Central Jersey Orchid Society Newsletter

January 2022 Issue

January 2022 President's Message

February is always one of my favorite orchid months. Paphiopedilums are in full bloom in my grow space; some Cattleyas are winding down, while others are putting out inflorescences; Cymbidiums are all in various stages of early blooming; and soon, all my winter resting Dendrobiums will be waking up with beautiful blooms. It's a great time of year!

Last month, we spoke about hosting an in-house auction in the late-Spring. As a quick reminder, we rely on our members (that's you) to supply the auction plants. And, just as importantly, to spread the word about the auction; attend; and, should a plant tickle your fancy, support the sale of our plants. However, before I get ahead of myself, first things first, please start perusing your collections for orchids you would like to donate and, or, make divisions, so that they are well established, come the auction.

A great BIG thank you to **Christopher Bevins**! When I fell ill last month, he quickly stepped in to make sure we can shift virtually with our speakers. We had a great talk with our speaker William Stender. Again, if you want to hear more about anything he had to share, you can contact Bill via email and possibly even schedule a visit to his greenhouse.

For our February meeting, Kristen Uthus, of New World Orchids, will be joining us and speaking on Australian Dendrobiums. This was a *hot topic* during our member Q&A session, but admittingly still remains a relatively new genre for many of us orchid growers. Should be a great and informative presentation.

Our next meeting will be **virtual-only**, on Zoom, and is scheduled for Wednesday, February 2, 2022, at 6:30pm. The virtual meeting room will be open at 6:15pm, for those that want to log onto ZOOM early to connect with one another and share your latest orchid blooms.

As always, I look forward to seeing you.

Be Well,
Jaymie Santiago

Newsletter Contents

Meetings and Events 2021

Meetings, 6:30 PM (open virtual meeting room at 6:15), Meetings are held the first Wednesday of the month.

Virtual until further notice: Johnson Education Center,
1 Preservation Pl, Princeton, NJ 08540, USA

Topic: CJOS Monthly Meeting / Topic: Aussie Dens (Kristen Uthus)
Time: Feb 2, 2022 06:30 PM

Join Zoom Meeting
https://us02web.zoom.us/j/82134602966?pwd=NDV3VXJMbHRTcVFRYkVTT1QvTjNhQT09

Meeting ID: 821 3460 2966
Passcode: 735232

Nov: "Q&A: Panel of Experts"

Dec: Plant Swap

Jan: William Stender - Prepping orchids for Summer Outdoors

Feb: Kristen Uthus – Australian Dendrobiums

March: TBA

April: TBA

May: TBA

June: TBA

Officers and Committees:

President - Jaymie Santiago
jaymie.santiago@ymail.com

Vice President – Chris Bevins
cmb00621@gmail.com

Treasurer - Rachel Lemcke:
rachel.lemcke@gmail.com

Membership Secretary -
Luanne Arico
larico@comcast.net

Corresponding/Recording Secretary -
Tobie Parnett
tparnett@gmail.com

Editor Newsletter - Ed Frankel
Edsharkf@yahoo.com

Members Virtual Show Table

Jim Murtha

Blc. Pink Empress "Ju-Sen"

c. Bouton D C R "nn"

Blc.Joan Yuklnura

Blc Cherr Suisse

Jim Murtha (continued)

C. Loddigesii

Percivaliana "Florabunda"

C. Walkerana "Pendentive"

Jim Murtha (continued)

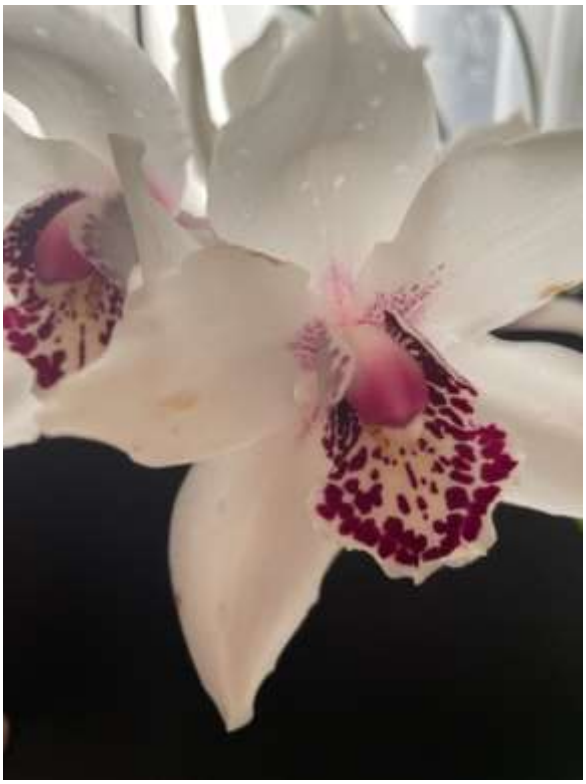
Rcl Lawless Romeo “Delight”

