

Volume 16.5 - November 2004

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Bulbophyllum barbigerum

Greetings!

I trust that members all across Canada have enjoyed the COC Speakers Tours. Many thanks must be given to Ingrid Ostrander who co-ordinated the Western Tour and Yves Aubrey who once again handled the Eastern Tour. It has been through their hard work and dedication that we all had the opportunity to benefit from views of orchid growing from outside our border. Many Thanks Ingrid and Yves.

And now that brings up the next topic.... We all enjoy these tours and would like them to continue.... We need co-ordinators to start now to make the arrangements for fall 2005. Volunteers are needed now to ensure that the Speakers Tour 2005 is a reality. There are many knowledgeable society members out there who are most capable. Would you consider co-ordinating one of the tours? Please let myself or Jerry Bolce know and we will be in contact with you to help with the details.

A suggestion that has come forward is that we consider having a Canadian grower from the East go west and vice versa. What are your thoughts on an all-Canadian tour for next year? One volunteer from the East has already come forward and offered to go west. Tours can only happen when the COC executive knows the wishes of the membership. Now is the time for your input please.

Congratulations to those who have done so well at the fall shows winning ribbons and AOS awards. Well done.

As you prepare for the Holiday Season with family and friends, I want to add to the cheery greetings exchanged my wishes to you and yours for a wonderful time of turkey and plum pudding and beautiful, fragrant *Angraecum sesquipedale* blooms.

Merry Christmas Everyone, I'll look forward to hearing from you in 2005!

Margaret E. Blewett

The Notice Board

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

Eastern Canada Speaker's Tour

This year our speaker was Roberto Agnes from Aranda Orchids (Brazil). His talks were on Popular Brazilian species, Intermediate to warm growing species, or Improved Cattleya species and hybrids. The tour was held October 9-23, when he talked at the Halifax, Quebec City, Montreal, Hamilton, London, and Niagara societies.

Many thanks to Yves Aubry who did a wonderful job organizing this tour.

Canadian Orchid Vendors

The COC maintains a list of Canadian orchid vendors on its website as a service to vendors and those of us looking for yet another orchid deal. But I need some help. Can you please check the list for orchid vendors in your area and email me with the details for vendors that I dont have or let me know if a vendor has gone out of business. A reference to the vendors that attended your last show would be of use.

- Jerry Bolce

COC Insurance

The form for the COC insurance has been e-mailed out to each society. Details of the insurance were put in the last newsletter. If your society is taking out the insurance that is offered by the COC, you are asked to complete the form as soon as possible and return it to me, along with your cheque. Cheques are to be made out to the "Canadian Orchid Congress". If you choose not to take out the insurance, please e-mail me to confirm your decision. A copy of the COC insurance form is enclosed with this COC newsletter. This insurance package provides affordable insurance and is an excellent deal for you society.

My mailing address is:
Janette Richardson
38 Straub Crescent
Regina, Saskatchewan
S4T 6S6

E-mail address is: dale.richardson@sasktel.net

Some venues require inclusion in the policy when a event is held on their premises. When this is required the society must advise Janette Richardson. Janette requires the name of the venue/venue owner, address and dates of the event. A certificate will then be issued to the venue owner to cover this event.

Lynne Cassidy - Insurance Liason

COC Dues

As a reminder to everyone, the due date for your 2005 COC dues is fast approaching. The membership fee is \$1.00 for each member of your society. The COC membership year is January 1 to December 31, the same as a calendar year. Your COC dues are due by January 31, 2005. Invoice for your dues will be e-mailed to each society in November.

Orchid Show Dates

Is your orchid show listed on the back page? If not, email me the information - Jerry Bolce

Bulbophyllum barbigerum

No true nature lover and, certainly, no serious student, can ever fail to be fascinated by the multitude of fantastically shaped flowers which is the hallmark of the family Orchidaceae. No other family of plants can compare in this respect, and it seems as if nature had reached the highest peak of fantasy here. Surely, one of the oddest flowers one can ever see is that of the West African *Bulbophyllum barbigerum* Lindley, which comes from Sierra Leone and Nigeria. It was described and named by John Lindley in 1837.

