



Orchidata

The President's Message

August 2014

Since I last wrote a column, our AGM has taken place, as has the picnic. To begin with the AGM, I think the swap and sale was a success. What do you think? Should we do it again next year? I know the strawberry social was a success! I don't need to ask for input on that one. ☺ Thanks for all the goodies that you all brought.

For the benefit of those who were not at the AGM, we should all thank the outgoing members of the Executive: Helen Crabbe who stepped down as Program Chair—we certainly appreciated all the interesting meetings she arranged—as well as Bob Gibbon who handed over the Treasurer's position after a lengthy commitment to this portfolio, and Denise MacLeod who stepped down from the Publicity portfolio after coping for several years in this challenging position. Thanks also to those who agreed to stand as new members of the Executive: Gavin Clark (Treasurer), Lauren Booklin (Programs), Scott Belton (Native Orchids) and Nancy Freckleton (Publicity) as well as those who are continuing in the same or another portfolio: Jacqui Arrindell (Secretary), Frank Cox (Social Convenor), Pat Vuurman and Olga Jokutaitis (Greenhouse Coordinators), Bob Gibbon (Flasking Group), Penelope Petrie (Sales and Raffles) and Peter Decyk (AOS/COC Liaison). Of course this represents only half of the Executive; the other positions come vacant at the next AGM and it's not too soon to give it some thought if you are interested in being more active within the Society. As a matter of fact, we are still looking for a Vice-President or President's assistant. If you could devote some time to the Society, please contact me or Lynda Vuurman.

What can I say about the picnic? Once again this year, the weather was an issue. A hardy bunch, we tried to ignore the "heavy mist" at the beginning and were rewarded when the sun came out in time for dessert! Ben Boers and Cindy MacKenzie were again instrumental in making this a success, running the barbeque and, along with Lynda

Vuurman, providing the infrastructure (that means all the extras that you don't necessarily think about, like tables and umbrellas and a bin to hold the drinks.) Of course, it's a group effort with everyone contributing food and raffle items. I want to thank Drew Goddard for handling the raffle and Pat Vuurman for a new activity this year: an orchid quiz. I had expected a lot of joking and leg-pulling over the quiz, but everyone seemed to take it very seriously. The only question that elicited a laugh was the one about where blue orchids grow. (Costco?! I would like your input on the subject of the quiz and the picnic in general. Should we do a quiz or some similar activity next year? Should we look for a new picnic venue (with a covered pavilion?) or continue to take our chances in the President's (or former President's) backyard?

I always seem to be asking you for input. Here's another question. Sandra Miccucci organized a successful outing to visit Joe DiCiommo's greenhouse. She is willing to organize another tour, but would like to know where the members would like to go and how you would prefer to have it done. For example, should we visit one place each time, or try to fit in several? Travel on our own or hire a bus? Talk directly to Sandra or contact me with your ideas.

One last issue to think about and give your opinion on: membership fees. We think that for next year a small increase is in order but there are differing opinions about how to apply it. It was noted that, at the present, couples can join with one membership fee and we talked about having a higher fee for a couple than for an individual. However, it was noted that there are different sorts of couples: in some cases both people are orchid fanciers, but in other cases only one is really involved in orchid growing, while the other person just attends meetings and events to be sociable. Would it be better to have an active fee and a social fee? In that case, if both parties are active orchid growers, each would pay the individual fee;

whereas if only one person was involved in orchids, the other person would pay a social fee. The difference would be that social members would not be able to exhibit or sell plants through the Society or receive a personal copy of Orchidata. We realize that this would have to be self-enforcing as no one on the executive could undertake to say who is a social member and who is an active member. We are interested in your feedback on this subject, especially if you are currently enrolled as a couple. Where do you fall on the spectrum and would this fee structure appeal to you or offend you? Talk to any member of the current Executive or email me at wendy-hm@cogeco.ca.

