

PLASTIC POTS

Pluses Inexpensive, lightweight, easy to unpot for transplanting or division, generally impervious surfaces adverse to moss, fungus and mold growth, and easy to sanitize for reuse.

Minuses Structurally flimsy, somewhat unstable for keeping tall plants upright on the bench, difficult to use with rhizome clips or pot hangers and subject to ultraviolet degradation in direct sun areas.

TERRACOTTA POTS

Pluses Aesthetically pleasing, heavy weight and good stability for keeping taller plants upright, porous surfaces allow increased aeration, easy compatibility with plant clips and pot hangers, immune to ultraviolet degradation in high light situations and easy to sanitize and reuse.

Minuses Subject to breakage if dropped or left out in freezing weather, prone to accumulate moss and fungal growth on the exterior surfaces and roots often form very strong bonds with surfaces, making depotting challenging.

Although my personal preference for many years has been terracotta pots, I have recently found a polyvinyl chloride (PVC) drainage pipe end-cap that, with minimal modification, has become my favorite container for "flat-growing" monopodial orchids such as a phalaenopsis and sympodial orchids with a smaller growth habit such as a miniature cattleya.

The end-caps can be found at any of the "big box" or hardware stores that sell large PVC drainage pipe. With an inside diameter of 6 ¼ inches (15.9 cm), depth of only 3 inches (7.5 cm) and wall thickness of 3/16 inch (4.7 mm), they have a nearly flat bottom and sufficient weight to remain upright on a bench. The side of the end-cap is thick enough to use various types of clips used to stabilize a newly potted plant, and is also thick enough to bore ¾-inch (0.6 cm) holes, 120 degrees apart, near the rim, for attaching three-wire hangers. The end-cap bottom can be easily bored with a ¾-inch (1.9 cm) drill bit (spade or auger) to provide ample drainage. With a perfectly smooth interior, removing a plant for division or repotting is as simple as soaking the entire container and plant in a bucket of water for a while, then easing it out of the end-cap with minimal root trauma. The heavy PVC will endure almost any vigorous sanitation prior to re-use and, while a bit more expensive than plastic or terracotta, they will last many years.

*— Dan is a retired Naval Officer and Aviator who resides in northwest Florida. An AOS member for nearly 45 years, he has grown orchids as a hobby since stationed in Hawaii in the early '60s. He presently has approximately 150 plants (mostly Cattleya alliance hybrids and species), that he moves from his greenhouse to "outdoors", and back again, as seasons change. He can be contacted through email at: dandudo@comcast.net.*

[1] A PVC end cap drilled for drainage and a hanger viewed from the bottom.
[2] The same end cap viewed from above.
[3] A small cattleya happily growing in a PVC end cap.
[4] Catteyas in PVC end cap pots.

## From AOS Orchids Magazine

# QUESTIONS AND ANSWERS

### IMPORTED PLANTS

QUESTION

How do plants adapt their blooming season from their native habitat to my greenhouse? If my plant needs a dry period in fall and winter, should I follow the season where I live, or where the plant is found in nature?

ANSWER

This question usually relates to a person buying plants from the Southern Hemisphere where the seasons are reversed from the Northern Hemisphere. How do we get these plants to adapt to the Northern Hemisphere? These plants will adapt but it can take 12–18 months or longer. They often will not flower for the first season or two. The most delicate ones are those that need a dry winter rest, and you get them near the beginning of our winter, which is the beginning of their summer. Look at and listen to what the plant is telling you. If it is growing it will need water. Let the plant finish its growth. Water and feed it as you would any other summer-growing plant. Watch for signs of dormancy, as it will go dormant at some point, likely with a smaller pseudobulb. Now give it its dry rest and watch for signs of the plant coming out of dormancy, which it usually does quite quickly. The new growth that starts usually will be a flowering growth as it is now in its regular growth cycle. Try to buy plants that are winter active as we go into our winter. And vice versa get summer active plants going into our summer. You should try not to buy a plant going into a dry winter rest in May. Eventually, they will adapt to our seasons.

### BUGS!

QUESTION

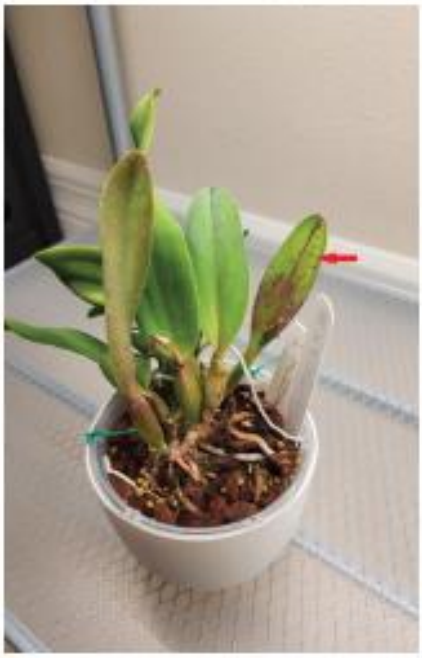
I have insects on my orchids. What are they and what should I do?

ANSWER

The insects in the first photograph (red arrow) look to be fungus gnats. Fungus gnats are a sign that the potting media is staying too wet. They thrive in wet, soggy conditions, but can be easily controlled. Any pesticide will kill fungus gnats. What you really want to do is change your culture and let your potting media dry out more. Cut back on your watering and check to see if your potting mix is getting old and starting to decay, ideal for fungus gnats. The other leaf shows a classic picture of a mealybug (white arrow). They are tough to treat! I would recommend you watch one of the pest management webinars. Treat them like you do scale

insects. Whichever pesticide you use, make sure to also treat the plant's roots because mealybugs and scale thrive on the roots. If you just treat the top of the plant, you will not be getting to the source of the infestation. They are wax covered, so make sure to use something that reduces the surface tension. A few drops of Dawn dishwashing liquid added to your spray will do the trick. Mealybugs love to get into the crowns of phalenopsis and at the base of paphiopedilums.

### FOLIAGE PIGMENTATION



These questions were part of one or more monthly webinar Q&As and compiled by Larry Sexton for inclusion here. Each month, a Q&A webinar is held during the first two weeks of the month. To view recorded Greenhouse Chats (Q&A webinars) or register for a future one, see https://www. aos.org/orchids/webinars.aspx. Send questions to greenhousechat@aos.org — *Ron McHatton, AOS Chief Education and Science Officer.*

QUESTION

This rhyncattleanthe has developed purple pigmentation on its new leaf and bud. Any idea what could have caused this? It grows under lights with a PAR reading around 180. Could this be too much light or possibly a virus? It is growing well and seems healthy.

ANSWER

The one leaf (red arrow) has some surface damage. It is possible this is related to LED lights and I would recommend you read the five-part McCracken series of articles as she will walk you through what PAR readings you should be getting from your LED source. Look at the pseudobulbs on this plant. They all have some pigmentation and even the damaged leaf has some pigmentation issues. I saw this happen to someone growing restrepias when they were moved from a windowsill to under LED lights and the plants struggled with foliage damage. They were moved back to their old spot and started growing well again and flowered. Either the spectral distribution or PAR intensity being supplied to the plants from the particular LED fixture was more than the plants could handle. I would recommend you check your LED light output as it may be putting out too much useful light, causing the excess pigmentation.

LEAF SPOTS

QUESTION

I occasionally get these marks (usually on older) Cattleya leaves, while the plant tests negative for viruses. What is the issue and how do I treat it?

ANSWER

When you test for viruses, you are usually only testing for two types of virus (Cymbidium Mosaic Virus and Odontoglossum Ringspot Virus), as these are the two easiest to get testing kits for. There are many other, less common viruses that affect orchids but they do not have readily accessible test kits.

That said, this damage could be viral but I do not think so. I think it is one of the leaf-spotting diseases such as Collectotricum, Anthracnose, or Cercosporid fungi; all treatable with a good fungicide such as Thiomyl, Dalconil, Pagaent or Heritage. Treatment will not get rid of the damage on old leaves but it will stop it from forming on new leaves. Start using fungicides, especially during hot wet parts of the year at four- to six-week intervals, and then as a regular control program at six-week intervals. Remove damaged leaves as they can be a source of continued infection.