Slc. Circle of Life x Pot. Loud Nine

Robert Rosenbaum

C. percivaliana 'Summit' FCC AOS

Karen Kennedy



CYM Vanna White mana

Den Rutherford blushing bride

Ludisia Discolor dawsoniani

Ed and Pam Frankel

Lc Tropical Trick - LC Tropical Sunset 'Oceans Heaven' x LC Trick or Treat 'orange magic' AM/AOS

George King 'Serendipity

Lc Golden Sparkle 'Pokai'

Den. Tetragonum 'hot lips' x Den. Tetragonum 'dark form'

Rachael Lemcke

Clowesia Rebecca Northen 'Grapefruit Pink' (18 spikes, potted in PET method)

Tobie Parnett

B. Noosa x Ric.Taeko Tamaki

Upcoming Webinars

Greenhouse Chat January 2022

Ron McHatton

Tuesday, January 18th, 2022
8:30 pm EST

Orchid Q&A

Judges' Forum

Jean Allen-Ikeson

Tuesday, January 25th, 2022
8:30 pm EST

Nomenclature and how it affects judging

Evolution of LED Lighting

Kelly McCracken

Tuesday, February 15th, 2022
8:30 pm EST

LED lighting choices

Greenhouse Chat February 2022

Ron McHatton

Wednesday, February 23rd, 2022
8:30 pm EST

Orchid Q&A

Please support the AOS and join. AOS.org

American Orchid Society
Education. Conservation. Research.

Dear Orchid Enthusiast,

Come **Join us for our Second Orchid Culture Day**. You can hear great speakers and learn about the Aeridinae and Angraecinae (commonly referred to as the Vanda and Angraecum Alliance) culture. From home growing to greenhouse.

Our four distinguished speakers
Kim Fedderson of Fair Orchids. "Yes, You Can Grow Vandaceous Orchids at Home."
Jason Fischer of Orchids Ltd. "Culture and History of Neofinitia falcata (now V. falcata)"
Bob Fuchs, Pres. of RF Orchids. "Latest Trends in Vanda Hybridizing."
Brenda Oviatt of Botanica Ltd. "Angraecoids: Conservation and Culture."

When? Saturday, January 29th @ 10:00 AM - 4:00 PM EST
This event will be held virtually using our GotoWebinar platform.
Cost: $30
Register here: https://register.gotowebinar.com/register/4834617917122351119

See you there!

The following is reprinted with permission from the St Augustine Orchid Society

CULTIVATION

Nitrogen in Fertilizer

by Dr. Courtney Hackney

With winter beginning the 21st of this month, it might seem strange to be discussing fertilizer. Nevertheless, the growth and flowers you see this year are due, at least in part, to the ability of your orchids to obtain nutrients. The rise of the orchid pot-plant market has sparked a level of research into orchid culture not seen since the cut flower days more than 50 years ago. A recent article by Dr. Yin Tung Wang at Texas A&M published in Phalaenopsis (Journal of the International Phalaenopsis Alliance) documents how fertilizers affect the growth of orchids.

In case some readers are new to the language of fertilizer, a few basics are in order. Fertilizers are nutrients and fall into two groups, macro- and micronutrients. Nutrients required in large quantities such as nitrogen, phosphorus, and potassium belongs in the first group, while 30 or so additional nutrients are required in very tiny quantities. Most micronutrients occur in sufficient quantities in surface or ground water and only need to be added if rainwater or Reverse Osmosis (RO) water is used. Calcium and magnesium, however, are two micronutrients that are usually added by the grower because they do not occur in sufficient quantities in water.

There remain many scientific questions regarding the best form of fertilizer for orchids, even though these questions are answered in most orchid books. Most of the information in books is anecdotal or based on small samples. Wang's article tests many of the assumptions about fertilizers and provides enough information to allow both the commercial grower and hobbyist to use its findings.

His first study compared urea, nitrate, and ammonium, the three different forms of nitrogen found in fertilizers. The question has been whether orchids could use all three forms equally well and what dose grew orchids faster. Most fertilizers specify a rate of application that provides 200 ppm (parts per million) of nitrogen regardless of form. Wang is able to grow Phalaenopsis from seed to 29-inch leaf span in 25 months with this rate of application.

Some authorities contend that urea, an inexpensive form of nitrogen, is unavailable to orchids and is thus wasted as a fertilizer for orchids. Urea is also reputed to accelerate the degradation of media forcing more frequent repotting. On the other hand more expensive forms of nitrogen, nitrate (NO3) and ammonium (NH4), can be absorbed directly through the roots of orchids and quickly used for growth.

