

JULY
2020

The Orchid Grower

Orchid Growers' Guild of Madison

www.Orchidgrowersguild.org



**Orchid
Growers'
Guild**

MESSAGE FROM THE PRESIDENT

Hello OGG members,

I hope that you are well and are enjoying your orchids and the nice weather with a chance to get outside!

The board has had virtual meetings utilizing the Webex free app. We also use this free app for the monthly orchid judging/discussion sessions. At these orchid judging/discussion sessions we talk about how these plants are grown, so it is helpful if the people who submit their orchids join in the discussion. This is a learning session for everyone and we hope that more members will attend in the future.

Due to the spike in COVID 19 cases in Dane County as well as in the State of Wisconsin, it looks like we will need to go to virtual meetings, at least until next year. Cynthia has a paid subscription to ZOOM and has offered to let the Guild use this for the general meetings. This is free for everyone to download for use on any internet device, computer, iPad, any smart phone and for audio only for any phone including land lines.

MidAmerica Orchid Congress has been having virtual meetings. A number of other orchid societies have had very good luck with their virtual meetings, virtual orchid judging, as well as virtual orchid auctions. So it is time for us to get with the current situation, and if we want to meet, to accept virtual meetings.



Dave Watson's *Miltoniopsis* Maui Fusion 'Pink Spider' x Mps Harold Ripley 'Hansen'

Meeting Dates

- September 20
- October 18
- November 15
- December 20

Meetings start at 1:30 pm at Olbrich Gardens unless otherwise noted

Up-Coming Events

TBA

Officers and Committees

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Liaisons:
AOS: Nancy Thomas
MAOC: Keith Nelson

The other societies have found that the AOS recorded webinars are not that interesting for members since these webinars are not interactive. Several societies have had experts from across the country speak to them. The speakers prepare a slide presentation or may do a live virtual tour of their growing greenhouses. Growers that speak will also sell plants.

The speakers charge about \$200 upward but it is an opportunity to hear speakers from a distance as well as close by. We would have the meetings at the same time and date as our scheduled meetings unless we get a large consensus to change.

The MAOC has an excellent listing of speakers that will do virtual lectures, so there should be a good variety in the possible programs. The board will research these speakers so members can give input on what they would like to hear.

Another virtual meeting that has been popular with other MAOC societies is members giving a virtual tour of their growing facilities, from windowsill up to greenhouse. We would like to schedule some of these and we would like to know who would be willing to participate in these home tours! We had done home tours a number of years ago with physical travel but now we can more easily do this virtually! The tour can be very short or a whole meeting length.

We are planning a virtual orchid auction in September, so stay tuned and please check out which of your orchids you would like to auction off, as well as other orchid related materials. The details will need to be worked out and the money will go to the Guild. The Guild has regular expenses such as insurance, storage locker, website, etc and now speakers' fees that will be higher than what we had been paying. We have money in the bank, but we need to still work to bring in revenue and the auction is presently our only option other than membership dues!

Be careful, and please stay well!

Sue Reed



Sandy Delamater's *Pleurothallis mammiliata* and her unknown hybrid *Phragmipedium*



June Virtual Ribbon Judging

First Place

Keith Nelson	<i>Angraecum florulentum</i>
Nancy Thomas	<i>Bulbophyllum bicolor</i>
Jeff Baylis	<i>Cattleya maxima</i>
Scott Weber	<i>Cypripedium parviflorum</i>
Scott Weber	<i>Cypripedium reginae</i>
Sandy Delamater	<i>Dendrobium hellwigianum</i>
Scott Weber	<i>Liparis loeselii</i>
Dave Watson	<i>Miltoniopsis</i> Maui Fusion 'Pink Spider' x Mps Harold Ripley 'Hansen'
Dave Watson	<i>Miltoniopsis</i> Rene Komoda (Mps. Edwige Sabourim 'Bridal Veil' AM/AOS x Mps santanaei 'Snowflake' AM/AOS) #1
Gary Lensmeyer	<i>Miltoniopsis</i> Rene Komodo (Mps. Edwige Sabourin x Mps. santanaei) #2
Keith Nelson	<i>Nageliella purpurea</i>
Dave Watson	<i>Oncidium naevium</i> (now <i>Odontoglossum naevium</i>)
Nancy Thomas	<i>Paphiopedilum dianthum</i>
Sue Reed	<i>Paphiopedilum</i> Kolosand (<i>kolopakingii</i> x <i>sanderianum</i>)
Sandy Delamater	<i>Paphiopedilum lowii</i>
Nancy Thomas	<i>Phalaenopsis cornu-cerci</i>
Jeff Baylis	<i>Phalaenopsis</i> Liu's Cute Angel (Jiaho Cherry x <i>lobbii</i>)
Lorraine Snyder	<i>Phalaenopsis</i> Mini Unnamed hybrid
Judy Stevenson	<i>Phragmipedium</i> Scorc'er's Apprentice (<i>longifolium</i> x <i>sargentianum</i>)
Sue Reed	<i>Phragmipedium</i> Sunpop (Sunspot x Hanne Popow)
Sandy Delamater	<i>Pleurothallis mammiliata</i>
Keith Nelson	<i>Ponerorchis graminifolia</i>
Bruce Luebke	<i>Prosthechea cochleata</i>
Bruce Luebke	<i>Vanda</i> Chulee Delight

