

# news

Volume 18.1 - January 2006

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Happy 2006 Orchid Enthusiasts

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As you read this, I am sure that all the holiday trimmings are put away and the focus has now shifted to the preparation of your plants for the late winter/early spring shows that will soon be upon us.

Seed Pod or Capsule?

Orchids in the Garden

A very brief e-mail has been received from the CFIA acknowledging the receipt of the letter of concern sent to them in August 2005 by the President of the COC regarding the importation difficulties hobbyists are facing when they bring plants back with them from their trips. The message, from the Executive Assistant to the President of the CFIA, advises that they have contacted both the USDA and CBSA to address the concerns raised by the COC. They are waiting confirmation/information of action taken by both organizations to ensure that computer databases are updated in the USA and that CBSA will accept phytosanitary certificates in either official language at any Canadian border crossing. A formal letter from the new president of the CFIA is expected soon confirming this information and will be published in the COC newsletter as soon as received. For those of you taking winter vacations, please ensure that you check the government web site and print a copy of their most recent regulations to take with you along with the necessary permits.

The Canadian Grower

Orchids of Manitoba

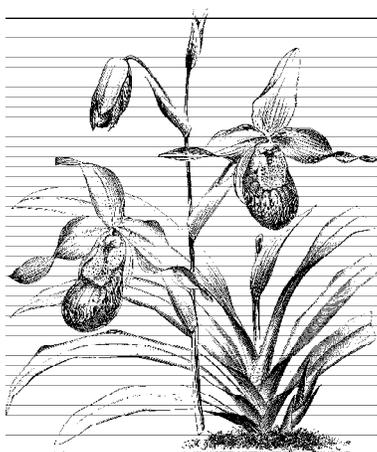
Hybridization

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Enjoy your shows; enjoy your hobby of growing some of the most beautiful, exotic and unusual plants in the world!

*Margaret E. Blewett*  
President COC



# The Notice Board

## Proceedings

Extra copies of the 16th World Orchid Conference Proceedings are available. This is from the WOC that took place in Vancouver in 1999. There is a listing and description on eBay under books or is available from Eleanor Holwerda, email: eholwerda@shaw.ca.

## OrchidWiz Encyclopedia

"The OrchidWiz Encyclopedia is ... for intermediate and advanced growers. It has information on more than 125,000 hybrids and 9,400 species including growing information. The amount of information provided is unbelievable! Easy to use and load. High recommended! I haven't seen anything like this before."

Have a look at <http://www.orchidwiz.com/>  
See an interesting comment on the software by Judy Cook:  
<http://www.orchidwiz.com/JudyCook.htm>

## Looking for Orchid Books?

Check out <http://www.orchidsbooks.com/>  
This is a Canadian bookseller. They have the new book "Orchids of Manitoba" by Doris Ames  
<http://www.orchidsbooks.com/book.asp?id=843>  
See the review on page 6 of this newsletter.

## Orchid Books on the Web

For quite a while now Project Gutenberg has been scanning old books and putting them up on the net. One of interest would be

"About Orchids: a Chat" by Frederick Boyle, 1893  
<http://www.gutenberg.org/etext/17155>  
and

"West Australian Orchids" by Emily H. Pelloe  
<http://gutenberg.net.au/ebooks04/0400681h.html>

Another place to look is  
Michigan State University » MSU Libraries » Digital & Multimedia Center » Digital Collections > Orchids  
<http://digital.lib.msu.edu/collections/index.cfm?CollectionID=14>

## Orchid Photos

Probably the best orchid photo site on the web is the Orchid Photo Page by Greg Allikas  
<http://www.orchidworks.com/>  
Fantastic photos and "what if they mated?" show parents and the resulting offspring.

## New Website

The Okanagan Orchid Society now has a website at  
<http://www.members.shaw.ca/oos/>

## Slide Programs

**Cattleyas** - by Ken Girard.

**Oncidiums** - by Gordon Heaps.

**Fragrant Orchids** by Marilyn Light.

**Hardy Orchids and Their Culture** by Bill Bischoff

**Phragmipediums** by Ingrid Ostrander

**Lycastes** by Ingrid Ostrander

More information on the programs is available on the COC website.