Wendy

Monthly Meeting Schedule OSRBG

Upcoming Events

August 17, 2014 – OSRBG General Meeting, Room 5. Plant sales commence at 1:00 pm & Meeting to begins at 2:00 pm. **Programme:** Mario Ferussi, Masdevallias and Draculas culture / hybrids / species

September 21, 2014 – OSRBG General Meeting, Room 5. Plant sales commence at 1:00 pm & Meeting to begins at 2:00 pm. **Programme:** Ivan Milin, Natural Fertilizer from Space-Travel Technology

September 27 & 28, 2014 – The Central Ontario Orchid Society Orchid Show and Sale, Cambridge Hespeler Arena, 640 Ellis Road, Cambridge

October 18 & 19, 2014 – Eastern Canada Orchid Society Orchidfête 2014, CEGEP Andre-Larendeau 1111 Lapierre, Lasalle QCH8N 2J4

October 19, 2014 – OSRBG General Meeting, Room 5. Plant sales commence at 1:00 pm & Meeting to begins at 2:00 pm. **Programme:** Rob Halgren, Growing Orchids Under Lights

October 25 & 26, 2014 – The Windsor Orchid Society 2nd Annual Orchid Show and Sale, Teutonia Club, 55 Edinborough Road, Windsor

November 1 & 2, 2014 – The Essex County Orchid Society Annual Orchid Show and Sale, Colasanti's Tropical Gardens, 1550 Road 3 East, Ruthven

November 17, 2014 – OSRBG General Meeting, Room 5. Plant sales commence at 1:00 pm & Meeting to begins at 2:00 pm. **Programme:** Jean Ikeson, Sarcophilus

December 21, 2014 – OSRBG General Meeting, Room 5. Plant sales commence at 1:00 pm & Meeting to begins at 2:00 pm. **Programme:** Christmas Auction

Date	Locations
August 17, 2014	Room 5
September 21, 2014	Room 5
October 19, 2014	Room 5
November 17, 2014	Room 5
December 21, 2014	Room 5

Greenhouse Tour – July 7, 2014

Thank you to Joe and Patricia DiCiommo for sharing your greenhouse and home with members. The orchids were spectacular and Joe's minestrone soup, homemade wine and hospitality were also a highlight. Thank you to Sandra DiCiommo for organizing this visit.





Above pictures by Wendy Hearder-Moan

Cladosporium orchidis* - a fungal pathogen causing leaf disease in *Dactylorhiza

By Maureen & Brian Wilson

Dactylorhiza make desirable garden plants and are widely grown by club members in Scotland where many do exceptionally well. In recent years, in common with many other growers, we have observed an increasing incidence of dark brown spotting on the leaves relatively early in the growing sea-son, leading to premature senescence of the plant. The spots usually start small, are often irregularly lens shaped, aligned with the length of the leaf and may be surrounded by yellowing tissue. The brown areas enlarge so that eventually the whole leaf goes brown, the stem collapses and the plant dies down to the ground. The appearance of the spots is that of a classic hypersensitive response to an infection. While initially the leaf damage does not usually kill the plants, the shortened period of growth means that the new storage roots are much smaller than normal and premature loss of the foliage in successive years weakens the plants so that they eventually fail to reappear in the spring. The condition seems worse if the plants start into early growth and are then subjected to frost and prolonged cold damp growing conditions. Some colleagues have reported dark spots on the storage roots which may also be truncated and lack the fine white hairs of healthy roots indicating infection by spores carried through the soil by rain. Infected roots may rot prematurely. As a precaution some growers have destroyed their stocks of plants. There is no evidence that the infection is systemic as infected roots reportedly give rise to healthy offsets. There seems to be some variation experience *Dd. praeterissima* and *foliosa* and the in

susceptibility of *Dactylorhizas* to the disease depending on the genetic background of the plants. Thus, in our



Cruickshank form of *D. fuchsii* are badly affected. In one colony of hybrids only a few variant plants which are thought to be sports or seedlings of the original hybrid were damaged.