Second Place

Keith Nelson	<i>Angraecum distichum</i>
Sue Reed	<i>Galeottia grandiflora</i>
Lynn West	<i>Phalaenopsis</i> unknown hybrid #2
Sandy Delamater	<i>Phragmipedium</i> unknown hybrid

Third Place

Keith Nelson	<i>Phalaenopsis</i> Unknown hybrid #1
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Nancy Thomas' *Phalaenopsis cornu-cerci*



Paphiopedilum lowii grown by Sandy Delamater

Members' Orchid Photos



Miltoniopsis Rene Komodo (Mps. Edwidge Sabourin x Mps. santanaei) #2 from Gary Lensmeyer

Phragmepedium Scorcer's Apprentice (*longifolium* x *sargentianum*). I have had this plant for at least 10 years. It blooms about every third year. It sits under T5 lighting for about 12 hours daily. It is growing in New Zealand fern bark. I use Michigan State Fertilizer starting in August through December, switching to rain water starting in January. I water just once a week and the orchid sits in water continually. This year I took my orchids to Arizona and noticed they prefer more humidity. This year the flower stem is much taller than in previous years, at stem is 32" tall. Thus far two blossoms have opened up. The first blossom dropped off and a third flower is still yet to open.

Judy Stevenson



Galeottia grandiflora from Sue Reed



Nancy Thomas' *Bulbophyllum bicolor*



Bruce Luebke's *Vanda Chulee Delight*

Native Orchids under Cultivation

By Scott Weber



Photographs by Scott Weber

Cypripedium reginae

Showy lady slipper in my orchid seed nursery, probably a seedling from a 1992 seed pod collected and grown for the Nature Conservancy. Its siblings were planted out at Summerton Bog, Marquette Co., as part of a study on the survival rate of lab propagated orchids. The soil was improved with wood chips, leaves, and a bit of lime. It will grow in part shade to full sun but roots should not be allowed to dry out, especially going into winter.

This was a good year for *Cypripedium parviflorum*. These are photos of two plants, siblings from same parent, about fifteen years old, lab propagated and cultivated in my orchid nursery. Originally grown under shade cloth, which was destroyed by an early snow storm, they now grow under paper birches. With the yellow lady slipper, I intentionally crossed two parents with the dark sepal/petal color and large flower size, so they are not much different than most orchids that are judged: a product of selected breeding and seed propagation. If one specializes in hardy orchids, getting any to winter shows is pretty difficult, so this virtual judging is the one way I can show off my specialty.

Liparis loeselii or Loesel's twayblade. This native orchid grows wild on our farm but is easily grown in a pot; this twayblade is sharing the pot with a purple meadow rue, *Thalictrum dasycarpum* and moss. The orchid stays outside all year with no protection other than a shade cloth during the summer. It is full bloom today. It will readily self sow into the pots of other perennials.



Adventures With Virus Testing

By Keith Nelson

Test Kit: CymMV & ORSV ImmunoStrip by Agdia, Inc., Elkhart, IN

This test kit is a rapid screening method for all strains of Cymbidium mosaic virus and Odontoglossum ringspot virus.

I have a few Phalaenopsis orchids with leaves that look just terrible. I think it is a bacteria and fungus problem but was also suspicious it could be a virus. Listening to the AOS Webinars, Ron McHatton indicated one cannot determine if a plant is infected with a virus without testing. As I am always looking for something interesting to do, I decided to get a testing kit and do it myself.