**Note:** When reserving a program, please include **two** (2) cheques, one cheque for \$10.00 to cover the cost of shipping and insurance, and another cheque for \$25.00. The cheque for \$25.00 will be required as a deposit and will be returned as soon as the program is returned. Please include in your request the date of the meeting for which you want the slide program. Cheques are to be made payable to "The Canadian Orchid Congress".

The slide programs may be ordered from:

Janette Richardson  
38 Straub Crescent,  
Regina, Sask., S4T 6S6

Phone: 306-543-0560  
Email: [dale.richardson@sk.sympatico.ca](mailto:dale.richardson@sk.sympatico.ca)

# What is pH? How does it Affect Orchids?

These questions keep coming up. Many orchid growers, new to these endeavours, ask me about pH and how it applies to their orchids.

Webster's dictionary explains:

"pH is the negative logarithm of the effective hydrogen-ion concentration (or hydrogen-ion activity) in gram equivalent in liters, used in expressing both acidity and alkalinity on a scale from 1 – 14. Duh...

Or the World Book Encyclopaedia:

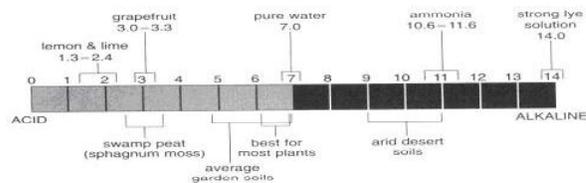
"pH, a symbol used (with a number) to indicate acidity or alkalinity in testing soils for suitability to specific crops, in analyzing body secretions, and in various industrial applications. It represents the relative concentration of hydrogen ions (in gram atoms per liter) in a given solution, usually determined by the use of a substance (indicator) known to change color at a certain concentration. The pH common scale ranges from 0 to 14, pH7 (the hydrogen-ion concentration, (10 to the power of minus 7) or .0000001, in pure water) being taken as neutral, 6 to 0 increasingly acid, and 8 to 14 increasingly alkaline. Most soils range between pH3 and pH10". Hmm - is this better?

What we can glean from the scientific jargon above is that pH is a measuring system based on percentages of Hydrogen ions that runs from 0 to 14. A high pH (from 8 – 14) means the substance is alkaline (sweet) and a lower pH (from 0 – 6) means that the substance is acidic (acid). The neutral point is at the pH value 7.

Most orchids (in my experience) like to have their roots in a slightly acidic medium (pH value about 5); others need to have slightly alkaline conditions (pH value about 8). We must keep in mind that certain plants have evolved in lime (alkaline) soils and they are better off in neutral surroundings. So far, I have not found a list of which orchids need to be in acidic media and which ones need alkaline media. It is up to the grower (who wants to know) to study her/his plants' requirements. Please note: if plants grow in limestone soils and get cold rainwater or cold water seepage from underground, the lime gets dissolved and becomes available to the plants. When the limestone receives only warm water, then it does not dissolve much and the soil may not show a high pH value.

The figure below may help more than many words. This is from a very useful book about composting called "Let It Rot" by Stu Campbell

How can we find out what our orchids are dealing with,



The pH scale and some commonly known substances

inside their pots? Since rainwater is slightly acidic (pH around 5) and our tap water in Victoria is pretty much the same, we could say that as long as we use the regular water, things will be good for most orchids. That would be correct here on Vancouver Island. Other geographical areas may have to deal with different water. We also apply different fertilizers (having different pH levels) and as long as we flush the pots on a regular basis, things are still ok. When somebody tells you that some (not all) Paphiopedilums and some (not all) Cypripediums need an alkaline environment, you might add some crushed oyster shell, crushed egg shells or a little pinch of Dolomite limestone to a particular plant or mix something of that into the growing medium or you can use calcium nitrate with your fertilizers. You have to read the instructions that come with the different mineral fertilizers. Please make certain that this lime is really needed by your plant! For instance, I have learned that *Paphiopedilum delenatii*, in contrast to most Paphiopedilums, prefers rainwater and NO lime.