UNRULY PLANT

QUESTION

My phalenopsis has all these aerial roots. Do I have to replant it vertically?

ANSWER

You can replant it vertically. Most growers want phalenopsis to grow vertically but this is not how they grow in nature. Phalaenopsis plants in nature grown on the side of trees or horizontal branches and arch out and down so that rainfall is shed toward the leaf tips and away from the crown.

When you are ready to repot, remove the plant from the pot and trim off all the old dead roots. You will need to trim several of these good roots to fit in a typical pot. Use a sterilized blade and trim back the roots to a point where you can fit the plant into a pot. Trimming the roots will not hurt the plant as it will replace roots from both the cut roots and the base of the plant collar. The proper repotting depth would be at the arrow. The uppermost roots would be in the potting mix. Then let the plant reestablish itself.

## From AOS Orchids Magazine

TOM'S MONTHLY CHECKLIST

# January: The Month of Happiness

By Thomas Mirenda

WE TEND TO reassess our existence in the New Year. How did last year go for you? Did you make progress toward some lofty goals? Strengthen or initiate existing or new relationships? Has the world gone in the direction of peace, beauty and stewardship? Have you done your part to preserve and achieve progress for mankind and all the other species we share this island in space with, especially our beloved orchids? I like to think we are waking up to the needs of a struggling planet and that this consciousness is leading us to make the right choices for the future. Although the many and varied factions of humankind do not always agree on the way forward, I was reminded recently, at our AOS Members Meeting in Sacramento, of how important our fellow citizens of the earth are to our collective well-being and ultimately to our happiness. Did we agree harmoniously on everything? HA! But ultimately, we found ourselves influenced by the sublime beauty and passion for our orchids to do good things for our community and joined in fellowship with our beloved orchid friends.

*Thomas Mirenda*

Many people measure happiness in "things," such as possessions, including orchid collections. Others, myself included, measure happiness through journeys and experiences we are blessed to engage in, including orchid-hunting trips! In the end, though, it is our relationships, however fraught, that are the measure of our happiness. I do not mean this in the way of love or even friendship, but rather in a collective purpose and stewardship we feel when we have found our true path. The friends we make in the world of orchids, their cultivation and conservation, are our companions on a most enjoyable and rewarding voyage. Although they can sometimes frustrate us, ultimately it is our relationships with each other that nurture extreme happiness and fulfillment. Resolutions to achieve fitness and other forms of prosperity, while important, pale in comparison to our need for camaraderie. I find it a profound revelation to realize our ultimate happiness depends greatly on our success in bringing people together. That is my goal for the new year. Will you join me?

*Brassocattleya* Bredren's Calypso 'Carnival Queen' AM/AOS (Yellow Bird × *Cattleya* Jalapa) exhibited by Phillip Hamilton and Bredren's Orchids at the November 5, 2022 International Vanda and Slipper Symposium, Apopka, Florida. The strikingly colored flowers were 2.75 inches (7 cm) in diameter and described by the judges as having "lipstick-glossy" sepals and petals and a velvety lip.

REST AND RELAXATION So many orchid growers engage in our fabulous diversion because they think it will be relaxing and they want to be surrounded by sublime beauty. Ultimately though, true orchid devotees begin to realize that growing orchids well requires some effort. Even here in Hawaii, where orchids tend to thrive, the idea that they grow themselves is soon dispelled. However, much in the same way our orchids provide a rest and diversion from the pressures and responsibilities of the workplace and relationships, the orchids themselves require a bit of a rest this month as well. Plants that are pushed into relentlessly growing all year long will eventually crash, like we do when we are fatigued or have nervous breakdowns. Now, while the day lengths and solar angles are at their lows, just after the winter solstice, most orchids need a slight rest or even an extreme dormancy. Although orchids with large pseudobulbs can generally handle more drought than those that lack them, you must learn about each individual plant in your collection to understand which need just a slight reduction in care, and which need an extreme dry rest. It can be daunting to see leaves slough off on catasetums, lycastes, dendrobiums and habenarias, but it is a necessary stage in their life cycle and must be adhered to for ultimate success.

BLOSSOMING BEAUTIES Despite most orchids needing less fussing over in the winter, we are about to enter the blooming season for a majority of cultivated orchids, including cymbidiums, paphiopedilums, soft-cane dendrobiums and, of course, phalaenopsis. It is tempting to water these plants more when buds appear or when flowers start to open, but now is the time to water them much more judiciously. It is not that blooming plants do not need

water; they surely do. But watering and feeding excessively now will often lead to discouraging blooming by pushing the plants into continued vegetative growth. By resting your plants now, the combination of slowed vegetative growth, reduced photoperiod and lower temperatures will only encourage your plants to stop growing and instead, bloom more profusely.

COOL CULTISTS For those of us who appreciate upper-elevation plants, we find practically the opposite of the warmer growers, and particularly the seasonally dry plants. Pleurothallids, such as draculas, masdevallias and lepanthes, lack food and moisture storage organs such as pseudobulbs and actually grow much more rampantly now than they do in the summer, when they are often stressed by temperatures they would never receive in their natural habitats. Although such plants seldom need excessive feeding to thrive, and revel in very pure water, now would be the time for very diluted fertilizer and stepped-up watering. On cold cloudy days, the application of a fungicide on wet, pseudobulbless plants might eliminate some of the rot that often happens in the absence of bright light and heat. Monitor the growth of your cool-loving plants closely to be sure they are not too waterlogged and losing densely packed leaves. Watering early in the morning, so the leaves dry well before dusk, can alleviate a lot of problems.

HAPPY HOBBYISTS Although your orchid culture generally simplifies in the winter months, I encourage you to crack open your orchid books when it is too cold or dangerous outside to venture out. With tens of thousands of species, each fascinating in their own way, and innumerable spectacular hybrids, there is no shortage of orchid mysteries to unlock. Understanding orchid habitat is the key to the successful culture of your plants. Only you can gather this knowledge. Invite some friends to visit you and talk orchids with them. I can guarantee that doing so will fill you, them and your orchids with great happiness.

*— Tom Mirenda has been working professionally with orchids for over three decades. He is currently an AOS trustee and is a past chair of the AOS Conservation Committee. He is an AOS accredited judge in the Hawaii Center (email: biophiliak@gmail.com).*

## MAKING SURE PEOPLE CAN REACH YOUR AFFILIATED SOCIETY IS NOW EASIER THAN EVER

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Make the necessary changes to contact details and address and **Save changes** (lower left corner of the screen)

Help us ensure the AOS Corner, renewal notices and important correspondence reach you. Update any time you have a change.

## Winter is HERE!

**Does your greenhouse run too cold? Now is the time to prepare.**

Stick one side of Velcro disks a foot apart onto the inside of the north side of the greenhouse to fit the shape of the foil-covered, bubble-wrap-type batts like the material used as jackets for hot water heaters. It can be purchased in rolls. The foil will reflect light back into the greenhouse and the bubble wrap will help insulate against the cold. It may also be used to insulate the west side of the greenhouse on the outside to help keep the greenhouse cool during the summer months.
*— Jean Allen-Ikeson*

FOR THE NOVICE

# The Nurseryman's Test

## Early Subtle Signs of Virus

Text by Sue Bottom/photographs by Terry Bottom

THEY SAY THAT the only way to be sure if a plant is virused is to test it. Now we will have to add a qualifier to that statement, "...unless Dave Off is in town." Dave manages Waldor Orchids in Linwood, New Jersey with other family members. He was vacationing in St. Augustine with his family and spoke to our club. The subject of orchid viruses came up in one of our conversations, and Dave offered to walk through my greenhouse and identify potentially virused orchids. I hoped he would be unsuccessful, because several years ago I discarded about a third of my cattleyas after they tested positive. Unfortunately, Eagle Eye Dave walked through the greenhouse and brought a half dozen or so cattleyas to my attention. Each one later tested positive for virus.

Dave has an internal checklist that he uses to identify virused plants. He looks at the new growth, and it must be at the proper point in its growth cycle, when the leaf is unfolding but before it hardens off. The symptoms on the young leaves are very subtle. On the newest forming leaf, there is a longitudinal streaking running parallel to the veins in the leaf. This streaking does not tend to traverse the entire leaf blade. It is slightly irregular on the horizontal axis, so it is somewhat blotchy in appearance. The streaking is evident on both the upper and lower leaf surfaces. The discoloration is inside the young leaf, with no sunken areas. This streaking may or may not disappear when the leaf is mature, depending on the severity of the infection. It is best viewed early or late in the day rather than under conditions that are too bright.