On seeing this flower for the first time, one puzzles over it for a while before finding and understanding its various parts.

The lip, over 1 cm, long, with its fuzz of bloodred hairs, is disproportionately large. The very small column and the minute petals are hidden in the basal cavity of the dorsal sepal.

The hairs of the lip, up to 1 cm. long, many with fleshy thickenings at their tips, wave in the slightest breeze. This probably serves to attract insects. But the insect which can perform the act of pollination on this flower must be very small, because the pollinia on the small column are only minute grains. Do these insects not become entangled in the hairs of the lip? And what attracts them to the hidden column? The latter, which is only 1.5mm. long, has on each side of the apex a cylindrical, horn-like, I.5mm. long wing which extends at a right angle to the column. Do these very odd wings serve some function in the pollination process? Perhaps as quidelines? At the base of the column is a group of blood-red papillae (minute, nipple-shaped glands). Perhaps these produce some ethereal excretion which our human senses are too dull to perceive but which attract the insects. This mystery may never be resolved, but if this arrangement did not function, this orchid would surely be long extinct.

A still greater mystery, however, is this; How could such a complex flower structure ever evolve? Which were the intermediate stages which led to this development? Surely it did not suddenly appear without a long series of trials. These stages of the plant's development have long disappeared in the dim past.

Bulbophyllum barbigerum is, of course, an epiphyte, growing on the branches of trees or on rocks. Its flat, one-leaved pseudobulbs are 2.5cm. high and 2.5 to 3cm. wide and are produced on a creeping rhizome. Its fleshy leaves are 8.5 to 10cm. long and 2.5 to 3cm. wide.

The more or less upright flower truss (a raceme),

up to 15 cm. high, is produced from the rhizome, directly behind the pseudobulb.

The floral bracts (the bracts at the base, of the individual flower stalk, or pedicel) are about 1cm. long and persist after the flowers have fallen. The pedicel and ovary, which are marbled brownish red, are 0.8 to 1cm. long.

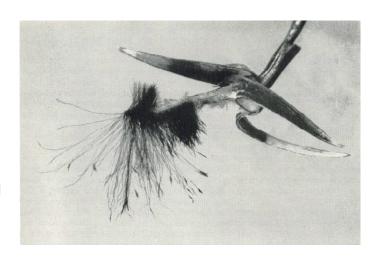
The only conspicuous parts of the flower, besides the lip, are the sepals, which are about 1.5cm. long and 3.5 to 4.5mm. wide at the base. All three are concave at the base. The lateral sepals form a round chin (mentum) under the base of the lip. Their long-pointed upper parts are reflexed.

All three sepals are greenish, flushed reddish outside (dorsally) and more or less blood-red with whitish tips inside (ventrally).

At Montreal, B. barbigerum flowers in April.

As the accompanying photograph shows, *B. barbigerum* is in no sense an ornamental species, but its flowers are so odd and offer so much of interest that they never fail to attract attention. For that reason this species readily deserves a place in any orchid collection.

H. Teuscher, Montreal Botanical Garden, 4101 Est, Rue Sherbrooke, Montreal 6, Canada. Reprinted from AOS BULLETIN, JULY 1965



Close-up of a single flower of *Bulbophyllum barbigerum*, showing the unusually large labelium with its bizarre fringe of blood-red hairs.

Mentoring a New Hobbyist - A Conservation Viewpoint

I expect that many of us have entered the orchid hobby by way of a smiling face at a show, a first purchase or gift of a beautifully flowered orchid, or by joining an orchid club to learn more about the hobby and to meet similar minded people. By whatever means we were lured into the orchid hobby passion, we likely remember, fondly, that smiling face at our first show, that helping hand when we first tackled repotting, the thoughtful guidance of a hobbyistmentor when we wanted to expand our collection, and the counsel of a seasoned exhibitor when took the plunge and decided to display our pride and joy. We may also remember the words of a senior hobbyist who cautioned us about pests and diseases or who pointed out that "To save a plant you give a division away."