But then – how do I know what pH the potting mix has? What you can do is: take your orchid plant, flush the medium with lukewarm tap water, which you can catch in a dish. You then immerse either one of those pH-testing strips and see what colour it turns; instructions come with the kit. Or you can purchase a pH testing tool, that will need to be calibrated regularly, adjust it to the same temperature as the drained-off water in your dish, immerse the testing tip in the water and you will have a perfect reading of the pH value of the mix in that pot. You can then flush the pot a second time and repeat the test. That would give you a good idea of the average pH value in that pot. If you find that it is extremely high or extremely low, you can then try to bring things back to about 6-7 pH. This may give you peace of mind. However, remember that orchids (as a family) are much older than humans and will put up with a lot of nonsense from us before they retire to "Orchid Heaven". So, don't worry too much about this pH thing. If the plant really looks sick, it will be probably be a better idea to re-pot it instead of trying to adjust the pH value. As long as plants look healthy, leave good enough alone.

- Ingrid Schmidt-Ostrander

## Is it a Seed Capsule or a Seed Pod?

When we discuss something, we need a label that we can agree upon. Now we commonly call that part of the orchid plant that contains the seeds a seed pod - unless you are a botanist or want a more correct term. So what are the definitions?

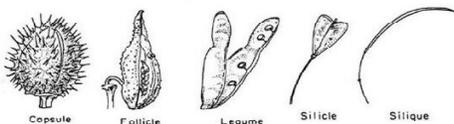
We can observe that the orchid fruit has three sections or carpels and splits along three seams when ripe and dry.

A Capsule is defined as: A dry dehiscent fruit that develops from two or more united carpels. Dehiscent Fruits are Dry fruits which at maturity open by definite natural means to shed the contained seeds.

So let's look at the terms that are used to distinguish the different dry dehiscent fruits.

- i. Follicle - A dry dehiscent fruit developed from 1 carpel and at maturity splitting along only one seam. (milkweed, larkspur, columbine)
- ii. Legume - A dry dehiscent fruit developed from 1 carpel and at maturity splitting along two seams. (beans, peas).
- iii. Silique - a special long slender capsule of two carpels. Splits along two seams and contains an inner membrane known as the replem. This fruit type and another closely related fruit type known as a silicle is typical of the mustard family.
- iv. Capsule - A dry dehiscent fruit developed from several united (syncarpous) carpels. There are several types of capsules.
  - (a) Loculicidal capsule - one which splits along the outer median line. (orchids, lilies).
  - (b) Septicidal capsule - one which splits along the septa and opens at the top. (yucca, agave).
  - (c) Poricidal capsule - one which opens with round holes. (poppies). - Jerry Bolce

FRUIT TYPES  
DRY DEHISCENT FRUIT TYPES



## Orchids in the Garden – Nutrition through Guttation

Article by Otto Moeller, Hannover, from the German magazine 'Die Orchidee' translated by I. S. Ostrander

There is no life on earth without water. Here, all life processes are dependent on water. Not only rain and snow are providing this water, dew and fog are also very important contributors. In the temperate zones, the amount of water arising from dew is estimated to be between 3 – 5% of the total precipitation. This dew can increase considerably in areas where the moist air rises from warmer riverbeds up to cooler mountain slopes. In the dry areas of the world, the precipitation of dew can come to 3 mm per night. For the growth of orchids as well as all kinds of micro-organisms the additional supply of water in the form of dew is of much value; the presence of fog is equally useful.

Now we will look at a different kind of precipitation: The necessary flux of sap in plants is furthered by the evaporation of moisture over the leaf surfaces (low salt concentration). During periods of high humidity, this evaporation stops and the plants must continue to support the flow of sap by actively excreting fluids. There are particular areas on the tips of grasses, the toothed margins of *fragaria* (strawberry) leaves, *alchemilla* (Lady's mantle) etc. called hydrasthodes (water slits) with specific cells called epithemes that serve exclusively to secrete liquids by guttation.

We have multiple records which show that inside the drip line of *crataegus* (hawthorn), the germination of *orchids mascula* is extremely high, there can indeed be 'beds' of the young and flowering plants in these locations. Test strips for diabetes were used to measure the sugar content in the guttation droplets of hawthorn and different grasses. The strips reacted noticeably and indicated a much higher sugar content for hawthorn as compared to different grasses. Besides sugars, plants also exude mineral salts and possibly other substances. Considering that different plants will contain different mineral substances, it may be assumed that this guttation supports a healthy development of the local micro organisms. A cycle of nutrition is thereby established, which aids in particular the plants with deep root systems. Where the surface layers of the soil are thus enriched with sugars, that is where the optimum germination of these particular orchids takes place. One may deduce from all these things that to accomplish enhanced growth in our garden orchids, we must be more

observant of the accompanying flora around our terrestrial orchids. We must also pay attention to the secretions in the root zone of these companion plants, keeping in mind that the plant parts above ground as well as the parts below ground will secrete substances that will be available for 'recycling'.