If Dave sees some chlorotic streaking, he starts inspecting the rest of the plant, first looking at the other new growths to see if they too exhibit symptoms. Both top and bottom leaf surfaces are inspected. If virused, the streaking will be visible in all the new growths. He looks at the older part of the plant, perhaps there might be the necrotic black splotches or the reddish-purple markings often reported for virused plants. He looks at any flowers that might be present, for signs of color break or necrotic streaking. He looks at the flower sheath for signs of abnormalities. He also evaluates the plant's growth vigor, as viruses can sap strength from a plant.

The phalaenopsis bench was Dave's next target. I have not tested many phalaenopsis because of the generally held assumption that many of those sold in the mass markets could be virused. Dave found a dozen plants that looked suspicious to him, and upon testing, Dave continued to bat a thousand ... more bench space!

In more advanced stages of viral disease, the more commonly recognized signs of virus might appear in the plant. These include the black necrotic blotching often reported for cymbidium mosaic virus (CymMV) or the reddish-purple markings of odontoglossum ringspot virus (ORSV)

[1] Subtle expression of virus in young cattleya leaves: longitudinal irregular chlorotic streaking, evident on upper and lower leaf surfaces. Depending on the severity of the virus infection it may or may not disappear when the leaf is mature.

[2–5] The chlorotic streaking from virus in young cattleya leaves is very subtle. Dave could predict from the markings whether it was CymMV or ORSV. ORSV streaking tends to be more blotchy and CymMV more linear. The presence or absence of color was also predictive. I will need a few more lessons to make any educated guesses.

in the leaves. The flowers can show the presence of virus in color break and brown necrotic blossom streak. Even the flower sheaths can express virus symptoms. Dave's chlorotic streaks in young leaves are your early warning system, letting you know there may be something suspicious in your plant.

Careful observation is the key, and testing to verify or refute the presence of virus helps build your knowledge set so your eyes can be trained to detect the early symptoms of virus. It is not a "once and done" proposition. The plants must be in the proper stage of growth for these subtle signs to manifest themselves. Dave keeps newly arrived plants at his nursery in a staging area for perhaps 18–24 months. Changing the plant's environment can add stress, which can make the symptoms more evident. The plants are inspected regularly as they go through one or two growth cycles under his growing conditions. Only after this observation period are virus-free plants allowed to be placed into the general growing areas.

Dave had some other interesting growing tips. I was repotting a cattleya seedling he gave me and noticed a little wire with a long tail wrapped around the rhizome. Dave said that was an "artificial root" used to hold the seedling stable in the pot. He does not use rhizome clips, so this method allows a young plant with little root mass to be kept from wobbling around in the pot until it grows its own roots.

Dave does not use rhizome clips on larger plants either, instead using a potting stick to pack the medium tightly around the plants. Potting sticks were commonly used during the era of osmunda fiber, which is no longer available as a potting medium. Potting sticks were often made of wood and blamed for spreading virus between plants. Dave's potting stick is specially fabricated to his specifications, made of fiberglass resin, so it can be sterilized. He packs the bark medium tightly around the plant with the potting stick, so no rhizome clip is required.

Dave's family has been growing orchids since 1925. His family's nursery was concerned about viruses long before it became fashionable, and they were the first in their state to be certified virus free. He has 100 years of orchid growing knowledge in his bloodline, so it is no surprise that he sees things that others might miss. I cannot wait for my next orchid growing lesson!

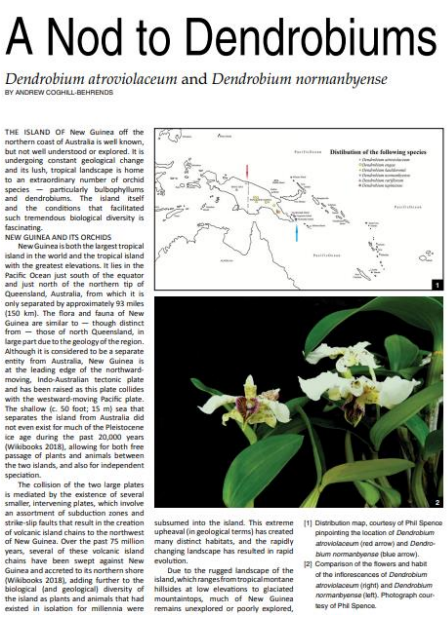
*— Sue Bottom started growing orchids in Houston in the mid–1990s after her husband Terry built her first greenhouse. They settled into St. Augustine, Florida, Sue with her orchids and Terry with his camera and are active in the St. Augustine Orchid Society, maintaining the Society's website and publishing its monthly newsletter. Sue is also a member of the AOS Editorial Board (email: sbottom15@gmail.com).*

[13] Sometimes ORSV causes circular to angular patterns on the leaves with the discoloration ranging from yellowish to reddish purple to brownish in color.

[14] Blossom brown necrotic streak from CymMV (generally thought to be in combination with ORSV) shows up 5–10 days after the flower opens, resulting in unsightly discoloration on the floral segments.

[15] Color break from ORSV is an irregular, nonsymmetrical marking on the flower. You might simply discard the plant with apparent color break, but thrips and chemicals can cause similar blemishes on the flower.

## From AOS Orchids Magazine



# A Nod to Dendrobiums

*Dendrobium atroviolaceum* and *Dendrobium normanbyense*

BY ANDREW COGHILL-BEHRENDS

THE ISLAND OF New Guinea off the northern coast of Australia is well known, but not well understood or explored. It is undergoing constant geological change and its lush, tropical landscape is home to an extraordinary number of orchid species — particularly bulbophyllums and dendrobiums. The island itself and the conditions that facilitated such tremendous biological diversity is fascinating.

NEW GUINEA AND ITS ORCHIDS

New Guinea is both the largest tropical island in the world and the tropical island with the greatest elevations. It lies in the Pacific Ocean just south of the equator and just north of the northern tip of Queensland, Australia, from which it is only separated by approximately 93 miles (150 km). The flora and fauna of New Guinea are similar to — though distinct from — those of north Queensland, in large part due to the geology of the region. Although it is considered to be a separate entity from Australia, New Guinea is at the leading edge of the northward-moving, Indo-Australian tectonic plate and has been raised as this plate collides with the westward-moving Pacific plate. The shallow (c. 50 foot; 15 m) sea that separates the island from Australia did not even exist for much of the Pleistocene ice age during the past 20,000 years (Wikibooks 2018), allowing for both free passage of plants and animals between the two islands, and also for independent speciation.

The collision of the two large plates is mediated by the existence of several smaller, intervening plates, which involve an assortment of subduction zones and strike-slip faults that result in the creation of volcanic island chains to the northwest of New Guinea. Over the past 75 million years, several of these volcanic island chains have been swept against New Guinea and accreted to its northern shore (Wikibooks 2018), adding further to the biological (and geological) diversity of the island as plants and animals that had existed in isolation for millennia were subsumed into the island. This extreme upheaval (in geological terms) has created many distinct habitats, and the rapidly changing landscape has resulted in rapid evolution.

Due to the rugged landscape of the island, which ranges from tropical montane hillsides at low elevations to glaciated mountaintops, much of New Guinea remains unexplored or poorly explored,

[1] Distribution map, courtesy of Phil Spence pinpointing the location of *Dendrobium atroviolaceum* (red arrow) and *Dendrobium normanbyense* (blue arrow).

[2] Comparison of the flowers and habit of the inflorescences of *Dendrobium atroviolaceum* (right) and *Dendrobium normanbyense* (left). Photograph courtesy of Phil Spence.