THE CAUSE

Examination of the brown areas showed they contain fungal hyphae which have been identified as *Cladosporium orchidis* - a member of a family of plant and animal pathogens. *C. orchidis* is a known pathogen of orchids (Ellis and Ellis 1997) which occurs in the wild in the UK where it can be common on colonies of *Dd. fuchsii* and *majalis*. Like many fungal pathogens it probably enters the plant through local areas of damage and senescing tissue such as those produced by frost. It is favoured by cool wet conditions. *Cladosporium* may also occur at times late in the season as the aerial parts of the plant die back for the winter. For those interested *Cladosporium* can be isolated on malt extract agar as olive colonies bearing greenish conidia. We do not know if *Cladosporium* infects other orchid genera but we have seen similar spotting on *Epipactis gigantea* and on *Orchis mascula* although we have not investigated these.

PREVENTION

Having identified the problem we now come to the speculative part, what are we going to do to save our *Dactylorhizas* next year? We would suggest the follow-

ing strategy to reduce the extent of the disease. Like most plant diseases hygiene is a good place to start, thus cleaning up and destroying infected tissue and old leaves at the end of the growing season is essential. A clean mulch such as peat, sand, gravel or bark laid round the plants just before they start into growth should help to prevent overwintering spores being splashed onto the plants. Planting washed tubers into clean soil can also be tried.

Benzimidazole fungicides like Carbendazim applied at intervals early in the season should also help to control *Cladosporium* as should most other modern non-oomycete fungicides. For the amateur grower in the UK there are several fungicides suitable for use on ornamentals containing Carbendazim available in garden centres. There may be no recommendation on the label giving the frequency of application and dose for orchids but those suggested for fungal diseases such as *Botrytis* on ornamentals should be suitable. With most fungicides this equates to an application every two weeks in the early part of the growing season. As a precaution when treating new plants it might be wise to try spraying only a few plants initially to ensure that spray damage does not occur. Orchid leaves can be difficult to wet with sprays and the inclusion of a few spots of washing-up liquid as a wetting agent will help to ensure the leaves are thoroughly wetted by the fungicide. While these modern fungicides are to some extent systemic, a good coverage and wetting particularly of the underside of the leaves will ensure good penetration of the active ingredient. To reduce damage to the mycorrhiza (beneficial fungi) which are associated with orchid roots a wise precaution will be to protect the soil round the plants as much as possible and to spray upwards to reduce the quantity of spray reaching the soil. Because of the effect on the mycorrhiza we are not certain if dipping infected roots in fungicide and replanting them in clean soil will be beneficial. In our experience physical protection of the plants in the early part of the year can also help prevent *Cladosporium*. *Dactylorhizas* grown in pots in the greenhouse and plunged outside when the danger of frosts is over seem to be free of *Cladosporium* infection. This treatment also improves the growth of young plants as their growing season is lengthened and they produce better storage roots by the end of the season.

PROGNOSIS

Cladosporium will always be in the environment and harmless infections may well occur most autumns during senescence. It has probably become a major problem earlier in the season because of a succession of years when we have had very mild periods in February and March followed by occasional sharp frosts and a cold wet cold spring lasting until July. Our experience is that *Dactylorhiza* colonies which have been infected in the

last two years were previously fully hardy and disease free. Since we have only just identified the problem we hope that by adopting the precautions suggested above we can return to enjoying disease free orchids of former years.

FOOTNOTE

At the time of writing we have not yet been able to try all of the precautions suggested above. Neither the authors nor the Scottish Rock Garden Club can accept responsibility for a failure of, or any damage resulting from the treatments suggested which are given in good faith.

STOP PRESS:

It is now late April and we have carried out many of the suggested measures and as an additional pre-caution covered the emerging plants with a plastic sheet set on bricks to keep the rain off. To date our plants are disease free. We will never know if this is due to the precautions taken or to the more normal winter/spring weather we have experienced since last summer.

ACKNOWLEDGEMENTS

We are grateful to Professor Graham Gooday of the Department of Molecular and Cell Biology, University of Aberdeen and Dr Roland Fox, Crop Protection, Department of Horticulture and Landscape, University of Reading for help in identifying *Cladosporium* and for comments during the preparation of this article.