## Target: The Canadian Orchid Grower

For orchid growers in Canada, especially the novices, it is bewildering to read in so many different orchid books how to care for your plants in so many different ways. Of course, these books were written in many different places, particularly (for English speaking persons) in England and the USA – places like Florida and California, where the majority of orchid companies seems to be. There are precious few publications that originate in Canada and/or address our particular geographic situations.

Considering that not only are we situated farther north than most other orchid growers and therefore have to deal with colder temperatures, both our coastal areas (East and West) experience much colder, snowier/wetter and stormier seasons than those farther south or in Europe. On the other side, our interior provinces provide an extremely dry climate, similar to semi-deserts or Siberia; I wonder how many orchids are grown in Siberia?

In order to address these particular Canadian problems, the Canadian Orchid Congress (COC) was founded, almost 20 years ago. Yes, it exists even in bilingual form.

Over the years, more and more aids to assist the Canadian orchidist have been established: In addition to a newsletter, there are culture sheets, slide programs, speaker tours; we are even able to provide an insurance that will benefit particularly the smaller Canadian societies. It may not be so costly to have liability insurance for a show when there are over hundred members in one group, but there are some societies in Canada that number less than 20. For them, insurance on their own is prohibitively expensive, which

means they could not ever have a public orchid show or even just a display – they could not afford it. That is where the COC is most useful. For the past ten or so years, there is the COC website. Our webmaster Jerry Bolce (Waterloo ON) is also the current newsletter editor. Jerry has recently asked me if I could try to find out how the Orchid Society members feel about this website.

How many of you (those with computers) know about this website? <http://www.Canadianorchidcongress.ca/>

How many of you are accessing the site? What do you like about it? What don't you like? What improvements would you suggest? Is you society's information up-to-date?

When you read the menus that are provided, you will find several lists: Canadian Orchid Societies (about 30), Canadian orchid sellers, Upcoming Canadian orchid shows, Canadian orchid-growing instructions, links to Canadian and international places, articles about particular Canadian concerns like importation rules and suggested procedures, conservation and others. There are a good number of pictures from earlier orchid shows, where you can perhaps get ideas how to set up your own exhibit.

Please, do let Jerry know – his e-mail address is: [jerry@uwaterloo.ca](mailto:jerry@uwaterloo.ca)

Or you can let me know how you feel about this website. You may either tell me at a meeting or during a show; you can telephone me (250)652-0753 or send me an electronic mail to: [ifl@telus.net](mailto:ifl@telus.net) and then I can report back to Jerry.

Thank you All!

*Ingrid Schmidt-Ostrander, COC Past President.*

# Orchids of Manitoba: A Field Guide

Doris Ames, Peggy Bainard Acheson, Lorne Heshka, Bob Joyce, John Neufeld, Richard Reeves, Eugene Reimer & Ian Ward.

Native Orchid Conservation Inc., 2005.  
Printed in Canada. ISBN 0-9734864-0-6  
Trade Paperback, 158 pages. \$17.95

Reviewed by Robert Parsons

A new book is on the market, covering Manitoba's native orchid species. Some are showy and photogenic. These include the well-known lady's-slippers. Many others are inconspicuous and easily overlooked by the casual observer. All are lavishly illustrated and described in this attractive and sturdily bound volume.

The book has 16 sections. The first ten, "Acknowledgements", "Forward", "Introduction", "A Brief History of Orchids", "Conservation and Biodiversity", "Protection of Species and Ecosystems", "Orchid Biology", "Orchid Habitat", "Key to Orchids in Manitoba" and "Introduction to the Species Accounts" are brief accounts, ranging from one to ten pages. Photographs and paintings enhance many of these, and all are written in a lively fashion. The authors are to be commended for their presentation of this information.

The "Genus and Species Accounts" make up the bulk of the book. The plants are arranged alphabetically by genus, and within each genus by their Latin names. Thus, a summary of the genus *Amerorchis* opens the section, and it ends with *Spiranthes romanzoffiana*. A wealth of photographs makes this section a visual delight.