2021 AOS AWARDS

[1] *Cattleya walkeriana* (Tribba) 'Maui' JC/AOS. Exhibitor: Exotic Orchids of Maui; Photographer: Michael Blietz. Hawaii Judging

[2] *Rhyncholaeliocattleya* Pauwela Charm 'Valley Isle' AM/AOS (Sun Spots x Carl-Ilinor amethystoglossa) 86 pts. Exhibitor: Exotic Orchids of Maui; Photographer: Michael Blietz. Hawaii Judging

[3] *Rodriguezia bracteata* 'Devotion' CCE/AOS 91 pts. Exhibitor: Jan Takamiya; Photographer: Jan Takamiya. Hawaii Judging

[4] *Rhyncattleanthe* Yellow Bouquet 'Lynne' AM/AOS (*Rhyncholaeliocattleya* Hazdyai Delight x *Cattlianthe* Loog Tone) 82 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging

[5] *Rhyncattleanthe* Memoria Luciano Pavarotti 'Bravissimo' AM/AOS (Memoria Mario Lanza x *Rhyncholaeliocattleya* Murray Spencer) 86 pts. Exhibitor: Bryan Lee; Photographer: Roy Andrade. Hawaii Judging

[6] *Dendrobium* Calliope Purple 'Bryce' AM/AOS (Minnie x Black Spider) 85 pts. Exhibitor: Bryan Lee; Photographer: Roy Andrade. Hawaii Judging

[7] *Calanthe masuca* 'Windy Hill' HCC/AOS 78 pts. Exhibitor: Marilyn LeDoux; Photographer: Matthew Nutt. Mid-America Judging

[8] Vanda Rays Jerry Eugene 'Pottsy's Jerry Eugene' AM/AOS (Suksamran Sunlight x Carol Holdran) 82 pts. Exhibitor: Ray and Annette Potts; Photographer: Matthew Nutt. Mid-America Judging

[9] *Rhyncholaeliocattleya* Momilani Beauty 'Lynne' AM/AOS (Taichung Beauty x Sueño de Amor) 82 pts. Exhibitor: Calvin Kumano; Photographer: Roy Andrade. Hawaii Judging

[10] Vanda Yano Blue 'Ploenpit' AM/AOS (Madame Pattana x Wirat) 80 pts. Exhibitor: Jan Takamiya; Photographer: Jan Takamiya. Hawaii Judging

[11] *Rhyncattleanthe* Lovely Fantasy 'Rare Earth Orchids' AM/AOS (Love Sound x Cattleya Fire Fantasy) 81 pts. Exhibitor: Steve Moffitt; Photographer: Julius Klehm. Houston Judging

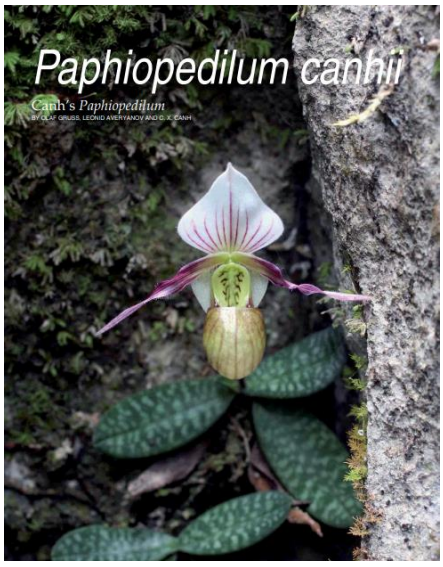
[12] *Paphiopedilum* Wissner Minister 'Windy's Star' HCC/AOS (*Paphiopedilum henryanum* x *Paphiopedilum helenae*) 77 pts. Exhibitor: Kathy Judy; Photographer: Matthew Nutt. Mid-America Judging

[13] Vanda Rays Mark Allen 'Pottsy's Mark Allen' HCC/AOS (Crownfox Golden Spots x *sanderiana*) 78 pts. Exhibitor: Ray and Annette Potts; Photographer: Matthew Nutt. Mid-America Judging

[14] Cattleya Green Grass 'A' AM/AOS (Lulala x *Kerrolion*) 81 pts. Exhibitor: Waldor Orchids, Inc.; Photographer: Bayard Saraduke. Mid-Atlantic Judging

[15] *Rhyncholaeliocattleya* Michael Gaine 'Orchidglade II' HCC/AOS (Fortuna x Melinda Wheeler) 77 pts. Exhibitor: Waldor Orchids, Inc.; Photographer: Bayard Saraduke. Mid-Atlantic Judging

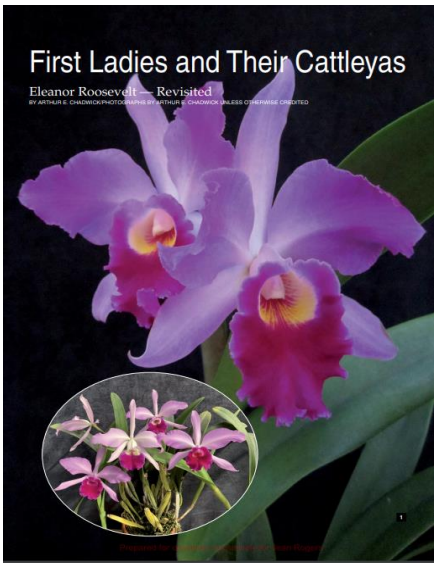
[16] *Rhyncholaeliocattleya* Tarda Eagle Eye 'All Victory' AM/AOS (Meditation x Carl-linor Madeleine Knowlton) 84 pts. Exhibitor: Waldor Orchids, Inc.; Photographer: Bayard Saraduke. Mid-Atlantic Judging



# *Paphiopedilum canhii*

Canh's *Paphiopedilum*

BY LEAF GRUSS, LEONID AVEYANOV AND C. K. CANH



# First Ladies and Their Cattleyas

Eleanor Roosevelt — Revisited

BY ARTHUR E. CHADWICK/PHOTOGRAPHS BY ARTHUR E. CHADWICK UNLESS OTHERWISE CREDITED

# Uncovering Nepal's Medicinal

BY RESHU BASHYAL AND JACOB PHELPS, KUMAR PAUDEL

PHOTOGRAPHS BY KUMAR PAUDEL — GREENHOOD NEPAL — UNLESS OTHERWISE CREDITED

WHEN IT COMES to harvesting orchids from the wild, we likely think of the illegal collection of ornamental plants — charismatic large flowers, newly discovered species or unusual species favored by niche collectors. Few people know that many orchids are also harvested and traded as medicinal plants.

Nepal is a center of the medicinal orchid trade, where plants are harvested for domestic medicinal use in a region where many people have limited access to public healthcare. Plants are also harvested and illegally exported to several other countries for use in the Ayurvedic, Unani, and Chinese traditional medicines. Our team is working to understand the scale and nature of this underrecognized trade.

NEPAL'S ORCHIDS

Nepal hosts more than 500 species of orchids. The country's unusual and dramatic elevational cross-section, from near sea level to over 26,000 feet (8,000 m), creates a wide range of environmental niches. *Dendrobium aphyllum* thrives in the hot, lowland Terai regions, while endangered *Cypripedium himalaicum* lady slippers grow in the cold highlands up to 14,750 feet (4,500 m). Species such as *Eria coronaria* are found across a wide range of elevations and forest types. This diversity is also reflected in the wide range of uses that people have found for orchids across the region.

RESEARCHING MEDICINAL ORCHID TRADE

Our team, including researchers from the Nepali nongovernmental organization Greenhood, Lancaster University and the International Union for Conservation of Nature Species Survival Commission Orchid Specialist Group — Global Trade Programme, has been undertaking the first study on the trade of medicinal orchids in Nepal, one of the first of its kind globally. Although we know orchids are listed in the pharmacopeia of multiple medicinal traditions and have anecdotes about their harvest from the wild, no research has focused on understanding which species are being commonly and commercially harvested to satisfy these trades.

In Nepal, wild orchid harvest and trade were legal until 2017, although official trade records show only a small-scale trade. Since then, the trade has been banned, and the issue of wild orchid harvest is largely considered resolved. Indeed, when we started our project, we were somewhat uncertain if the trade we observed during our scoping research was indeed as large as we suspected.

We began visiting medicinal plant

[1] *Eria coronaria*

[2] *Cypripedium himalaicum*. Photograph courtesy of Nima Gyeltshen.

[3] Drying pseudobulbs of *Pleione praecox* in preparation for the trade.

[4] *Pleione praecox* in flower in-situ in central Nepal.

[5] Remains of *Pin. praecox* after the large pseudobulbs were harvested.