In the real world, profit often comes before consideration of the living commodity or of the unwary consumer. We owe our new hobbyists some words of caution and advice. When we practice what we preach and express our concerns in constructive ways such as supporting enterprises dealing in artificially propagated plants then we show new hobbyists that orchid hobbyists care. When we refuse to trade in wild collected material we demonstrate respect and caring about wild orchids. When we show generosity of spirit by propagating rare plants either by seed or pollen exchange or by raising and distributing seedlings, we show new hobbyists that orchid hobbyists care about conservation.

All plants are subject to a panoply of pests and diseases. Most orchids happen to be vulnerable to virus diseases which are both deleterious and contagious. When we practice sanitation in our collections and employ methods to reduce the transmission of virus diseases such as using a new razor blade to cut flowers from each plant, we show new hobbyists that we care about the health of the plants in our care. When we keep infested or infected plants off the show table and out of the monthly draw for a new orchid, we demonstrate our respect for our members, the security of their collections, and moreover, we do our bit to give that newbie hobbyist the very best chance to succeed with a plant.

Orchid hobbyists love to show what they grow. New hobbyists are especially keen to exhibit either in a

society display or as individuals. Encourage their participation, applaud their triumphs and gently explain how they can groom a plant to show off its finest attributes. Often it becomes the responsibility of some of these new enthusiasts to stage an exhibit for the club. We can demonstrate not only how to assemble the props and stick handle through the registration process but also how to care for the precious entries of hobbyists not at the show. From the time of unpacking, staking and staging to the rushed takedown and repacking for the trip back home, the new hobbyist will see how their experienced companion cares for both their own plants and those of other members and will learn to do so likewise.

Marilyn H.S. Light
Adapted from a presentation to OrchidSafari in 1999.

Name changes in the Oncidium Group

The orchid registrar has made a number of changes to the list of registered hybrids which have resulted in a re-assignment of genus names to more than 2200 hybrids in the Oncidium group, or just under 20% of the total registrations in this group. For example, two species formerly treated as Miltonia, *Milt. schroederiana* and *Milt. warscewiczii*, have been transferred to Oncidium as *Onc. schroederianum*, and *Onc. fuscatum*. This change results in a change of genus for the well known and highly awarded hybrid Colmanara Wildcat among others, which is now called Odontocidium Wildcat.

All of the equitant Oncidium species have been segregated out under the genus Tolumnia. Lastly, *Onc. onustum* has been changed to *Zelenkoa onusta* in the registry.

Since these changes impact on so many hybrid names, we have compiled the complete list of hybrid names that have changed as a result of these revisions in rich text format. The list can be downloaded by clicking on the following link: Oncidium Changes. http://www.wildcattdata.com/NewWeb/news.htm

Many orchids are hallucinogenic. The larger the flowers, the stronger the drug. They all can produce the delusion that you have a large amount of money and an enormous greenhouse.

Growing Substrates for Orchids

William Ikeson March 29, 2004 King's-Edgehill School

An essential part of artificial propagation of orchids is producing the right potting mix. The proper potting mix can effect growth speed and life expectancy. Unfortunally it is easy to:

"Highlight how easily cultural advice is passed from grower to grower, even when totally devoid of merit. The fact that orchids survive many valueless but harmless cultural practices is too often accepted as substantiating such claims... Despite the large number of people who cultivate orchids worldwide, relatively little application of the scientific method has been made to separate myth from fact in cultural practices. We should take caution from the lemmings who unquestioningly follow each other into the sea" (Bert Pressmen; October 2003)

There is a lot of hearsay and opinion about how to grow young orchid plants. Most growers develop a system that works with their specific conditions but real comparisons using scientific measurements are rare.