The typical genus summary text is up to about a half page in length on the right-side page, with one or more photographs below and at least one photograph on the facing left-side page. These are almost always of plants at the peak of blossoming. With multi-species genera, there are usually several species displayed. Each genus summary is followed by accounts of the representative species members of the genus.

The species accounts are arranged similarly to the genus summaries, although the text is longer, usually accounting for at least 2/3 of the page. At the bottom of each, there is one photo, and a range map of the particular species in Manitoba. One to four, usually two or three, photos are on the facing page. In general, the facing page photos are

close-ups of the flowers at the peak of bloom. The one photo on the text page more often shows the entire plant, buds or, in a few cases, seed capsules. There are a few additional photos; for example page 88 shows "Some colour variations in the genus *Cypripedium*" (the lady's-slippers) and its facing page shows some hybrids of *Cypripedium candidum* and *C. parviflorum*.

Thirty-six species (and two additional varieties) are covered. The photographs do a great job of displaying identifiable, diagnostic features of each species. This is important, given the intent of the authors for the book to act as a field guide.

The last five sections, "Table of Flowering Times", "Bibliography", "Glossary", "Index" and "How You Can Help" all provide additional information for the botanophile.

To the best of my knowledge, this is the first time all Manitoba orchid species have been covered in a single work. Scoggan's Flora of Manitoba was published in 1957 and the two most recently discovered species, western prairie fringed-orchid and Great Plains ladies'-tresses, were not found until the mid 1980s. In any event, this is the first time they have been covered in a format aimed at the popular audience.

I had to look hard to find any shortcomings. I did find the following, but all are nit-picky details. These do not, in any way, detract from the attractiveness or functionality of the book. The table of contents lists "Genus and Species Accounts" as beginning on page 42. While this is accurate, there is no actual label of it on the page itself. Many of the range maps have straight lines on the northern edges of the range of many species (white bog-orchid on page 119 is an example). This doesn't likely reflect reality, but is hardly a shortcoming of the book so much as it is a gap in our knowledge of orchid distribution. I really think the seed capsule photos are useful and regret there aren't a few more of them.

None of the above should dissuade you from buying this book. It would be an ideal gift for the orchidophile on your list, or for your own use. A friend of mine asked me recently if I'd bought my copy yet, and on my affirmative reply, she asked "Isn't it exquisite?" The only answer is a resounding yes.

*This originally appeared in For The Love of Orchids, the newsletter of the Manitoba Orchid Society, Vol. 28 #3, November 2005.*

# So You Want to Try Your Hand at Hybridization?

## Part I - The Easy Part

Marilyn HS Light

Copyright November 2005

First presented at <http://www.orchidsafari.org>

### Introduction

You have been wanting to take the plunge, to try your hand at making your very own hybrid orchid but wonder just how to go about it.

The topic is divided into three parts. Part I - The Easy Stuff, deals with doing it: flower structure, pollen removal, storage, and pollination techniques. Also covered are some aspects of parent selection. Part II - The Challenging Stuff, will deal with the consequences of doing it: choice of seed and pollen parents, speculative crosses, line breeding, novel breeding lines and seed-borne diseases. Part III - I have a million babies! will address the reality of the first time experience including what to do with millions of seeds, thousands of protocorms, hundreds of compots, and how to realize success from the adventure.

## Part I - The Easy Part

### Flower Structure

Anybody with basic knowledge of orchid floral anatomy can locate the anther and the stigma. They are both located on the column, a structure found in all orchid blooms. Many orchid-related books and web pages deal with the subject in detail. We can find the Writings of Charles Darwin "On the various contrivances by which British and foreign orchids are fertilised by insects." London, John Murray (1862) on the web. [http://pages.britishlibrary.net/charles.darwin3/orchids/orchids\\_fm.htm](http://pages.britishlibrary.net/charles.darwin3/orchids/orchids_fm.htm)

Royal Botanic Garden (Kew) provides some excellent information on the subject.

<http://www.rbgekew.org.uk/scihort/orchids/orchidstructure.html>

### Flowers of *Cypripedium*, *Paphiopedilum* and *Phragmipedium*

There are two anthers located at the base of the column, one on each side. The pollen may be sticky or mealy. The pollen-receptive structure is the stigma which is located behind the staminode and faces inwards toward the back of the pouch. Its surface may be smooth or rough to the

touch. Close examination will reveal tiny papillae on the surface which capture the pollen as it is smeared by an exiting insect.