# Community Service

If you have knowledge of an upcoming event, or something you think others might like to know of, please let me know and I can put it 'HERE' in the newsletter – jeanierogerswarren@gmail.com


816-522-9230

Vashti.bird@gmail.com

Birdsbotanicals.com

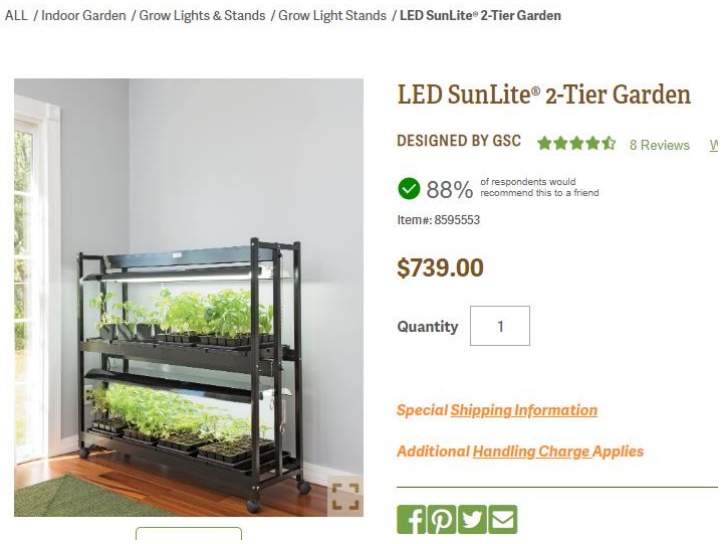
Message us for any specific plant requests!!

Orchid 101 Class was fun & very educational!! We have gone ahead and scheduled another Orchid 101 Class on Thursday, February 9th, 2023 from 6-9pm at 'The Space' by Dolce Bakery. David will be lecturing on 7 different Orchid families, provide you with tips & tricks on re-blooming, conduct a repotting demonstration, and plants/supplies will be available for purchase! The class is $39 and anyone interested in registering can email me directly at vashti.bird@gmail.com

TWO weeks from today, we will be headed to the St.Louis Show & Sale held at the Missouri Botanical Gardens!! This will be the kick-off weekend to the Gardens Orchid Show Display held inside the Conservatory!!
The Sale runs Friday evening 7-9pm (for members of the Garden) and for the public Saturday & Sunday 9-5pm!
Check out our website, I have posted dates/times/locations to the 3 different Orchid Shows that we will be attending.

We are also a part of the Master Gardener Conference that takes place in June 2023.

Our own Becky Mickelberg has contacted me and has hip problems causing her to have mobility issues. She would like to sell the plant stand that she recently purchased. It is quite new and the price was $739.00. She would like to get $200 for it. You can look them up at Gardener's Supply Company.




**In addition to the wonderful features of the light stands. we added grating to the trays that allows for water to be added for humidity, and yet hold the plants above the water. We also added 12 easily adjustable shade tubes, that can be adjusted to provide the right amount of light for the type of orchids on that shelf.**

# Outside OSGKC Resources

We thank the American Orchid Society for allowing us to reprint this article from the website under “All About Orchids”.

American Orchid Society
Education. Conservation. Research.

## Fertilizer Burn

By Susan Jones

The saying "If some is good, more is better" is not necessarily a beneficial approach to fertilizing orchids. Plants will only absorb the amount of mineral nutrients they need, which is determined in part by the amount of light they receive, the temperatures they are grown in and the quantity of water available. Just as with people, too much food can cause serious health problems in orchids — excess mineral salts can build up, which they cannot tolerate. It is a gradual problem, affecting orchids that have been consistently overfertilized or have gone too long without repotting, allowing mineral salts to accumulate and concentrate over time.

### Fertilizing

If you grow a mixed collection, one in which a variety of genera are represented, the fertilizing needs of your plants may vary considerably. The general rule of thumb — applying a balanced fertilizer weekly, weakly — is a good starting point. Too much or too strong fertilizer can burn orchid leaves and roots.

Many growers recommend that plants be watered with plain water, then watered a second time with a fertilizer solution. This ensures that the medium is thoroughly wet before fertilizer is applied. Some mixes, especially those containing pine bark, can be difficult to wet through, and so should be prewatered with plain water and left to sit a few minutes until the medium is completely damp. This helps reduce salt buildup and the possibility of root burn.

Most vandaceous orchids do best with copious amounts of fertilizer, and during growth may benefit from dilute applications of fertilizer as often as twice a week. Pleurothallids, on the other hand, do not require nearly the same quantity of nutrients, and may be better off with a biweekly schedule. In addition, any orchid will require more nutrients during periods of active growth, less during periods of slower grow and possibly none during dormancy.

Fertilizer can be applied weekly to biweekly at half or even a quarter of the strength recommended by its manufacturer. When in doubt, start with a more dilute solution and observe the results on your plants. Should the beginning quantity prove insufficient, the amount of fertilizer may be adjusted upward with fewer repercussions than burning the plant through over-fertilization.

There are many high-quality fertilizers available, but be sure the one you choose for your orchids is labeled specifically for their use, rather than an all-purpose garden or houseplant fertilizer. It should also include a balance of the three main elements: nitrogen (N), phosphorus (P) and potassium (K) (the percentage of each element usually appears on the label in numeric form, such as “7-7-7”; the remaining percentage is composed of inert ingredients), and ideally micronutrients as well.

### Water quality

Water quality is important, and contributes to the overall health of plants. Rainwater, melted snow, deionized water or reverse-osmosis (RO) water with a bit of tap water added are all low in dissolved mineral salts and considered safe for watering orchids. Chlorine damages orchids, but chlorinated tap water may still be used. Fill a container with the water for the plants and allow it to sit open overnight before watering. This allows the chlorine to dissipate. Well water and softened water are more tricky. Well water may have a high mineral content and softened water has sodium added, both of which can damage orchid roots. They may be treated with a reverse-osmosis system to filter out harmful salts.

### Salt buildup

Starting with water of excellent quality is important, but salts from added fertilizers may still accumulate over a period of time. Salt buildup looks like whitish to brownish crusts on the medium and around the pot, or on the surface of the

mounting substrate on mounted orchids, and can be a sign of over-fertilizing. If allowed to remain, those salts will negatively impact the health of your plant. Fertilizer salts burn and kill orchids, especially in more sensitive genera like paphiopedilums, phragmipediums, pleurothallids and bulbophyllums.

## Fertilizer burn symptoms

Lack of root growth may indicate an unhealthy concentration of mineral salts in the medium, on up to full fertilizer burn. If this is suspected, decant the plant and check its roots. Dead root tips, brown roots or salt crust on the potting medium surface are signs of trouble. In later stages, brown leaf tips may appear, indicating burned roots. Leaves, and eventually pseudobulbs on sympodial orchids, can become yellow. If allowed to continue, fertilizer burn will eventually kill the plant.

## Prevention

When beginning a fertilization regime, it is safer to err on the side of a weaker solution for several months until it is determined how much fertilizer the plant needs and can use. Starting out slowly reduces the risk of damaging tender young roots, especially on seedlings or more sensitive plants, with too strong a concentration of fertilizer.

Larger applications of fertilizer can increase plant growth in heavy feeders such as vandas, but when this is done plenty of water should be available to the plant at all times. The concentration of fertilizer salts increases as the amount of water decreases, which can damage the roots if they are allowed to dry too much.

Plants that require a dry winter rest period should not be fertilized for a few weeks before that rest period is initiated. Otherwise, roots may burn when fertilizer salts remaining in the pot and mix concentrate as water is cut back.

Dry or sunburned plants are most susceptible to fertilizer burn. Fertilizer salts are hard on dehydrated plants, as they are not able to absorb fertilizers properly. Use a dilute solution (one quarter of the recommended strength), water well between feedings, and check regularly for salt buildup on your pots and potting medium as your plant recovers.

Flushing media and root zones with plain, fresh water at least once a month will dissolve and remove mineral salts that can otherwise build up in the pot and media and harm plants. Mounted plants need regular leeching as well, and should have their mounts and roots flushed regularly. Some growers incorporate this into their care regime, fertilizing orchids at every other watering so that the media is automatically flushed clean in between.

