



Manitoba Orchid Society

For the Love of Orchids Newsletter

Next Meeting: 15 November 2009
Salle Académique, Rm. 1531
St-Boniface College,
196 De La Cathedrale Av.

Novice Programme

Question and answer session.

Starts at 1:00PM

Regular Programme

Oncidium slide show.

Starts at 2:00PM

Bring Plants for Show & Tell

Plant sales by members are encouraged.

Goodies will be provided by Garnet Ward, Diane Tolgyessy, Jacques Cahill, and David Moran.

Website: <http://www.manitobaorchidsociety.ca>

Executive email: president@manitobaorchidsociety.ca

Newsletter email: newsletter@manitobaorchidsociety.ca

Submission deadline 16 December 2009 for January 2010 Issue



December 13th MOS Christmas Party

Hearts & Flowers

If you hear of any good/bad news regarding members or their families, please call Phyllis McCaskill and let her know.



To Garnet Ward, Jerry Lenover, Jacques Cahill, Ed Maza, Jim Roy, Darlene Stack, Lorne Heshka, Dave Moran & Rob Parsons for conducting the annual auction.



The Executive encourages all members to provide feedback, comments, suggestions by filling out a comment sheet available from the Secretary at all General Meetings.

All signed comment sheets should be returned to any member of the Executive. They will be reviewed at the next Executive Meeting and you will be informed of follow-up action taken.

2007/2008 Executive

Elected

President Dave Moran
Past President Joyce Jaworski
1st V.P. Kyle Lucyk
2nd V.P./Show Chair Rob Kato
Treasurer Garnet Ward
Secretary Phyllis McCaskill

Appointed

Membership Gary Jaworski
Social Eva Slavicek
Public Relations
Special Orders Darlene Stack
AOS/COC Rep Kevin Duerksen
Library Lilianne Foster
Newsletter Robert Parsons
Webmaster Robert Kato

Fertilizers--solid, liquid, organic, dilution, application, frequency

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WHAT IS A FERTILIZER? Fertilizers are solids or liquids containing one or more plant nutrients. The most important nutrients are nitrogen (N), phosphorus (P), and potassium (K). The proportion of each is stated on the product. N-P-K, 20-20-20, 1-2-1, etc. Additionally, there may be other nutrients listed on a product including calcium (Ca), sulphur (S), magnesium (Mg), boron (B), iron (Fe), etc. While these may not be needed in large quantities they are essential to plant health.

TYPES OF FERTILIZER:

SOLID CRYSTALLINE OR POWDER - Concentrated product ready to dissolve in water when the diluted liquid should be used immediately.

LIQUID - Concentrated solution ready to dilute further with water for immediate use.

SLOW RELEASE PELLETS - solid or liquid fertilizer contained in a porous shell which leaks a bit with every watering. May be more effective at certain temperatures.

FORMULATIONS: Some products containing large amounts of P (phosphorus) are suggested to promote blooming but recent evidence suggests that less P is needed than was once thought. What is needed is a vigorous root system to absorb nutrients and this develops with enhanced N and K in the formulation.

WHICH FERTILIZER SHOULD I USE? Both solid and liquid fertilizers are suitable for orchids provided they are correctly diluted and applied when plants are actively growing. Pellets may be useful for very large vigorous plants such as *Grammatophyllum* and *Cymbidium*. Very good results have been obtained with MSU Fertilizer (19-4-23) formulated for Michigan State University and meant for use with well or tap water that already contains calcium and magnesium.

There is another product for use with rainwater/reverse osmosis water/deionized water. These specialty products are available through some orchid vendors.

HOW TO USE: Too much fertilizer can damage roots but infrequent application is equally ill advised. Apply a product according to manufacturer's instructions. Once a week is suggested when plants are growing well. Less frequent application is indicated during dull weather or during winter. No fertilizer should be given to dormant plants. If plants grow too quickly such that growths become soft and floppy, reduce the quantity and frequency of fertilizer application.

HOW TO APPLY: Fertilizer may be applied using a sprayer or a watering pot. Saturate the potting medium and roots with water until liquid flows freely from the pot. Drain. Apply fertilizer similarly: drain. Dipping each pot in the same pail of fertilizer solution is unsanitary and can lead to the spread of diseases.

WHEN TO APPLY: Fertilize when you would normally water. Remember to water thoroughly without fertilizer at least once a month to allow excess minerals to be flushed from the medium. Less frequent application is indicated during dull weather or winter when days are short. Do not fertilize dormant plants or those not actively growing.

Taken from Spike March 2009, the newsletter of the Ottawa Orchid Society

Fertilizer Burn (Too Much of a Good Thing Can Harm Your Orchids)

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. 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 (RG) 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.



The burned leaf tips on this sobralia are an indication of trouble at the roots, a common symptom of fertilizer burn. Decant the plant and check the roots; dead root tips or roots and a salty crust on the medium are symptomatic of the mineral buildup caused by excess fertilizer remaining in the medium.

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.



This member of the *Oncidium* Alliance is suffering from the advanced stages of fertilizer burn, and is likely to die if left untreated. Treating a burned plant involves flushing mineral buildup from the roots and base of plant with plain water, then repotting it in fresh, clean media and a new pot. After repotting, keep the plant semi-shaded and protect it from temperature extremes.

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.

References

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This article was taken from the March 2008 Newsletter of the Central Vancouver Island Orchid Society

Minutes - Manitoba Orchid Society General Meeting Sunday, October 18th, 2009

Recorder: Phyllis McCaskill

1. Call to order:

Dave Moran called the meeting to order at 1:20 p.m. indicating that this would be a short meeting so as to be able to start the auction at 1:30 p.m. The minutes from the executive meeting were approved and they are available from the secretary – Phyllis McCaskill. Suggestion slips are available at all general meetings and once completed, these slips should be signed for follow-up and they may be submitted to any executive member. Volunteers for November refreshments are: Garnet Ward, Diane Tolgyessy, Jacques Cahill, and David Moran.

2. Minutes of the last meeting:

Motion to accept the minutes from the last meeting, as published, by Phyllis McCaskill and seconded by Fran Cass. Carried.

3. Financial report: Garnet Ward

No Report.

4. Programs: Kyle Lucyk

Kyle was absent, but sent a report that nothing was confirmed for November meeting at this time.

5. Show Chairperson Report: - Robert Kato – Absent

A meeting was held and everything is reported to be under control. The theme for the upcoming show is “ORCHID PARADISE”.

6. AOS/COC Representative: - Kevin Duerksen

Kevin was absent - No report

7. Hospitality: - Eva Slavick –

Eva was absent – No report.

8. Library: - Lilanne Foster

Nothing to report.

9. Public Relations: - Position vacant.

10. Membership: Gary Jaworski

Gary was absent – but reports membership at 95.

11. Newsletter: - Robert Parsons

Nothing to report.

12. Website: - Robert Kato

Rob was absent. No report

13. Special Orders: - Position vacant.

14. Unfinished Business:

There have been a number of suggestions for a new meeting place submitted to the Exec. Board. Any additional suggestions should be in by next Sunday. The list will be reviewed by the board on Tuesday the 27th. The best will be visited and evaluated for the final decision.

15. Adjournment:

Motion to adjourn by Kimberly Pronyshyn.

Note: Minutes of the Executive Meetings are available to be picked up at General Meetings on request from the Secretary.