Fig. 1

The kit I obtained was from Agdia, Inc. Fig. 1. It comes in packs of five. I used two the day I received it. The testing indicated I needed a leaf sample that weighed 0.15g, about the size of a quarter. As I don't have anything in the home that could weigh 0.15g, I doubt many hobbyists do, I decided in the quarter method, Fig. 2. The leaf piece is put into the provided sample extract pouch, Fig. 3. The sample in the pouch is then thoroughly mashed until it turns



Fig. 2

into a homogenous green solution. The ImmunoStrip is then inserted into the buffer filled bag, Fig. 4



Fig. 3

and allowed to sit in the sample extract for 30 minutes. After 30 minutes red stripes on the ImmunoStrip indicated the results. In this case a single red



Fig. 4

stripe in this position indicated a negative result, Fig. 5. Both orchids I tested were negative so I had to admit, the poor quality of the orchids is my fault, not a virus. Virus testing was easier than I anti-



Fig. 5

pated and adds an interesting dimension to the hobby of growing orchids.

Catasetum Project July 2020

During the next two months, you will be seeing rapid growth of your catasetums. They love to be watered and fertilized. The diameter of the new spindly shoot can expand to a robust growth which, in some cases, can reach a diameter up to 1 1/2 inches or more. You can review past articles for specifics on taking care of your plant during this time of the year.

Several participants responded to my request, published in June newsletter, for photos of their respective project plant. The following pictures are from these folks. Again, the cross is Ctsm. NEW HYBRID ([Ctsm. fimbriatum 'Golden Horizon'](#) x [Ctsm. osculatum 'SVO'](#)).



Pic 1. This plant was grown under full-spectrum LED lights. Three growths. WOW!



Pic 2. Plant was grown under T5 lights (Blue and Red) located near a large window with a highly-shaded southern exposure.



Pic 3. Notice the large ovoid-shaped mother pseudobulb for this plant of the cross.



Pic 4. This grower purchased two additional plants of the cross to observe the differences that can occur within a single cross.



Pic 5. Notice the thick substance of leaves and the proliferation of very healthy roots.



Pic 6. This plant was repotted recently.

I wish to thank all of you who submitted photos of your catasetum. Your photos are evidence that you are doing a great job at growing your plant. We look forward to seeing the blooms!

Questions are always appreciated. glmsnwi@gmail.com
Until next month, Happy growing!
Gary Lensmeyer

A Pictorial of revitalizing a greenhouse [every cloud has a silver lining?]

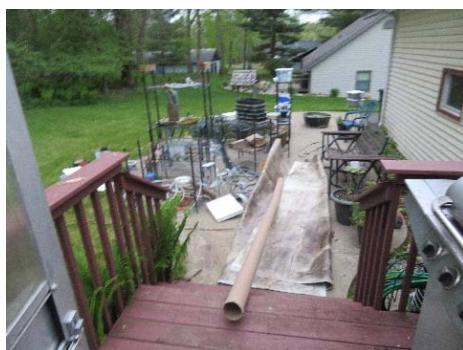
By Terri Jozwiak

My greenhouse is right outside my sliding glass door of the back of the house. It is situated on the old back deck so it is level with the house but above the ground by about 18 inches. It is 12 x 10 ft in size, small enough to be not too big but big enough to house all my orchids along with a few other personal favorites.

While cleaning my greenhouse I noticed a huge hole in the linoleum floor. This meant that the water, that was supposed to go down the drain in the floor (and go right outside), now was leaking onto the subflooring. Knowing that that was plywood I knew that it had to be replaced. Little did I know the work this was going to entail



First we removed everything from the greenhouse. Weather was supposed to be cold and rainy so electricals and live material came inside



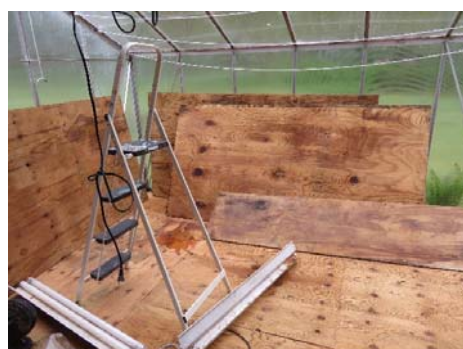
Shelves and other paraphernalia when outside onto the porch.



The plants went into the living room on the floor.



The old linoleum was taken up and as expected the wood was soaked. We (my husband & son) pulled up the plywood sheets, two layers, and set them up to try to dry. This took all week because it was raining outside for a few days.



We took the plywood out of the greenhouse and then let the sub-flooring of 2 layers of styrofoam dry. After the plywood was dry it was laid back down. The plywood pieces had grown a little while they were drying so they had to be trimmed again.



Then the linoleum was laid out. We are not carpenters or experienced floor people so we picked a single piece of linoleum.

We picked out a linoleum at Menards online (and because of Covid) and we sent our son to the store.

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After rolling it out, the linoleum fit well and was glued down by the edges and around the drainage hole (the white dot in the back). By using a single sheet of linoleum it looks like a slate floor but it has no cracks that water can penetrate.



