NEWSLETTER



Editor's Note: The newsletter will be distributed electronically to all members for whom we have an email address. If you wish to switch from paper to electronic delivery, please notify me at robert.lucas@usask.ca.

Future Meeting Dates:

November 17, 2013 March 23, 2014 January 26, 2014 April 27, 2014

February 23, 2014 May 25, 2014

SOS Executive

| President: | Cal Carter |
|----------------------------------|---------------------|
| Vice-President: | |
| Past President: Sherida Gregoire | |
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| Resources: | Yvette Lyster |
| | Pat Randall |
| Librarians: | Tracey Thue |
| | Jan Dougall |
| Newsletter: | Bob Lucas |
| COC/AOS Rep: Al Hartridge | |
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| | |

October Meeting

The October general meeting of the Society will be held on Oct. 27, 2013

at John Dolan School, commenting at 1:30 p.m. Cal Carter will give a

demonstration on basic orchid care.



ANNOUNCEMENTS

If you did not partake of the incentive to renew your membership for 20132-14 in the Spring, you should do so at the October meeting.

Cal Carter will give a talk on basic orchid care including an potting and mounting demonstration.

As we do not have a visiting speaker for the October meeting, you are encouraged to bring your own plants and divisions for the sale table.

A warm welcome is extended to Valerie Martz, Marge Kowalchuk, C. Rayat and Lynn Leislar who joined the SOS in September.

The October meeting will have a raffle of plants donated by Safeway. Be sure to purchase your tickets from Tracey or Jan at the Library table, \$1 for one, \$2 for three.

Meeting Agenda

- Announcements Problem Corner
- Show and Tell
- Coffee/Suppl
- Cal Carter Presentation
- Plant Raffle
- Plant Sale
- Adjournment



Phal Bedford Golden Victory

SEPT. 22 MINUTES

Announcements

Cal welcomed everyone to the September meeting..

The supply table now has New Zealand sphagnum moss and tap water MSU, and they also have a a jar of MSU that someone purchased and forgot under their chair at a previous meeting.

New DVD powerpoint presentations from Orchid Digest are available for sign-out from the library.

Many plants are available on the raffle table. Tickets are available at the library table.

Thank you to Cheryl, Heather, Lisa, Jenn, Lynn, Sherida, and Lori for bringing treats today.

Shawn Hillis of Calgary will be speaking to us today on new hybridizing trends in Cypripediums and he has brought plants for sale. Please put your membership numbers in to be drawn to purchase plants

Plant orders will be due

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on Oct. 4th for Sunset Valley Orchids. Plant lists are posted on their website, although Paphs will not be available for us to order. Please contact Cheryl or Heather with your orders.

Problem Corner

An Oncidium type plant had its new growth knocked off. What can be done? There are usually two dormant buds and the second will hopefully start to grow at some point.

Show and Tell

Plants were shown by Lisa Pauls, Mary Orchard, Vicky Wiley, Lynn Campbell, Tracey Thue, Pat Randall, Al Hartridge, Sherida Gregoire, Bob Lucas and Don Keith.

Presentation

Cypripediums: Jewels of the Shade Garden, was the title of the talk given by Shawn Hillis. It was an informative presentation on Cypripedium species and hybrids suitable for growing in our gardens. The talk included videos on how to plant and divide them from visuals put together by Frosch orchids from Europe.

Plant Raffle

A number of blooming plants were donated by Safeway.

Plant Sale

Shawn Hillis brought an assortment of Cypripedium hybrids to sell.

Adjournment, approximately 3:30.

SOS SEPTEMBER SHOWAND TELL



Paph. charlesworthii Exhibitor: Bob Lucas



Phrag. Jason Fisher Exhibitor: Bob Lucas



Paph. Maybelle Exhibitor: Lynn Campbell



Blc. Cornerstone Exhibitor: Pat Randall





Phrag. Rosy Gem Exhibitor: Tracey Thue

Paph. (Hsinying Web x Hsinying Ruby) Exhibitor: Lori Posniak



Phrag. Quiet Dragon Exhibitor: Don Keith



Vanda Robert's Delight Exhibitor: Sherida Gregoire

GROWING TIPS by Courtney Hackney

Editor's Note: Reprinted from the website of Courtney Hackney: www.roseg4art.com

THE IMPORTANCE OF PH TO ORCHID GROWTH

Few successful orchid growers can successfully explain why pH is important to growing orchids. If one looks up pH in the dictionary, the definition has to do with the number of hydrogen ions in water; a fact that has little meaning to most orchid hobbyists.

The pH of water used to grow orchids is important and so is the pH of the medium on which orchids grow. The vast majority of hobbyists use the medium available plus whatever water they have and never understand pH because the combination of medium and water they are using is well within the ideal range for most orchids.