This project will compare the growth of *Cattleya* and *Phalaenopsis* hybrid orchid seedlings using the media most commonly used for potting orchids: small fir bark, sphagnum, a combination of small fir bark and sphagnum, and coco fibre.

Artificial propagation involves two steps. First the orchid seed is sown under sterile conditions in agarbased media. Secondly, after the seed has germinated and grown to an appropriate size, then the young plants must be transferred to a growth medium. The problem is what media are best suited for growing orchids because losses can be quite high with tender young plants. The stage a few months after seedling orchids have been removed from flasks and have acclimatized themselves is critical. This is the point that I will investigate in this project.

When most orchid growers make mixes with fir bark, they usually just use fir bark or make fir bark the main ingredient in the mix. Fir bark is cheap and is easily used. The problem with fir bark is that it decays within one to three years after it is put into a pot. The conventional wisdom is that the coarse surface of fir bark allows for the right amount of oxygen and water for the roots of tropic or epiphytic orchids under humid tropical conditions. Fir bark is available in three different forms: fine, medium, and coarse. Seedlings are usually grown in fine fir bark.

Sphagnum moss is a common medium that comes in various forms: dried short, dried long, alive short and alive long. Dried long is the most commonly available although some growers use live sphagnum. Sphagnum is usually used in mixes with other potting media. Some growers though use it alone for sick plants, seedlings that need a constant supply of water, for special plants in small pots, or newly imported plants.

Pressing coconut makes coconut-husk fiber or coco fiber. This process is simple and quick, allowing mass quantities to be produced from what would otherwise be considered as waste material. Coco fiber is also, when dry, quite lightweight making it even easier for shipping and selling. It works best when it is used alone in a mix and takes a long time to decay. Like bark, it comes in fine, medium, and large. The Canadian Orchid Congress culture sheets suggest that fir bark is the best medium to used for Phalaenopsis and Cattleyas.

Each plant was weighed on a gram scale accurate to one tenth of a gram and photographed in bare root condition using a digital camera. Comparisons will be made with total gram weights of each group and visual comparisons of leaf and root growth at the beginning and at the end of the project.

Method

Sixteen *Brassolaeliacattleya* Goldenzelle 'Prelude' and twelve *Doritaenopsis* (Taida Sun King 'Rebecca' X *Phalaenopsis* Green Mist 'Kaitlyn') seedlings were used. (*Doritaenopsis* is a hybrid of, *Doritis* and *Phalaenopsis*. Some taxonomists consider *Doritis* to be part of *Phalaenopsis*.) All the orchids were potted in 3-inch plastic azalea pots with a layer of pea-sized gravel in the bottom of the pot for drainage plus the assigned potting substance.

The orchids were separated into four groups of four for the Cattleyas and four groups of three for Phalaenopsis. The four treatments were: fine (seedling sized) fir bark (Rexius brand), fine coconut fibre (shredded fibres plus 3x10 mm chunks of husk), New-Zealand type golden, long-fibre dried sphagnum, and New-Zealand type golden, long-fibre dried sphagnum top dressed to a depth of 2 cm on top of Rexius fine fir bark.

Each of the orchids was weighed on a scale accu-

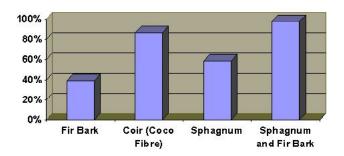
rate to 0.1 gm. Each plant was then ranked by weight. The rank went from heaviest weight to lightest weight The orchids were then assigned to four groups according to their rank weight starting with the heaviest and in a pattern. The pattern for the Cattleyas was ABCD, BCDA, CDAB, and DABC. The pattern for the Phalaenopsis was EFGH, FGHE and GHEF. Each of the four groups was assigned randomly to one of the experimental treatments. For potting Cattleyas, group used fine coconut fibre, group B used small fir bark, group C used sphagnum and group D used sphagnun top dressed over 2cm deep small fir bark. For the Phaleanopsis groups, group E used sphagnum over small fir bark, group F used sphagnum, group G usec small coco fibre and group H used small fir bark. The sphagnum was presoaked in rainwater for 30 minutes. The small fir bark was presoaked for 48 hours in rainwater. The small coco fibre was presoaked for 24 hours in rainwater, drained and rinsed and then soaked for another 24 hours, drained and rinsed. Although the coco fibre was labeled as low in ppm total dissolved salts, growers report that the ppm is variable and presoaking and rinsing to remove salts is advisable². Each group was then photographed. The orchids were planted in the assigned media on May 31, 2003. Each orchid had a plant number, a group assignment letter and a before and after weight. The plants were removed from the pots on January 17, 2004. They were weighed and photographed as was done in the beginning of the project.