### Other Orchid Flowers

In other orchids, a single anther is found at or near to the tip of the column. The pollen-containing structure called a pollinarium is usually covered by an anther cap which protects it until it is dislodged by a visiting pollinator or your toothpick. Loss of the anther cap can lead to premature flower fading. The mass of pollen (pollinium) often has a filament attaching it to a sticky disk (viscidium). It is the sticky disk which attaches the pollinarium to a pollinator's body. We can likewise remove pollinaria by touching a toothpick to the viscidium if it is present.

### Anther, Pollen, Pollinium, Pollinarium - Pollen Parent

The pollen may be in wedge-shaped packets of tetrads (massula) which are in turn gathered together into pollinia as in *Platanthera* and *Disa*. The massulae are connected to each other by an elastic material so that only a few massulae detach as the pollinium is dragged across a stigma. One pollinium can therefore be used to pollinate several flowers. More often, pollen is tightly compressed into firm to hard pollinia as we see in *Dendrobium*, *Cymbidium* and *Phalaenopsis*. There are usually two or four pollinia per pollinarium but we may also find six or eight in some genera. Each pollinium can be removed and used separately to pollinate blooms. In *Cattleya* and some relatives, the pollinia are composed of flattened plate-like structures and each piece can be used separately to pollinate a bloom. In others, the pollinia are round or oval.

### Stigma, Ovary, Ovule - Seed Parent

The stigma is usually located behind the anther and on the undersurface of the column but the position can vary with the genus. The stigma is usually a simple sticky depression. The stickiness causes the pollinia to remain in place. The fluid is also an ideal germination medium for pollen grains. Stigmas are usually easy to spot but in some orchids like *Gongora* and *Promenaea*, there are slit-like openings that can be challenging to manoeuvre when it comes to placing pollen. Try to imagine how an insect enters and leaves the flower to position the pollen accordingly. Pollinia are always perfectly shaped and sized to enter the stigma of their species. When making hybrids, there often serious disparity in size and shape which is when a bit of imagination is needed to be successful.

Exercise: The next time you view an orchid, try to identify the column and if you are uncertain, ask a fellow orchid society member to assist. If you can, remove a flower of the same type to be bred and identify the column, pollinaria and stigma. Note how the parts are arranged and see if there is a sticky viscidium present. Try removing the pollinarium by touching a toothpick to the viscidium or remove the anther cap and examine the pollinarium. Find the stigma and touch it gently to see if the surface is sticky. Using a toothpick, pick up a pollinarium and deposit the pollen mass on the stigma. If it adheres, you have succeeded in pollinating an orchid flower.

### Timing of Pollination

Sometimes a stigmatic surface is appropriate to pollen deposition only while the bloom is fresh or when it is most sticky. Receptivity may coincide with fragrance peaks which may vary with flower age. Flowers may be less receptive when a plant is young, has been recently disturbed/repotted or if the plant lacks vigor. A healthy mature plant is always a better choice as a seed parent.

### Flower Position

In a multi-flowered inflorescence, pollen can be removed from almost any flower but flowers destined to be hand pollinated should be those toward the base/bottom of the inflorescence.

### Additional Skills Required

Some skill will be needed to artfully remove pollen either as sticky, powdery or hard pollinia and to place this on a stigma. Pollinia do come in all shapes and sizes, colors too, but even the tiniest structures such as those found in pleurothallid flowers can be successfully transferred provided one does not sneeze! Always work over a piece of white paper! A simple toothpick is an ideal tool for pollination. The flat end is suited to removing sticky pollen then smearing it on a stigma. The pointed end can be used to pick up pollinaria. Use as is or further whittle to create a fine tip. Use one toothpick per pollination to minimize transmission of disease. Discard used toothpicks.

