



# Orchid Society of Santa Barbara

*Meeting: Wednesday, March 9, 2005*

►► **NOTE THE LOCATION!** ◄◄

**MacKenzie Adult Building**

at MacKenzie Park

3111 State Street (at Las Positas)

*enter parking lot on Las Positas*

**Meeting begins at 7:30 pm**

## **PROGRAM**

**Harry Phillips** of Andy's Orchids will speak to us about  
**Mounting Orchids**

If you have ever been to the spring show, you probably have admired the exhibit and vendor displays of Andy's Orchids, where plants are naturalistically mounted on bark or twigs. There are a number of growers who feel that many orchids do best when mounted in an approximation of their growing conditions in nature. Come hear Harry Phillips, brother of Andy and longtime orchid grower, speak to us about mounting orchids.

## **CALENDAR OF UPCOMING EVENTS** - *It's Show Season!*

March 4-6, 2005

**60<sup>th</sup> Annual Santa Barbara International Orchid Show "Celebration of Orchids"**

Fri-Sun, 9am - 5pm. Earl Warren Showgrounds. [www.sborchidshow.com](http://www.sborchidshow.com). Be sure to visit the OSSB sales booth! Remember that both Santa Barbara Orchid Estate and Cal-Orchid have open houses during the show.

March 11-20, 2005

**18<sup>th</sup> World Orchid Conference**

Dijon, France.

March 12-13, 2005

**UCI Arboretum Winter Orchid Show**

Sales, lectures, repotting demos, Rowland cymbidium collection on display, \$2 admission. (949)824-5833.

March 19-20, 2005

**Five Cities Orchid Show and Sale**

\$4 admission. 800 W. Branch St, Arroyo Grande. [www.fcos.org](http://www.fcos.org) or (805)929-1791.

## Summary of the February 2005 Meeting

(Your editor was out of town for the meeting and thanks Jeff Thompson for his notes on the lecture; any errors herein are completely my own misreading of his notes. The following is part summary, part commentary on a topic your editor finds fascinating and not a little bizarre.)

Most of us think of fungus as something we want our orchids to avoid. However, our February speaker, our own John Holson of Santa Barbara Orchid Estate, informed us at the February meeting that not every fungus is destructive to our plants. Holson spoke to the membership about the symbiotic relationship between certain types of fungi and orchids, a topic he studied at the University of California at Santa Barbara.

A peek in the dictionary reveals that *mycorrhiza* refers to the symbiotic relationship between a fungus and the roots of a seed plant. For most plants, this is an ectomycorrhizal relationship, but orchids are unique. Orchids allow symbiotic fungi *inside* their cells -- an endomycorrhizal fungus.

This relationship is so intimate that orchids have dispensed with investing their seeds with nutrients.

Most plants have seeds surrounded by food to give the seed a running start until it can make its own leaves and roots and food producing mechanism. The mother plant invests a fair amount of energy into making each individual seed -- after all, it has to make food for the seed, too. As a result, fewer seeds are produced.

Look at an orchid seed pod and you will find miniscule seeds, almost like dust. These are naked seeds, with no nutrients of their own. The orchid plant can make millions of these seeds, and the seeds can be widely dispersed because they are so small and light.

But, when the seed germinates, it will need food. If the seed is fortunate enough to encounter a mycorrhizal fungus, the seed will allow the fungus into its cells. The fungus, then, will act as a root system, collecting water and providing nutrients to the seed.

How frustrating it must have been for orchid breeders before the development of flasking techniques! Recall that breeders used to simply scatter seeds from orchid seed pods onto

new growing medium. Germination rates were poor. Those that did best often grew at the base of the mother plant. We know now that they were taking advantage of mom's symbiotic fungus!

Today, germination rates are excellent with the development of in vitro techniques. By putting a nutrient solution in a sterile flask and dusting this solution with seed, breeders replace the mycorrhizal fungus with artificial sugars. This works for clones, too. Growers can take the meristematic tissue, or growing part, of a prized orchid, chop it up a bit, and put those bits in a flask to make lots of little prized clones.

Surprisingly, orchids, which are so picky about their pollinators, are not picky about their fungal relationships. There are five major fungi commonly involved in mycorrhiza infections. How peculiar that a plant demanding, for example, to be pollinated by a particular species of wasp (and only the males, thank you) would accept any old symbiotic fungus!

The fungus can, however, be too strong or too weak for the plant. Adult plants tend to associate with stronger fungi.

Different orchid species also use the relationship in different ways. Tubers of *Dactylorhiza* species utilize fungus during dormancy. This terrestrial genus can be found in Europe, the Middle East and temperate Asia, with one species in North America.

Saprophytic orchids have a special relationship with fungi. These are plants that obtain their nourishment from dead and decaying organic matter. In the case of orchids, the fungi decompose woody and leafy material, and the orchids receive nutrients from the fungi. *Coralorhiza* orchids, which are saprophytes, are also parasites; they take everything from the fungus. Saprophytic orchids need their fungi for germination, even in flask.

Fortunately for most of us who love growing orchids, there is no need to address issues of mycorrhiza infection or the lack thereof. Most commonly cultivated orchids reproduce just fine with some agar and sterile flasks. And yet I have to wonder ... are the good growers in my greenhouse somehow the ones that found their own mycorrhizal fungi?