REFERENCE

Ellis, M. B. and Ellis, J. P. (1997) *Microfungi on Land Plants: an identification handbook*. 2nd Edition Richmond Publishing, Slough.
The Journal of the Scottish Rock Garden Club, Vol.27 No.2 (107), June 2001

Sphagnum Moss – Friend or Foe?

If you've worked a lot with various potting media, you've probably had some experience with sphagnum moss. It is a great additive to drier mixes if you need to enhance the moisture-holding capacity, and it is an absolutely fantastic medium for a wide range of orchids if used all by itself.

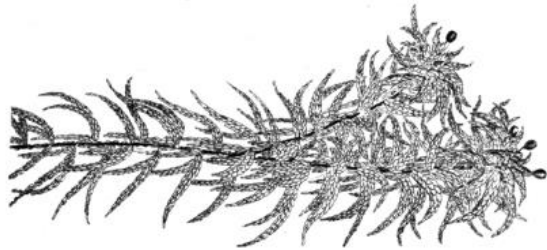
However, there seems to be a great deal of variability in opinions about it, it's quality as a medium, and folks' success in using it. In this article, I'll try to provide a little insight into the material itself, why it's great for some and a killer medium for others, and maybe lend a trick or two to making it work better for you.

The first thing to understand is that not all sphagnum is created equal. Sphagnum is a genus of peat mosses comprised of as many as 300 species (or more, depending upon the taxonomist). They vary all over the map in terms of their color (almost white, to green, pink, and even red), their habitats (valleys, mountains, aquatic, terrestrial), and physical structures. It is the last of those that is of primary importance to the orchid grower.

The most common species used as orchid-growing media and basket liners are *Sphagnum cristatum* and *S. subnitens*, particularly those found in New Zealand, but

others, like *S. magellanicum* from Chile are also used, as are others harvested wild and farmed throughout mountainous regions of South America and elsewhere. Some authorities will tell you that certain species are better than others – which is generally true – but there is enough variability within the growth of any species that there is considerable range and overlap in quality – and price.

Looking at the structure of sphagnum, it grows as a strand surrounded by “fluffy” fibers, as shown in this botanical drawing:



The length of the individual strands, and the length, thickness, and density of the fibers all affect the absorption and “springiness” of the moss, with long, thick, and dense strands being the best.

Shifting briefly to what is important to orchid culture, we know that in addition to holding and providing moisture to the plant, the potting medium needs to stay open and airy to allow the plants’ gas exchange processes to carry on freely via the root system. That is the crux of the “sphagnum conundrum” – packing it firmly enough to secure the plant, without suffocating it – and “what works” is determined by the quality of the moss, the pot, and the growing conditions.

The dried moss, by itself, is a pretty good “sponge”, absorbing and spreading water uniformly throughout its tissues, which is what makes it such a great potting medium. However, when we pack the moss somewhat tightly, we make the spaces between the fibers smaller. Just like using a fine bark, or letting a potting medium decompose, that allows water to be trapped by surface tension and fully fill the spaces, resulting in the “soppy mess” most folks (and plants!) object to. However, and this is something that is a bit counterintuitive, if the moss is very compressed, it actually can hold less water in between the strands, making it great if your conditions lead to rapid drying.

Another issue that folks using sphagnum run into is the fluffy mass becoming more-and more dense with time,

particularly if heavy watering from overhead is the norm, and with the use of lesser-quality moss.

So why is it that some growers – notably some of the “big name” commercial growers in Hawaii – seem to do so well with very tightly-packed sphagnum?

One factor is their use of premium, “5-star” New Zealand moss. Having very long stands and being very fluffy, even when firmly packed around the plant’s roots, there is still a considerable amount of air space in the mass. Its sturdy structure also “holds up” better under the weight of the absorbed water, so won’t collapse as readily. Add to that the fact that their dynamic growing environment (lots of sunlight, air movement, and an overall buoyant atmosphere) fosters pretty rapid drying, and problems with extended, waterlogged pot conditions are minimized. Move those same plants into my greenhouse environment, and it’s “dead roots” time. (Another, less-discussed factor is that of time – plants don’t stay in their care for very long, so the moss never has time to break down.)