The orchids were placed in trays in a greenhouse with an average maximum light of 2000-foot candles. The orchids were subjected to three hours extra light provided by Hi Pressure Sodium Lights from November to the end of this study. They were fertilized three times a month with Greencare Orchid Fertilizer (13-3-15-8Ca-2Mg applied at 125 ppm nitrogen), and watered with rainwater as needed (whenever any of the plants started to dry out). All groups were watered at the same time. The lowest temperature that the plants were subjected to was 14 °C while the highest was 33 °C. However, average night lows were 15 °C while highs in the warmer months averaged 25 °C and in the colder months, 18-20 °C.

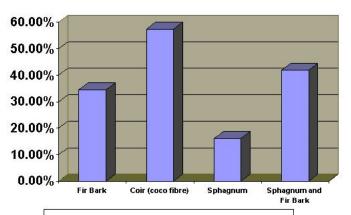
² Mario Ferrusi, "Growing Odontoglossums in Coir," Orchidata Mar. 2004: 3-4

Results

The results of this study are shown in Figures I and II.



■ Figure 1. Percentage Growth Increase in Cattleyas



■ Figure 2. Percentage Growth Increase in Phalaenopsis

Discussion

This project produced results that are different from what growers might have expected. Coco fibre is a medium that is fairly new and does surprisingly well producing good growth for orchid seedlings. It was best for the Phalaenopsis seedlings and a close second for the Cattleya seedlings. The coco fibre did not dry out as rapidly as the bark did nor did it stay overly wet as the sphagnum group did. Since the aim of a potting mix is to provide aeration without drying out too quickly, coco seemed to come the closest to this ideal.

Small fir bark performed the worst for the Cattleyas and the second worse for the Phalaenopsis. It appeared that the Cattleyas with the straight bark mix had lost all of the roots that they had at the beginning of this experiment and grew new ones. Straight bark treatments dried out quickly and were often dry when other treatments were still damp. This caused the growth in these orchids to slow down tremendously. This was probably caused by a lack of water in the dried fir bark although it was soaked prior to use. In a

study by Poole and Sheehan (C 1997), they compared fir bark to tree fern, etc., and produced similar results that showed fir bark to be a poor medium when used alone.

Although straight sphagnum produced fair growth for the Cattleyas, it worked the worst out the four mixes on the Phalaenopsis. In the Phalaenopsis group potted in straight sphagnum, I noticed that all of the Phalaenopsis had purple leaves, which was possibly from being too wet or a lack of air although the roots were fine. The straight sphagnum kept water in the pot for a long time when other treatments were dry.

Fir bark top dressed with sphagnum was the best with Cattleyas with coco fibre being a close second. The Cattleyas grew better with the mixes in this experiment over all compared to the Phalaenopsis. This may be because the green house low temperatures in the fall and winter are less than optimum for the Phalaenopsis. The results of this experiment may have been different if the orchids had been left unexamined for a few more months because some of the orchids were beginning to put on new growths.

Even though these results will help the horticultural industry, the results will only go so far. More research is needed particularly on plants closer to blooming size. A trial using such plants would be interesting considering the Canadian Orchid Congress Culture Sheets suggest growing in bark based mixes, which in this study was one of the worst choices.