## Treatment

If the damage is done and an orchid injured through overfertilizing, the road to recovery starts with decanting the orchid, removing all of the old medium and thoroughly flushing the roots with plain water to remove accumulated salts. Next, repot the orchid using fresh clean medium and a new pot. Keep the plant shaded and shield it from temperature extremes as you would any recently repotted plant, watering regularly and reintroducing a dilute fertilizer once the plant begins to establish.
Soft-leaved orchids are especially suceptible to leaf burn.

# References


Dodge, Vivian M. 2001. “**Tips for August.**” Vivi’s Orchid Corner. 5(7).

Fortner, Linda. 2001.“Fertilizing.” Linda’s Orchid Page.

Light, Marilyn H.S. 1999. “**Orchids - Wondering Why #3.**” ICanGarden.com.

Orchid Tips. 2000. “**Orchid Care Made Easy.**” OrchidTips.com

Phil’s Orchid World. 1998. “Fertilisers.”

van Rooyen, Angela. “**Growing Orchids.**” Cape Orchid Society.



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

*We thank Age Old Organics for allowing us to reprint this article.*

# Remember to Flush: Removing Excessive Salt Build-Up

In simple terms, plants need fertilizer. This is especially true for those being grown in containers or hydroponically. With the proper and timely application of the 14 mineral elements deemed essential for plant growth and reproduction (commonly referred to as nutrients), a plant can grow wonderfully and achieve its full potential. However, with every feeding administered, there is the likely possibility that not all of the nutrients will find their way into the plant roots. Inorganic and synthetic fertilizer sources commonly marketed to growers often exist in the form of mineral salt ions. As a result, the nutrients that are not taken into the plant via the roots can remain in the soil in salt form and slowly build up over time.

Excessive application rates, imbalanced nutrient ratios, and rigorous feeding schedules can lead a grower down a potentially dangerous path. As the fertilizer salts build up over time, they can eventually cause unwanted problems such as nutrient lockout or, at its worst, even plant death. Growers may find it beneficial if not imperative to flush or leach the rooting medium to clear out any unwanted fertilizer salt build-up, giving the plants a clean slate to grow.

## The Trouble with Salt

The first thing that comes to most of our minds when we see the word salt is probably sodium chloride or table salt. But fertilizer salts, though similar to table salt, are not the kind added to food to enhance its flavor. Without getting too technical, a salt is simply an inorganic mineral that can be dissolved in water.

When the raw ingredients used to make inorganic and synthetic fertilizers are added to water they become soluble salts often referred to as fertilizer salts. The reason such mineral salts are popular as fertilizer is because elements in this form are the exact type of ions that are easily taken in by plant roots. This is what makes synthetics so fast acting and reliable. Some common inorganic fertilizer salts include ammonium nitrate, potassium sulfate, magnesium sulfate (aka Epson salt), and calcium chloride, just to name a few. These products are the end result of minerals being mined from the earth and manufactured into mineral salts and fertilizers. The mineral salts are then mixed with water and used to feed plants. What is not absorbed by the plant stays in the rooting medium and once the water evaporates the soluble salts will remain intact.

This can be seen by looking under the cap of an often-used synthetic fertilizer bottle. Eventually, the salt will build upon the rim of the bottle and around the cap. This is similar to what can occur in the soil. The more often the plants are fertilized, the more the salt will accumulate, raising the level of dissolved salts (the salinity) within the rooting medium. Soluble salts can also come from tap water if used as a water source and from some types of potting soil or medium. Poor drainage and under watering can also contribute to salt build-up.

## How Plants Use Salt

Plants can readily use mineral nutrients that are in the form of soluble mineral salt ions. The roots of a plant naturally contain different levels of mineral ions called root salts that help create a stable, natural flow of water and nutrients into the plant's vascular system. If the amount of fertilizer salts added to the rooting medium is more than what the plant needs and can use, the plant will be affected. As the salts accumulate, they can start to disrupt the flow of water and elemental nutrients entering into the root, and if salt levels reach the point of excess they can actually begin to draw water out of the plant and back into the soil.

## Signs of High Salt Concentration

Some signs of high salt concentration include a browning of the leaf tips, reduced growth (especially new growth), the aborting of lower leaves, dead root tips, and when at excessive levels, wilting.

Rooting mediums that have high soluble salt content will also have a high pH level. As the pH of a rooting substrate rises the result will be a change in the overall availability of certain nutrients, and sometimes it can even cause an alteration in the ionic form of some nutrients, changing them into unusable forms which may lead to nutrient lockout. In these types of cases, the plant may show visual signs of a mineral deficiency, mainly micro-nutrients, but this can be misleading. Though the apparent deficiency may be real, adding more fertilizer would only exasperate the situation leading to more plant

injury. The best thing to do is to first address any possible fertilizer salt build-up in the rooting zone and eradicate it before applying any more fertilizer.

### How to Solve Excessive Salt Build-Up

The way to deal with any problems associated with excess fertilizer salt build-up is to remove as much of the salts from the rooting medium as physically possible. This is done by using a technique called flushing or leaching. Allowing a relatively large amount of water to flow freely through the container in a small amount of time will once again dissolve the fertilizer salts, pulling or leaching them along as it travels through and out of the medium.

When leaching or flushing the root zone the general guide to follow is to use around two times as much water as the volume of the container. The amount of water needed for a proper flush and how often it should be done depends on a couple factors: the type of growing medium being used and the frequency/amount of fertilization applied. Mediums such as perlite and expanded clay, substrates that do not hold on to water and nutrients well, will require less water to successfully flush out excess salts than a soilless growing medium containing coco coir or a rockwool slab would.

When to flush is a little harder to determine. For plants that are on what I call a heavy feeding schedule (fertilized at least once a week), it may be a good idea to preemptively flush the growing medium maybe once a month or so, before any unwanted damage caused by excess salts remaining in the root zone can occur. The average house plant that is fertilized monthly or bi-monthly could use a good flush every six to eight months.

### Check Your Water

When it does come time to flush or leach the growing medium make sure to use a water source that is free of ions and has a TDS (total dissolved solids) quantity of zero. The average local tap water has a level of around 200-300 ppm (parts per million) of TDS. RO (reversed osmosis) water is free of soluble salt ions, has a TDS of zero and is a good choice to use for flushing. If the medium being flushed has an extremely high concentration of excess salt, there are also products on the market called clearing solutions that can be added to the flushing water to aid in their removal.

Heavily watering (remember 2x the volume of the container) the rooting medium with the flush water or solution and allowing all of it to drain from the holes in the bottom of the container will help remove the fertilizer salts. Do not let the container sit in its tray during this process. It will only end up re-absorbing the salts that were intended for removal. Repeat the process of flushing and leaching as many times as is needed.

### How to Make Sure the Salts Are Removed

Here is a way to check to make sure that salts are being removed. Using an EC (electric conductivity) /ppm meter, check the TDS level of the water before flushing through the rooting medium. When using quality, ion-free RO water the initial reading should show zero TDS present. Flush the container plant with the water/solution and capture the runoff drainage in a bucket. Using the EC/ppm meter, check the drainage solution. It will most likely have risen, sometimes as much as 500-600 ppm of TDS. Be sure to clean off any salt accumulation that remains in the tray and on the sides of the container from evaporation. After flushing, allow as much of the water to drain from the rooting medium that will and return the plant to its tray. After a nutrient flush, a plant can show positive visual signs of improvement within a day or two and the grower will be able to resume a normal fertilization schedule with the next watering.

### Preventing Salt Build-Up

For a grower, however, the main focus in all of this should be less on dealing with salt build-up and more on prevention. Preventing or at least minimizing the amount of excess salt accumulation will help the grower avoid potential problems along the way.

The first aspect to pay close attention to is the feeding or fertilizing schedule and how it will affect the growing plant and rooting zone. Many of the fertilizer products on the market today are so highly-concentrated and often imbalanced with regards to nutrient ratios that it is easy for a grower to unknowingly create excess levels of certain elements within the root zone. Applying too much fertilizer too often will only result in a waste of nutrients, imbalances in the rooting medium caused by the fertilizer salt build-up, and overall lower yields. By carefully researching the particular plant being grown one can more effectively choose or formulate a nutrient solution that will supply the plant with just enough of each specific nutrient needed in order to continue on a normal growth cycle.