**Step 1** - Locate the anther. Use a toothpick to gently dislodge the cap. If the pollinia are not apparent, check within the anther cap. Gently lever the pollinium out of the cap but be careful not to press too hard otherwise you see your pollen flying through the air, never to be seen again! Pollen may be used immediately or stored until needed. Pollen should be protected from humidity otherwise it could be attacked by fungi. I have stored *Cypripedium* pollen for six months to one year in the freezer whereas it spoils after just 30 days when stored humid in the refrigerator or

at room temperature. Hard pollinia should be placed in a piece of waxed paper which is then folded securely and labelled with name and date. I store hard pollen over silica gel in a sealed glass bottle in the refrigerator. Always collect pollen from fresh flowers. Pollen from aged or fading blooms may already be supporting fungal growth or may no longer be viable.

**Step 2** - Locate the stigma. With a toothpick, transfer all or part of a pollinium to the stigmatic surface. Label the flower/plant with a code or words to describe the date and the pollen parent. Additional information can be kept in a Propagation Notebook. The act of pollination does not guarantee fertilization or the production of viable seeds. Your speculative cross may never get past the starting gate. The parents may be genetically incompatible. Either or both parents may be functionally sterile.

**Step 3** - Measure and wait. The process of pollination is separated from fertilization by a matter of days to months. Unless the pollen never germinates on the stigma, hormones will be produced readying the ovary tissues for the reproductive cycle. The ovary will begin to enlarge in length and width. To follow the process, measure and record the length and width of the ovary at pollination and at the same point weekly or until the fruit aborts development and yellows or withers. If pollination leads to fertilization and seed development, the fruit will increase in girth for the first few weeks then pause for about a week before resuming growth. This pause is when fertilization is happening. When the fruit ceases growth in girth, seeds are matured.



# Taking Care of That First Moth Orchid

Phalaenopsis or Moth Orchids are popular easy-to-grow orchids now available in many retail outlets and even in some large supermarkets. They are usually sold in bud or in bloom, year round, and especially in the spring which is the peak blooming season. Moth Orchids have their origin in the south Pacific including the Philippines but what we see today are hybrids derived from many species.

## HOW DO I KNOW I HAVE A MOTH ORCHID?

Orchids are usually sold with a plastic label inserted in the pot. The label provides a name and some basic information on how to take care of the plant. If the label names the plant as a Phalaenopsis or Doritaenopsis, this identifies it as a kind of Moth Orchid. There may also be a name like 'Arctic Snow' or 'Coral Gleam' which refers to its hybrid name. This name may also be printed on the container.

Moth Orchids have large flat succulent leaves which emerge in pairs from a central growing point. The leaves may be light or dark green, sometimes reddish green, and are usually somewhat shiny. Plants sold in retail outlets usually have four to six leaves but the plants can grow larger with time and good culture. The flower spike arises from between leaves. It is erect and arching with a number of buds or open blooms arranged along it. The flowers may be white, pink, purple, or yellow and sometimes have spots, stripes or blotches of contrasting colour. They will be about 5 to 10 cm wide (2 to 4 inches). Moth Orchid roots are thick, fleshy and numerous. Some roots may have already grown out of the pot when their surface will be silvery when dry. Growing roots have a fragile green tip.

## WHEN WILL IT BLOOM AGAIN?

Most orchids are sold in bloom. They will bloom again in their particular season according to their geographic and climatic heritage. Your orchid will generally re-bloom in the same season each year. Most Moth Orchids are cued to bloom by the shortening days of autumn and by the cooler nights. Providing cool nights (min. 15 C) for six weeks during October/November will initiate flowering for late winter to early spring.

## WHAT SHOULD BE DONE WITH THE SPENT INFLORESCENCE?

Once Moth Orchids flowers have faded, the flower stalk may yellow and die naturally or it may remain green and alive. If the flower stalk has yellowed, it should be removed using sterilized scissors or a sterile blade. Cut the

stalk near its base, taking care not to cut leaves or roots in the process. Moth Orchids frequently rebloom from the stalk if it remains green. If your flower stem remains fresh and green, only remove the upper part which had flowered. Cut the stem about 1 cm (½ inch) below the lowest bloom.

## HOW MUCH LIGHT DOES A MOTH ORCHID REQUIRE?

Moth Orchid leaves can be easily damaged if they are placed in sunlight. Care must also be taken to keep plants out of sunlight when bringing them home from the store. When selecting a spot for your plant, choose a place with bright, indirect or filtered light. A curtained windowsill or wide spectrum fluorescent light is best for most kinds.

## WHAT TEMPERATURE IS APPROPRIATE?

Room temperature (20 to 25C); warmer by day, cooler at night. Avoid exposure to cold or hot drafts.