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Ferrusi M. March 2004. "Growing Odontoglossums In Coir, Orchidata" Orchid Society of the Royal Botanical Gardens, Burlington, Ontario

This article is a shortened version of a grade nine science fair project for which William won the District Horticultural Award.

The Typographic Error

The typographic error is a slippery thing and sly. You can hunt till you are dizzy, But it somehow will get by. Till the forms are off the presses, It is strange how still it keeps; It shrinks down in a corner And it never stirs or peeps. The typographic error, Too small for human eyes, Till the ink is on the paper, When it grows to mountain size. The boss, he stares with horror, Then he grabs his hair and groans; The copy reader drops his head Upon his hands and moans. The remainder of the issue May be clean as clean can be, But that typographic error Is the olny thing you see.

Anonymous

I and Pangur Ban my cat,
'Tis a like task we are at:
Hunting mice is his delight,
Hunting words I sit all night.

'Tis a merry thing to see At our tasks how glad are we, When at home we sit and find Entertainment to our mind.

'Gainst the wall he sets his eye, Full and fierce and sharp and sly; 'Gainst the wall of knowledge I All my little wisdom try.

So in peace our task we ply, Pangur Ban my cat and I; In our arts we find our bliss, I have mine and he has his.

From 9th century Irish manuscript

COMING EVENTS

2004

Nov 13-14: Niagara Region OS, CAW Hall 124 Bunting Rd, St. Catharines, Ont Contact: Tom Cunningham, Show Chairperson Email: tessiercunningham@cogeco.ca, Phone: 905-934-8289,

2005

Feb 5-6: The Southern Ontario Orchid Society, NEW LOCATION: the Japanese Canadian Cultural Centre.

"http://www.soos.ca/"

Feb 25-27: Orchid Society of Alberta in the Grant MacEwan College, Millwoods Campus, 7319 - 29 Ave.Edmonton, Alberta.

Showchair: Mary Wilke, mjwilke@shaw.ca "http://

www.telusplanet.net/public/macklam/pages/aborchsoc.html"

March 3-6: Victoria Orchid Society Spring Orchid Show in the Students' Union Building, University of Victoria.Contact: "Ingrid Ostrander" mail:ifl@telus.net 250-652-0753

"http://victoriaorchidsociety.ca/"

Mar 11-20: 18th World Orchid Conference in the town centre of Dijon, France "http://www.woc2005.org/"

March 12-13: London Orchid Society Orchid Show, The Ukranian Club, Gore Road, London, ON "http://los.lon.imag.net/"

March 18-20: The Manitoba Orchid Society. "http://www.manitobaorchidsociety.ca/default.htm"

March 19-20: Orchid Society of the Royal Botanical Gardens, 680 Plains Rd., Burlington. Showchair is Ben Boers, email bboers@cogeco.ca "http://www.osrbg.ca/"

April 2-3: The Orchid Society of Nova Scotia at the Nova Scotia Museum of Science, Halifax. Contact: Jean Ikeson 866-798-0514 email: greenhouses@win.eastlink.ca

"http://www.chebucto.ns.ca/Recreation/OrchidSNS/"

April 7-10: The Regina Orchid Society annual show and sale at the Core Ritchie Community Centre, 445 14th Avenue, Regina. Contact Charles Eisbrenner, email:

reginaorchidsociety@sasktel.net

April 9-10: Les Orchidophiles de Montreal Show, College de Maisonneuve, 2700 Bourbonniere St., Montreal, Quebec. For information: Andre Poliquin (450)653-9590

e-mail: mor-pol@sympatico.ca "http://orchidophiles.gc.ca/"

April 15-17: Central Vancouver Island Orchid Society at Country Club Center, Nanaimo, BC. Contact: Sue Christenson, email: CVIOS@shaw.ca "http://members.shaw.ca/CVIOS/CVIOS/"

April 16-17: Kingston Orchid Society at Portsmouth Olympic Harbour. For further information email: kos@cogeco.ca "http://home.cogeco.ca/~kos/index.htm"

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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Editor: Jerry Bolce

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 culivation 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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