## How to View an Orchid Show

By Heidi Kirkpatrick

You are probably thinking that I have an awful lot of hubris to tell you how to look at an orchid show. I am, after all, neither orchid judge nor orchid guru. But I do try to have an active imagination about the experiences of others.

And imagination is the point of this exercise. Think about how you usually view a show, then step back and imagine what someone else experiences. Maybe you'll rediscover the heady delight in so many beautiful orchids. Maybe you'll discover an appreciation for the floral arrangements. Maybe you'll better understand what earned a plant its ribbon or award. And in finding another perspective, perhaps your enjoyment of an orchid show will be enhanced. Commercialism aside, isn't the point of an orchid show to enjoy beautiful plants and learn a little something, too?

Each person, of course, has their own methods for viewing a show. But we could, perhaps, generalize the reactions of different groups of orchid lovers. To start you out, I'll use my imagination to create some viewer profiles.

- *The non-orchid-grower.* Maybe you saw some orchids at Trader Joe's and wondered what a show would be like. Maybe you have friends (or, perish the thought, a spouse) entranced with the hobby. You probably came out of casual curiosity to see these mysterious denizens of faraway habitats that might seem only vaguely tamed by intrepid growers. What a feat to get a bloom from plants like these! What an overwhelming rush of color and beauty!
- *The novice.* Instead of just looking at that orchid at Trader Joe's, you bought it. Maybe you have attended a few society meetings. What you really want is to get that plant to bloom again. So you come to the show, and suddenly you are immersed in more orchid shapes and colors than you dreamed existed. It is almost overwhelming, and perhaps you feel a little humble upon seeing an exquisite cattleya that puts your own, modest flower quite in the shade.
- *The casual grower.* The show isn't just about orchid displays; it's about shopping. What plants do you see that you might want to grow ... and do they have them in the sales area? The show is a display of possibilities. The ribbons and awards might be guides to the sorts of plants available from the vendors whose exhibits struck your fancy. You see beauty, but some of it is beauty you can envision in your own collection.
- *The dedicated hobbyist.* Perhaps some of those ribbons or awards are on plants belonging to you. Or perhaps you are determined to purchase an awarded

plant. You have been to enough shows to recognize most of the genera displayed; now a show is a treasure hunt - a search for a peculiar species or novel cross you've heard about but not seen in person. Perhaps you have favorite exhibitors and pay special attention to what they have installed this year. Maybe you feel confident enough to make your own critique of which plants the judges chose to award and which exhibits received trophies.

- *The commercial grower.* Orchids aren't just a hobby; they're a business. You might spend some of your time viewing the show with an eye to assessing the competition. What hot new plants do they have for sale? What is the quality of the plants in their display? What plants might you be buying for future sales?
- *The hybridizer.* Those aren't just beautiful flowers. Those orchids are potential mamas and papas. Which new crosses look successful? Which new crosses make you wonder what the other guy was thinking? The flowers in an orchid show may give you ideas for new directions in your own hybridizing.
- *The judge.* You've had years of training about what makes a quality flower or a thematically attractive display. You see orchids with a critical eye to form and color, comparing them mentally with similar orchids you have seen at other shows or at judging sessions. Do you agree with the other judges about the awards, trophies, and ribbons?
- *The floral arranger.* Your critical and artistic eye assesses the design of the exhibits, but you look with the most interest at the floral arrangements. To you, beautiful orchids can be made more beautiful by a good floral arrangement. Design is so important!

Do you see yourself in any of these imaginary profiles? I'm probably a blend of casual grower (oooooh, the sales area) and dedicated hobbyist (oooooh, look at that obscure hairy little species). I have favorite exhibitors, I look for awarded plants, and I try to find all the winning displays. But at my next show, I want to recapture some of that wide-eyed, magical joy in the beauty I see. I intend to spend more time amongst the floral arrangements. And rather than simply nodding when I see an award or ribbon, I will try to figure out what the judges saw that made the winning orchid better than its neighbors. Maybe I'll even try to imagine the next step in hybridizing.

There is, of course, no "right" way to view a show. But perhaps trying a new viewpoint will enhance your enjoyment of the next orchid show you attend. Use your imagination! And have fun!

## **Announcements**

- ▶ *Sad News.* I am sad to report that longtime OSSB member Dr. Alan Chovil passed away.
- ▶ *Correction.* In last month's newsletter, I incorrectly worded Randy Arnowitz's ad for greenhouse assistant ... and got his phone number completely wrong. Here is a corrected (I hope!) version. Randy Arnowitz is looking for someone to take over one of his orchid greenhouse accounts. This involves one to two hours a week managing a collection. Contact Randy for details. His correct telephone number is 886-6278.
- ▶ *Contact Your Newsletter Editor.* If you use an old newsletter to find the address of your newsletter editor, the address will be incorrect. My email address is now hkorchid@juno.com.

### **Last Notice: Pay Your OSSB Dues!**

OSSB Membership renewals are due in January each year! You may pay our new treasurer, Angela Watt, at the meeting, or send her a check for \$25, payable to OSSB. Do not send cash! Send your check to Angela Watt, OSSB Treasurer, 513 Barling Terrace, Goleta, CA 93117. To help us keep our records current, please include your name, address, telephone number(s), and email address.

- Check out our web site! [www.west.net/~orchidsb](http://www.west.net/~orchidsb)
- OSSB Officers for 2005:  
President - Phil Watt      Vice President - Don Brown  
Treasurer - Angela Watt      Secretary - Heidi Kirkpatrick