## HOW OFTEN SHOULD THE ORCHID BE WATERED?

Once or twice a week depending on how quickly the growing medium dries out. Water thoroughly with tap water, letting the water flow through the pot. Avoid using hard well water.

## SHOULD FERTILIZER BE APPLIED? WHAT KIND AND HOW OFTEN?

Use very dilute liquid flowering houseplant or orchid fertilizer with regular watering once every two weeks in summer, once a month in winter.

## THE HOME IS DRY IN WINTER. HOW CAN HUMIDITY BE SAFELY MAINTAINED?

Pebble trays are not very effective. Spray exposed roots and leaves one or more times daily with tap or deionized water.

## WHEN SHOULD THE PLANT BE REPOTTED? DIVIDED?

Roots growing out of the pot is normal with this type of orchid: do not cut them off. What is most important is the quality of the potting mix. Before the mix becomes soggy and inhospitable to orchid roots, it must be replaced or about every 18 months to two years. Use a medium to coarse commercial potting mix designed for orchids.

- Marilyn H S Light

# COMING EVENTS

## 2005

**Nov 12-13:** Niagara Region OS, CAW Hall 124 Bunting Rd, St. Catharines, Ont Contact: Tom Cunningham, Show Chairperson  
Email: tessiercunningham@cogeco.ca Phone: 905-934-8289

## 2006

**Feb 11-12:** The Southern Ontario Orchid Society at the Toronto Botanical Garden, Edwards Gardens. <http://www.soos.ca/>

**Feb 24-26:** Orchid Society of Alberta. in the Grant MacEwan College, Millwoods Campus, 7319 - 29 Ave. Edmonton, Alberta. Show chair: Mary Wilke, [mjwilke@shaw.ca](mailto:mjwilke@shaw.ca)

**March 4-5:** Victoria Orchid Society Spring Orchid Show. It will be held in the Students' Union Building, University of Victoria. Contact: "Ingrid Ostrander" [mail:ifl@telus.net](mailto:ifl@telus.net) 250-652-0753

**March 11-12:** Orchid Society of the Royal Botanical Gardens 680 Plains Rd., Burlington Show chair is Ben Boers, email [bboers@cogeco.ca](mailto:bboers@cogeco.ca)

**March 24-26:** The Manitoba Orchid Society. For more information, please email: [president@manitobaorchidsociety.ca](mailto:president@manitobaorchidsociety.ca)  
<http://www.manitobaorchidsociety.ca/default.htm>

**April 1-2:** The Orchid Society of Nova Scotia at the Nova Scotia Museum of Science, Halifax. Contact: Jean Ikeson 866-798-0514 toll free; email: [greenhouses@win.eastlink.ca](mailto:greenhouses@win.eastlink.ca)

**April 1-2:** The Regina Orchid Society at the Core Ritchie Community Centre, 445 14th Avenue, Regina. Please contact Charles Eisbrenner, email: [reginaorchidsociety@sasktel.net](mailto:reginaorchidsociety@sasktel.net) for more information.

**April 8-9:** London Orchid Society at the Western Fair Special Events Building, London, Ontario For show information:  
<http://los.lon.imag.net/losshows.asp>

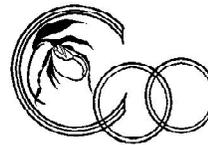
**April 15-16:** The Annual Toronto Artistic Orchid Association Show, Chinese Cultural Centre, 5183 Sheppard Ave., East (Markham Road)

**April 28-30:** The Vancouver Orchid Society annual show will be held at the Richmond Curling Club, 5540 Hollybridge Way, Richmond BC. Contact Wayne Louie for more information; email to [ergo@direct.ca](mailto:ergo@direct.ca).

**COC Web Site - <http://www.CanadianOrchidCongress.ca/>**

**This newsletter may be found there.**

**Please send in your show information - date, location, contact, etc.**



news

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The purpose of COC news is to inform members of the meetings, policies of the COC, to profile members, and to provide technical information regarding happenings, trends and techniques in orchid cultivation across the country and around the world.

We welcome your suggestions and contributions. Deadline for each issue is one month before the issue dates previously announced.

Recipients of this newsletter are strongly urged to pass a copy on to other members of their society

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