A colleague of mine once told me that a grower needs to take care, when planning a fertility program, to ensure sufficiency and not excess. This includes keeping application rates and the frequency of feedings at levels that are more in balance with the nutrient status and needs of the plant at a given time which, in turn, will help limit the amount of remaining mineral salt ions within the medium after an application.

When growing plants in containers, whether it’s flowers or fruits or just foliage, some form of a regular fertilization schedule is a must. While inorganic/synthetic fertilizers can supply plants with a fast-acting, reliable nutrient source, overly or improperly applying them can lead to excess salt build-up and the accompanying problems that it can bring. By incorporating a nutrient flushing or leaching phase into a regular fertility program and by paying careful attention to the amount and frequency of feedings, a grower can maintain a more balanced environment within the root zone and ensure a more healthy and productive plant.

Kristy Charland found this handy hand-out from Roy Tokunaga's lecture at the MAOC 2018 show:

**Flower Boosters** Kansas City 2018

by Roy Tokunaga Email: greenthumb808@aol.com

Definition: Anything that will empower my Orchid to spike more reliably with maximum flowers. It can be cultural adjustments like more light, water quality, and air movement. Also, nutritional like fish emulsion, bone meal, and specialty fertilizers. Most of us would like to spray a magic potion and the Orchid will flower like magic.

For Mid America: The best growers have several things in common.

1. Maximize light for the genera they are growing. "Principles of light by Dr. Erik Runkle, Orchids Magazine, May 2008.
2. Have good air movement. Roots are well aerated.
3. Low salts in the root zone. Flush plants regularly. High total disolved salts (TDS) in water, flush 45 minutes. If TDS low, 10-15 minutes. Weekly. If you grow in the rain, a 1 inch rain fall will do the same. For indoor growing use rain water or reverse osmosis (RO) water.
4. Have fantastic roots. Pest and disease absent.
5. Understands water quality and how it dictates fertilizer choice. Best article. "What's in Your Water?", by Jack and Cari Peters, Orchids Magazine, May 2012. City water can be moderately alkaline. Well water may be very alkaline. Rain and RO water has no alkalinity. What does it mean? Best article is by Dr. Bill Argo, Blackmore Company. Search on line and the SAOS (St. Augustine Orchid Society) has it on their web site. Many thanks to Sue Bottom.

What needs to be done is for one person in your area to do a water test by J. R. Peters and the alkalinity value is the most important. High alkalinity requires the most flushing. Best fertilizer will be 20-20-20 or 18-18-18. You can confirm this with J.R. Peters after doing the water quality test.

Rain water has no Calcium or Magnesium. Michigan State Fertilizer best.

High phosphorus is not necessary for anything. 2-3% of NPK sufficient. Best article is in Orchids Magazine, "Without High Phosphorus by Jan Szyren, June 2003. Recommends less nitrogen on mature plants to increase flowers.

6. Understanding Water Quality. Best explanation is by Dr. Bill Argo. One of the designers of the MSU Michigan State Fertilizer. Best water is rain water or RO water. Must be paired with the MSU RO special fertilizer. Best growers know how to balance their light , temperature, plant type with a small amount of fertilizer. Ask the best growers in your society that matches your growing conditions and do not exceed their fertilizer recommendations.

Roy's secret potion. On mature plants. Just before spikes appear. Apply additional calcium based fertilizer 1/2 teaspoon per gallon with micronutrient package like STEM by Peters or Microplex by Millers Chemical. 1/8 teaspoon per gallon of the micros. Weekly until spikes and flowers appear. Maximum 3 months.

If it does not give you the best flowering, ever. Email Roy, at greenthumb808@aol.com for diagnostic advice. Happy Growing.

**References:**

Sheehan, T. 2008. Physiological Disorder of Orchids. p.4-21. In Orchid Pest and Diseases, J.B. Watson , editor. Booklet by the American Orchid Society.

Runkle, E 2008. Principles of Light. Orchids 77(5):350-353.

Peters, J. and C. Peters. 2012 What's in Your Water? Orchids 81(5): 304-307.

Wang, Y-T. 2005. How Lime and Fertility Affect Hybrid Paphiopedilums. Orchids 74(11)814-817.

Bottom, Sue and Tokunaga, Roy. 2017 Choosing Fertilizer Based on Water Quality. Orchids 86(2)108-116.

Argo, B. pH Management and Plant Nutrition, Parts 1-5. http://www.staugorchidsociety.org/culture-water.htm. First published in the Journal of the International Phalaenopsis Society.

**Text Books:**

Arditti, J. 1992. Fundamentals of Orchid Biology. John Wiley & Sons, Inc. Hoboken, new Jersey.

Marschner, H. 1995. Mineral Nutrition of Higher Plants, 2nd ed Academic Press, Orlando, Florida.

Nelson, P. V. 2011. Greenhouse Operation and Management, 7th ed. Prentice-Hall, Inc. Englewood Cliffs, new Jersey.

Taiz, L. and E. Zeiger. 2015. Plant Physiology, 6th ed. Sinauer Associates, Sunderland, Massachusetts.

# Let's Get to Know Each Other

## OSGKC Members!

FEBRUARY

## Susie Hanna

Birthday February 13th

Here's me:

I joined 17 years ago, in 2004.

I've been growing orchids since 1996 or 25 years.

Hooked after Phalaenopsis re-bloomed for me.

Phalaenopsis remains my favorite, although I have many other genera in my collection.

We have a four-season's plant room attached to the north side of our house. We supplement with a variety of lights.

I have a journalism degree from KU, and worked at a number of companies doing market research. I'm now semi-retired, managing rental properties.

I like a good challenge and enjoy learning completely new things.

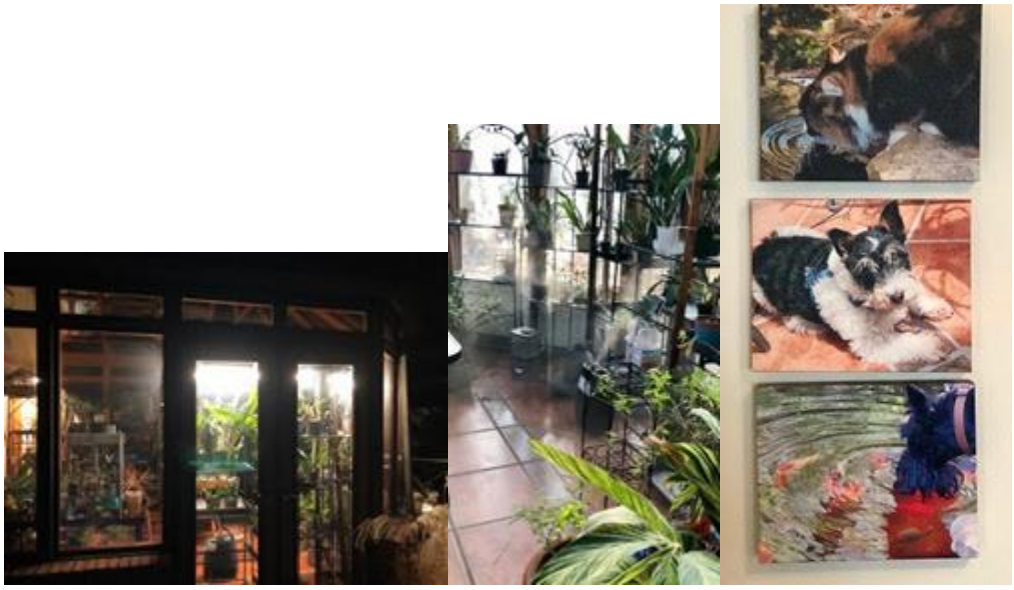
A black cat named Munchkin

My name is ***Joyce Moulis.***

Birthday February 18th

My late husband, Tom, and I joined OSGKC in 1973 shortly after we started growing orchids in 1972. Our interest in orchids was an extension of our love for tropical house plants. Our first plants came from a friend who had visited Hauserman's in Chicago and brought back two Phalaenopsis for us. We attended an OSGKC meeting to learn more about orchid growing and got hooked by the enthusiasm and generosity of OSGKC members sharing plants and knowledge with us. We started growing orchids in the windows. When the collection outgrew the windows, we moved to an underlights set up in a 12' x 12' basement room. In the early 1990s we built a 9' x 18' attached greenhouse. We held various offices and wrote the history for OSGKC's 50th anniversary. Tom and I retired in 2011 and 2012: he was an electrical designer and I was an executive assistant at a university. Cats have always been part of our family. In July, Shadow, a retired mama cat from the GPSPCA came to live with us. One of my more unusual interests is southwest archaeology and rock art.