How do orchids obtain this fertilizer? Wang found that Phalaenopsis were not able to obtain significant levels of fertilizer through leaves, a process practiced by some growers called foliar feeding. In fact, water passing over leaves or through media provides little time for absorption by the plant. It is only when roots come into contact with water containing fertilizer absorbed onto particles in the media that fertilizer and water are absorbed. Water is held on particles by surface tension and pulled into the plant from the particle surface. Thus, the medium is as important as the fertilizer in orchid culture.

Bacteria found on the surface of the medium can compete with plants for nitrogen. They use nitrogen and in the process degrade organic media such as fir bark. When urea is used in fertilizer some bacteria use this form and convert it into nitrate, which can then be used by the orchid plant. Thus, a medium that promotes bacteria growth can make nitrogen available from urea, while other media may not.

The Texas A&M experiment used a medium that was 70% fir bark and 30% peat. Peat provides a large, surface area for bacteria to convert urea to nitrate. Wang found no difference in growth using different types of fertilizer, even when the proportion of nitrogen from urea was over 50%. Rates of nitrogen application of 200 ppm (full strength) resulted in larger plants with more flowers and better roots compared to both higher (400 ppm) and lower rates (50 ppm and 100 ppm) of application.

This is an excellent study, but those not familiar with all aspects of plant nutrition might misinterpret or misuse the results. High fertilizer levels grow orchids more quickly, but pots will require excellent flushing to remove fertilizer salts that accumulate in the medium. These plants also require frequent repotting or there is risk of the bacteria in the medium degrading the medium to the point that it becomes mushy, a condition that can destroy orchid roots.

Wang's study used Phalaenopsis grown under ideal light conditions and likely treated with fungicides and bactericides at the slightest sign of a problem. The overapplication of nitrogen can lead to increased risk of rots, but the under-application of nitrogen can also cause problems. An orchid not receiving an adequate supply of nitrogen discards its old leaves as it recycles nitrogen into new leaves. My experience is that rates of nitrogen application of 100 ppm provide good growth for a hobbyist without producing the soft leaves that can result from over application of nitrogen. Whether leaves become soft or stay hard under high nitrogen fertilizer levels depends on other factors as well, especially the ratio of other nutrients in a fertilizer; the subject of next month's column.

Note: Dr. Courtney Hackney wrote a monthly column of his orchid growing tips for about 20 years; we are reprinting some you might have missed, this one from December 2002.

12 Incredible Orchid Facts That No One Ever Told You Before

By Plainview Pure

1. **Orchids are the largest family of flowering plants**
   The have been around the longest as they are one of the oldest flowers in existence. Since varieties of orchids are found all over the world. It's accepted that orchids were in existence prior to the separation of the continents.
2. **There are more than 25,000 documented orchid species throughout the world** (note this number maybe slightly high as experts disagree on some species.)
   This means the number of orchids on the planet is four times the number of birds and four time the number of mammal species.
3. **Although generally thought of as a tropical plant, orchids grow on every continent.**
   From the arctic circle to the southernmost jungle (except Antarctica). They're valued and thought as beautiful across continents and cultures with varying meanings and customs surrounding their existence.
4. **The smallest orchid is the size of a dime.**
   This amazing orchid is small enough to fit in a doll house.
5. **The vanilla orchid (and its vanilla bean is the only commercially grown orchid crop.** (that probably should be food crop)
   Orchid yummy enough to eat and cook with!
6. **Orchids have the tiniest seeds in the world**
   This makes them a challenge to grow and cultivate. They take forever to sprout and actually turn into a plant! Growing orchids from seed is only for the patient and very green-thumbed.
7. **There can be up to 3 million seeds in a single orchid seedpod.**
   You'll never see them though. They are the size of a speck of dust and are only visible under a microscope. Part of the reason for their small size is that the lack an endosperm and have no nutrients within. They require contact with a particular fungus to germinate and grow. We find this particularly interesting.
8. **It takes patience to grow an orchid.**
   The plants first flowers won't appear until at least 5 to 7 years after germination. The house plants you find in stores are often a decade old. From duck to swan.
9. **Some orchid flowers bloom for mere hours, while others last up to half a year.**
   Phalaenopsis orchids are versatile enough to last in a cut flower arrangement longer than most. That's why we like Phalaenopsis orchids the best!
10. **Orchid flowers always grow upside down when mature.**
    The orchid can have enough blooms to be heavy enough for the orchid to hang down. Gravity always wins!
11. **Orchid plants can live to be up to 100 years old.**
    Who said orchids are hard to grow??
12. **Orchids have become one of the most popular houseplants of all time.**

Adapted from Fairchild Tropical Botanical Gardens. and https://mamiverse.com/orchids-facts-59621/

How Do You Grow?

Each month, I would like to show a members growing methods/conditions. We started with ours. Please send me pictures of your growing conditions (summer/winter) **edsharkf@yahoo.com** No submission this month. Let's get some pictures of your growing space.