We put up a 70% shade cloth on the outside of the greenhouse and I cut some pieces for the inside that would be below the vent windows in the ceiling. The left side wall of the greenhouse (in the picture) gets a lot of morning sun so we put a piece of leftover 50% (shaded) shade cloth on the outside of that.



Now all the shelves, electricals and plants that had been take out could be put back in. We put back my beautiful copper fountain that I had made 10 years ago. Note the plastic box on the floor under the shelving by the fountain. I will explain that shortly.



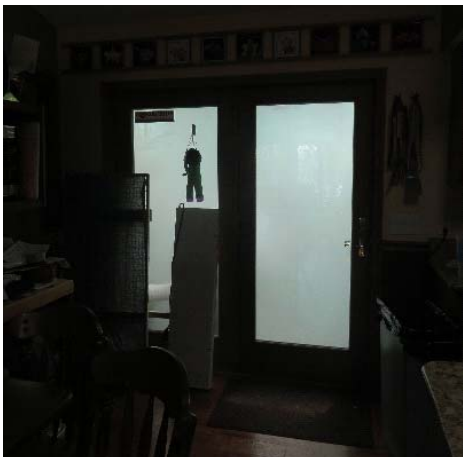
We put up a misting system with .008 nozzles to "mist" the greenhouse when it got warm. I did not have this before and it works wonderfully. The mist is so fine you can hardly see it but it keeps the temperature down and the humidity high. Hopefully just what the orchids want.



We added a fogging system. Remember that little plastic box I pointed out earlier? That has a fogger in it and now it turns on every hour for about 10 minutes or so to further humidify the greenhouse. At first we got fog that was so dense you could not see into the greenhouse but we have it working better now.



We put back all the plants and other assorted greenhouse supplies.



Right picture shows the normal greenhouse and the left shows when the fogger worked too well!



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There are also two fans keep that humidity circulating through the room.

I re-sorted the greenhouse plants by how much light each orchid wanted with the Bulbophyllums and Paphiopedilums on bottom shelves and the Cattlayas, Maxillaria and Aspasia on a top shelves. I am excited to easily keep the humidity above 60%. And the temperature in the greenhouse that used to go to 90-100+ degrees is now kept about 70-80 degrees.

All the work has paid off, the humidity is great for orchids, the temperature and light are more suited for the orchids. Now all I have to do is wait to see what the orchids think of all the changes.

Fertilizers and Solutions. What are those numbers anyway?

By Cynthia Wadsworth

Fertilizers typically provide, in varying proportions three main macronutrients:

- Nitrogen (N): leaf growth
- Phosphorus (P): Development of roots, flowers, seeds, fruit
- Potassium (K): Strong stem growth, movement of water in plants, promotion of flowering and fruiting

Three secondary macronutrients: calcium (Ca), magnesium (Mg), and sulfur (S)

Micronutrients: copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn), boron (B).

Of occasional significance are silicon (Si), cobalt (Co), and vanadium (V).

Everyone has seen those numbers of fertilizers, but what do they mean? For example, I have one sitting in front of me that says 20 – 20 – 20. So, the first number represents nitrogen, the second phosphorus and the third potassium. If you have a fertilizer that says 2 - 2 - 2, it has the same proportions, but will make a weaker solution.

So what about those solutions. We often measure total dissolved solids (TDS) in our fertilizer solutions. Some plants really need weak solutions, others are heavy feeders. TDS are often expressed as Parts Per Million. If that makes your head spin here is one way to think about it.

We all know what parts per hundred are, even if we are not aware that we know. If we say 10% that is the same thing as say 10 parts per hundred, which is



written 10/100. So to get parts per million keep adding zeros to the numerator and the denominator until the denominator is 1,000,000. So 10/100 is the same as 100/1,000 is the same as 1,000/10,000 is the same as 10,000/100,000 and finally is the same as 100,000/1,000,000 or 100,000 PPM. That's a lot of parts! We want Orchid fertilizers in the few hundred PPM.

What do dissolved solids do? Ironically, they draw the water out of the roots by something called Osmotic Pressure. Think of osmotic pressure as a gradient sort of like gravity pulling water downhill. Osmotic pressure will passively pull water out of the cells in the roots to try to equalize the dissolved solids concentration inside and outside the cell. As water comes out of the cell the concentration of total dissolved solids outside the cell comes down and the cell gets dehydrated. The same thing happens if you drink too much. Water comes out of your brain cells and when you feel like your head is going to explode it is because your brain cells have massively shrunk. In either case apply water without dissolved solids. Happy watering everyone and pay attention to the concentration of your fertilizers.