## *Karen Schorno*



Birthday February 26th

I am a newbie and an avid auction bidder to OSGKC. I first became interested in actually growing orchids and not just admiring them about 20 years ago. I worked in Microbiology at Lawrence Memorial Hospital with a fellow Medical Technologist and orchid grower.
He taught me some helpful tips and some Latin names.

We enjoy the conservatory we added to our home. It is a joy to be able to share the space with our plants especially during the winter. We keep learning and adding humidifiers and lights as our variety of orchids increase.

We share our home with three senior rescue pets, Regis, Phoebe and Ms Kitty. They have been great company during our time unable to travel and take photographs which we both love doing.

Next month on Feb. 26 I will celebrate another trip around the sun and wish for a much better year for all of us.

# *News from the AOS*

We thank the American Orchid Society for allowing us to use these AOS Corner items in our newsletter! Even if you're not an AOS member, there are lots of free resources available to everyone…and of course we encourage you to join. AOS membership includes digital access to ORCHIDS magazine, including digital archives of more than 350 issues dating back to 1932!


## Got Orchids?

***The American Orchid Society website is your portal to knowledge for all things orchid. The AOS website, along with ongoing Webinars and OrchidPro, offers a plethora of information to help you grow and show your orchids to peak performance. We encourage use of the AOS website by ALL orchid growers.*** The next best place to learn about the orchids that will thrive in your area, is to attend and become involved in your local Affiliated Society meetings.

# Welcome to 2023 the Year of the Orchid

Next On behalf of the American Orchid Society, we wish you our Alliliates a Happy and Prosperous New Year.

## Our Next Orchid Culture Speaker Day!

Save the Date - **Sunday, February 12, starting at 11:00 AM EST**

**You must register, member or not. If you cannot watch 'in-person', you will be able to watch it later as a webinar. You will be sent the link the following day.**

Do you get the Winter Blues? Would you like to do something to take your mind off Winter but maybe not the Blues? Well, the AOS will be Celebrating the Orchid Blues in February! Our next Culture Day will be packed with an informative series of speakers talking about Blue Breeding of Orchids.

**Winter Blues! Join Us for the Next Orchid Culture Day**

***A Virtual Event***

***If you have already registered, Thank You!***

**Sunday, February 12th starting at 10:00 AM CST/11:00 AM Eastern**

We all get the blues in winter, but these kind of blues we like!

**We are thrilled to welcome this fantastic speaker lineup and present their topics**

**Fred Clarke – Sunset Valley Orchids.** AOS Accredited judge, professional grower and hybridizer. His topic for this day:. ***"Modern Blue Cattleyas"***

**Carson Whitlow,** is best known for his work in hybridizing blue cattleyas in the 60's and his groundbreaking hybridizing of Cypripediums in the late 80's, early 90's. His topic for this day: ***"From the Beginning, Blue Cattleyas"***

**Dr. Leslie Ee,** AOS Accredited Judge and President of the Canadian Orchid Congres, world traveller and conservationist will speak about ***blue Phalaenopsis and how Indigos can help in their hybridizing.***

**Dr. Rob Griesbach,** *Active member of the* American Orchid Society for over 40 years, serving as an Accredited Judge, member and chair of Research Committee, past-Trustee and past-President. His presentation will focus on ***the culture & hybridizing of blue flowers.***

You do not want to miss this most interesting and informative webinar! Spend the day with these great speakers and learn about all things BLUE – history, hybridizing and of course, CULTURE!

**This virtual event is open to all – Cost is $30**
There are always a few surprises. Tell your Orchid friends!

**Schedule (All times are Central Standard Time)**

**10:00 – 10:45 am Fred Clarke** 10:45 – 11:00 am Q & A
11:00 –11:15 am **(Break)**

**11:15 – 12:00 Noon Carson Whitlow** 12:00 Noon –12:15 pm Q & A
12:15 – 12:30 pm **(Break)**

**12:30 – 1:15 pm Leslie Ee** 1:15 –1:30 pm Q & A
1:30 –1:45 pm **(Break)**

**1:45 – 2:30 pm Rob Griesbach** 2:30 – 2:45 pm Q & A
2:45 – 3:00 pm **Wrap up**

Join us Sunday, February 12th starting @ **10:00 AM Central (11:00 AM Eastern)**

**This event will be held virtually using our GotoWebinar platform**

**Unable to Join the Live Stream? No problem! We will provide registrants a link to view the recording at your convenience.**

**Cost: $30 Open to All - Tell your orchid friends!**

**Click Here to Register**

***See you then!***

## ***WHAT ARE WEBINARS?***

**Webinars** are online video presentations. You can register for an upcoming **webinar** or watch the recorded **webinars** any time at your convenience.

It's easy to find the **scheduled webinars** and to register on the AOS website.

**Webinars** offer new material each month and recorded sessions allow you to search a multitude of topics to view on your personal schedule.

The popular monthly **Greenhouse Chats** are open to everyone. AOS membership is not required. However, if you are an AOS member there are so many more webinars available to view.

**REGISTRATION REQUIRED**

Cannot make it on the scheduled date or time? No need to worry. Register anyhow! ALL webinars are recorded and available to view at your leisure.

# Orchid Society of Greater Kansas City

OSGKC.ORG

**A non-profit, educational organization stimulating interest in orchids and their culture**

**ORCHID SOCIETY OF GREATER KANSAS CITY**

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Orchid Growers of OSGKC -
https://www.facebook.com/groups/909878999427064/

**Like us, post your pictures or comments, join the community!!**

# What's Ahead …

Please check www.osgkc.org for updates and changes to our program schedule.

**Saturday January 28-February 26, 2023**
Missouri Botanical Garden Orchid Show, 4344 Shaw Blvd., St. Louis, MO

**Saturday & Sunday, January 28 & 29, 2023**
St. Louis Orchid Show and Sale, Missouri Botanical Garden

**Sunday, February 12, 2023**
Merriam Community Center, 6040 Slater Street, Merriam, KS
*Speaker: Fred Clarke, Sunset Valley Orchids: "Aussie Dendrobiums"*

**Saturday and Sunday, March 3-5, 2023**
OSO's (Arkansas) 12th Annual "Orchids in the Garden"- Orchid Show & Sale, Botanical Garden of the Ozarks, 4703 N. Crossover Rd, Fayetteville, AR

**Sunday, March 12, 2023**
Merriam Community Center, 6040 Slater Street, Merriam, KS
*Speaker:Peter T. Lin, Diamond Orchids: "The 3 A's of the Orchid World: Angraecum, Aerangis and Aeranthes"*

**Saturday and Sunday, March 18-19, 2023**
Springfield Orchid Show and Sale, Greene Botanical Center, Springfield, MO

**Saturday and Sunday, March 25-26, 2023**
Omaha Orchid Show and Sale, Lauritzen Botanical Garden, Omaha, NE

**Sunday, April 30, 2023**
Merriam Community Center, 6040 Slater Street, Merriam, KS
*Annual Orchid Auction*

**Sunday, May 21, 2023**
Merriam Community Center, 6040 Slater Street, Merriam, KS
*Speaker: Brandon Tam, "Orchids at the Huntington Collection"*

**Sunday, June 11, 2023**
Merriam Community Center, 6040 Slater Street, Merriam, KS
*Speaker: Dave Sorokowsky, Paph Paradise:"Growing Paphiopedilums"*

**Sunday, July 9, 2023**
*Annual Orchid Growers' Tour, Destinations to be announced*

**Sunday, August 20, 2023**
*Annual Members' Picnic*

**Sunday, September 10, 2023**
*TBA*

**Sunday, October 8, 2023**
*TBA*

**Thursday-Saturday, October 26-28, 2023**
*Annual OSGKC Show*