With the less-than-ideal growing conditions most of the rest of us have, what can we do to get the benefits of sphagnum while avoiding – or at least delaying – the pitfalls? Here are a few of the tips I’ve learned over the years:

Use top-quality moss. It is far more forgiving of misuse than are lesser grades.

Learn to water lightly, merely moistening the moss, rather than “smashing” it down with heavy overhead watering. One trick I’ve learned is to place a 1”-2” layer of LECA at the bottom of the pot, with the plant and moss on top of that, then only water from below. The LECA absorbs and wicks the water up to the moss, which becomes uniformly moist without ever being mechanically disturbed.

Consider blending the moss with more “rigid” components. I have had success with coarse strands of coconut husk fiber, interwoven with the strands of moss, as well as perlite or charcoal – anything that helps the sphagnum “stand up” under its own wet weight.

Do some experimenting. Once you gain a reasonable level of “mastery” of the moss, you’ll find it to be a good addition to your orchid-growing arsenal. Yes, it will always be one of the shortest-lived potting media you’ll

Article by <http://firstrays.com/>

Membership

Just a Reminder: Memberships were due June 1, 2014.

You can renew your membership at the next monthly meeting, or by mailing your cheque to:

Jacqueline Goddard
2037 Coral Crescent
Burlington, ON L7P 3K4
e-mail: krackerjac@hotmail.com

Membership Fee: \$20.00

Receive a \$5.00 discount if you would like to receive the Orchidata newsletter via e-mail.

Greenhouse Volunteers Needed

As you may know, the Orchid Society maintains the collection of orchids in the RBG greenhouse. This is a significant commitment which cannot be carried out without the help of volunteers.

Currently a group of volunteers meets on Thursday mornings from 9:30 to noon, more or less, and another group meets on Sunday mornings from about 10 until 12:30. This schedule is dictated by watering requirements. Volunteers are currently being sought for both these teams. "On the job" training is provided if needed.

In addition to watering, volunteers look after repotting the orchids, cleaning any plants that are being attacked by pests, removing dead leaves, sterilizing pots and other equipment, preparing plants for display and many other small but important tasks.

Volunteers are not required to attend every week, but some commitment to the collection should be demonstrated. If you are able to devote some time to helping us maintain the orchids, please contact Pat Vuurman (pvuurman@hotmail.com) regarding the Thursday group, or Denise MacLeod (pmacleod5@cogeco.ca) if you can volunteer on Sundays.

Flasking Group

Anyone interested in flasking please give Ben Boers, Pat Vuurman or Bob Gibbon a call for details

2014 – 2015 Executive & Contacts

President	Wendy Hearder- Moan	905-335-4055
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Vice-President	Vacant	
Treasurer.....	Gavin Clark	905-274-4888
Secretary	Jacqui Arrindell	905-528-1060
Membership.....	Jacque Goddard	905-635-6342
Newsletter	Drew Goddard	905-635-6342
Publicity.....	Nancy Freckleton	905-628-4198
Native Orchids.....	Scott Belton	416-22-6091
Show Chair	Ben Boers	905-701-8102
Sales & Raffle.....	Penelope Petrie	905-383-3558
Programming	Lauren Booklin	289-837-1462
COC Rep	Peter Decyk	905-632-1985
AOS/Mid-American Rep	Peter Decyk	905-632-1985
Hospitality	Frank Cox	905-334-2598
Librarian	Penny Lipsik	519-449-2321
Flasking	Bob Gibbon	905-387-1993
Orchid Collection	Olga Jokutaitis	905-544-9894
Orchid Collection	Pat Vuurman	905-527-4951
RBG Liaison.....	Ben Boers	905-701-8102

Honorary Lifetime Member

Dr. James Brasch

Membership and Address Changes

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Orchidata

Deadline for the September / October

Newsletter is September 3, 2014

Please note that Orchidata news and orchid society newsletters should be sent to:

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e-mail: andyjjj@gmail.com