Many years ago, Ralph Wasdon, was known as one of the best orchid growers in Eastern North Carolina. He was noted for using only K-Mart generic fertilizer, one of the cheapest around. Other growers, noting his technique tried to duplicate his growth without success. Ralph knew nothing of pH, but by trial and error had found the right combination of growing medium, which combined with his water source and fertilizer provided an almost perfect pH balance for the absorption of nutrients. He used very dilute solutions of fertilizer, but his perfect 6.2 pH was ideal for nutrient uptake.

There are a few hobbyists who have extremely poor water or who decide to try a new type of fertilizer, growing medium, or pesticide/fungicide who do need to understand pH. Some water sources are extremely basic or acidic and there are a few fertilizers that contain excess micronutrients.

Micronutrients can be toxic under extreme water pH. Most hobbyists that try to improve their growing by testing water for dissolved solids or pH fail to appreciate that it is the pH of the medium combined with water that is most important. While water source is one component, most water and nutrient uptake occurs where roots are in contact with the medium. Here, the pH may change dramatically from that of the applied water. In peat based media for example, the breakdown products of peat lead to acid conditions that may become extreme.

If micronutrients are in the water source or applied as fertilizer they may become so soluble under acidic conditions that the orchids receive toxic levels. This can be exacerbated by using some of the high nitrogen Cal-Mag fertilizers, especially blended for orchids. These fertilizers when mixed with water lower the pH. Typically this is not a problem if the water source is full of minerals. If the source is rainwater or DI water the acidity can be so extreme that orchid roots can be killed. Adding a solution that raises pH can produce fantastic growth in

orchids, but requires an understanding of pH.

Many pesticides are most effective at a specific pH, usually slightly acidic. One popular fungicide, Kocide can be toxic under a very acidic pH, but very effective if the pH is over 7. Kocide contains copper that is soluble and taken up by plants at lower pH values.

So what should the average orchid hobbyist know and do about pH? If your orchids are growing well, the answer is nothing. If you begin experimenting with new fertilizers, media or pesticides, a simple pH meter may prevent you from damaging your orchids and make you a better grower.

THE TRUTH ABOUT LIGHT

Once upon a time I spent a great deal of time trying to understand both the light requirements of the many orchids in my collection and the light levels in my growing space. This is no longer a priority for me because I have discovered how adaptable most orchids can be if given half a chance.

When Mark Rose, formerly of Breckenridge Orchids, allowed me to measure the light levels in his greenhouses, I was surprised to find that he did not worry about light levels. All areas of his greenhouse received the same amount of shading (40%) year round. While most of his orchids were phalaenopsis and paphs, there were also large sections of

cattleyas and even a few vandas as well. All of his orchids looked great and flowered well!

What was apparent within the greenhouse was that there were still zones, but they were arranged based on temperature, not light levels. "Cool loving" or at least "high temperature hating" orchids were located close to the cooling pads, while those that thrived in heat were at the other end of the greenhouse away from the cooling pads.

The lesson is that the heat in the leaves is far more critical than the light itself. Each little leaf is essentially a little greenhouse that can only be cooled by direct convection (dissipation of heat) or by opening the little stoma under the leaves and allowing water to evaporate, which cools the leaf.

The key to the successful technique for Breckenridge Orchids was not just that there was extensive air movement in the greenhouse or the use of cooling pads, but that Mark allowed his orchids to adapt with the seasons.

Orchids and most plants have a variety of mechanisms through which they change with the seasons. Under lower light levels, chloroplasts are closer to the surface than under higher light levels. In high light, leaves also decrease heat absorption by changing the color of their surface from deep green to yellow green.

Most hobbyists notice the difference in the color of orchid leaves when they bring a new orchid home and it is different in color from the rest in a collection. One only has to worry when the new plant is darker than other plants in your collection, which makes it susceptible to burning.

Orchids can acclimate and grow just as well with less light or more light if given time. Commercial growers know that to obtain maximum growth, they need to produce conditions where the growth is maximized and the potential damage from leaf burn on an extra hot day is minimized. There is also a real important phenomenon called photo inhibition, when heat and light levels are so high within the leaf that photosynthesis is inhibited.

Seedlings have less potential for handling heat stress and generally are grown under lower light levels. Their thin leaves are more susceptible to over

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heating just as a small greenhouse heats up more quickly than a large greenhouse with more volume.

If light levels are monitored continuously in a greenhouse there will be a peak at mid-day, with light and heat levels lower before and after the peak. An orchid may be photo inhibited near mid day, at optimum just before and after that time and not reaching maximum photosynthesis for most of the day. This is where growing under lights has a real advantage. Light can be optimized for the entire day. It is not surprising that many indoor growers are able to grow under lights so well that they receive AOS awards.

Today's lighting systems are far superior to what was available a couple of decades ago, with lights that generate exactly the correct wavelengths of light for plant growth. Some hobbyists add lights to their greenhouse and augment light early in the morning and in the evening to maximize the light delivered to their orchids. A lighting system can also be a useful way of augmenting the afternoon or morning shading in your greenhouse from a nearby tree or house.