

Orchid Society of Santa Barbara



Meeting: Wednesday, February 11, 2004

**Louise Lowry Davis Recreation Center
1232 De La Vina (at De La Vina and Victoria)**

Meeting begins at 7:30 pm

Program: Speaker to be announced

CALENDAR

Pacific Orchid Exposition "The Art of Orchids"

February 20-22, 2004

Festival Pavillion, Fort Mason Center, San Francisco. Friday: 10 am to 6 pm. Saturday: 9 am to 6 pm. Sunday: 10 am to 5 pm. For more information, visit www.orchidsanfrancisco.com

Five Cities Orchid Society Show

March 5-7, 2004

South County Regional Center, 800 W. Branch St., Arroyo Grande. Contact: (805)929-1791 or orchidlady@earthlink.net

59th Miami International Orchid Show

March 5-7, 2004

Coconut Grove Convention Center, 1700 S. Bayshore Dr., Miami, FL. Contact: Dorothy Bennett (305)661-1471 or orchidot@aol.com

59th Annual Santa Barbara International Orchid Show "The Wonderful World of Orchids"

March 19-21, 2004

Earl Warren Showgrounds, Santa Barbara. Hours: 9 am to 5 pm. For more information, please visit www.sborchidshow.com.

OSSB Officers for 2004

President – Phil Watt Vice President – Don Brown Treasurer – Carole Cowan Secretary – Heidi Kirkpatrick

Summary of the January 2004 Meeting

- **President Phil Watt** welcomed guests and new members, including Ashley Morrison and Bella Chen.
- **Wayne Ferrell** announced that the *Santa Barbara Cymbidium Society* meets on the 3rd Wednesday of each month at the Carpinteria Public Library.
- **Al Svoboda** reminded everyone that the spring show is coming up, March 19-21, at the Earl Warren Showgrounds. OSSB will have an exhibit, so start grooming your plants to appear at the show!
- The **29th Annual Cymbidium Congress**, held in conjunction with the show, will be on March 20. For more information, see the announcements section.

Program

The membership was pleased to welcome James Rose of Cal-Orchid as our January speaker. Rose spoke to us about the wild world of orchid culture, illustrated by examples of the various pots, media, and other assorted items commonly used by orchid growers.

Rose began his discussion of culture with the comment that, "Orchid growers are never satisfied." A perfect example of this is the orchidist's love-hate relationship with the humble orchid pot.

Rose observed that the perfect pot – durable, functional, attractive and economical, does not exist. Clay may be attractive, but dries out too fast. Glazed clay retains more moisture, but is expensive and heavy to ship. Black plastic? Ugly and hot in the sun. Lipped plastic pots? Too hard to stick a tag into.

Most growers, especially commercial growers, choose plastic for economy and function, but there are many different types of plastic pots. Regular gallon pots are really ugly. Plastic Japanese cymbidium pots are more attractive, but also more expensive; additionally, not all plants prefer tall pots, though Rose feels deep pots do well for plants without heavily branching root structure, such as paphs. Some European growers use clear plastic, having found that phal roots will photosynthesize through the pot. Rose noted that pots with interior ridges provide a barrier to root growth. He likes pots with air cones, side slits, and lots of bottom drainage – but they are expensive.

As for fertilizer, Rose exclaimed, "Wow, what a scam!" For hobbyists, he recommended a

balanced formula (e.g., 20-20-20), whatever is on sale, and observed that cheap fertilizers have basically the same ingredients as the expensive ones. However, he proceeded with a few caveats. Many growers avoid urea (a nitrogen source); Rose said it works in the summer, but is no good in the winter. He does not use it. Osmocote, a slow release fertilizer, has similar cold-temperature problems, though the newer Nutricote is more promising. The pH of a fertilizer solution is very important – 5.8-6 for proper nitrogen absorption – which may explain why many fertilizers seem to work poorly. He noted that the new fad for orchids is low phosphorus fertilizer, such as 19-4-23 (phosphorus concentration is indicated by the second number).

Another source of orchid grower heartburn is choosing a mix. Rose's criteria for growing medium are availability, economy, durability, and ease of use. He noted that sometimes the simple mixes work the best.

Growing media can be divided into organic and inorganic, with many growers using some combination. Rose feels a mix is tricky if there is no organic material to fix nitrogen. Many inorganic additives have been used by orchid growers. Spun fiberglass has fallen out of favor; its disposal was difficult. Oasis (florist's foam), is unforgiving of poor water and inappropriate fertilizing. Rose no longer uses pumice.

Charcoal is great stuff, but has gotten expensive. Most people use perlite (sponge rock) to aerate a mix, but Rose cautioned that very pure water can leach fluoride from perlite. Granite is heavy. Diatomite is lighter and some folks get great results.

Among the organic media used historically is tree mold. Osmunda (tree fern fiber) is hard to find, expensive, and hard to use, but was once very popular and yielded good results. Peat moss is too fine and tends to rot roots. Redwood fiber is very acidic. Mounted plants love cork, but Rose found that cork chunks in a pot broke down too quickly. Sphagnum is great stuff, but tricky to use and expensive. Coir can be hard to rewet and coconut chunks too fluffy. The quality of fir bark currently available is pitiful, but it is still the best option for most growers.

What is an Orchid?

By Heidi Kirkpatrick

I shall begin this month's editorial with an anecdote from last month's meeting. One of our newer members, looking at the *Bonatea speciosa* on the plant table, asked Don Brown what made it an orchid. Don commented to me later that he felt he'd made a poor explanation. I made a subsequent attempt, with probably twice as many words and half as much substance.

This episode made me think. What the heck is an orchid? I know that botanists have specific criteria for defining orchids. (You AOS judges can stop reading now, as you probably had this material on your first test.) But exactly what are these criteria? Despite the fact that I babbled on at the meeting about what makes an orchid, I realized that I could not speak coherently about the topic. So I went to Robert Dressler's *The Orchids*.

Monocots, parallel venation, no vascular cambium, resupination, blah, blah, blah, blah. Dressler is an excellent resource; I felt like I was in school again, trying to decipher obscure textbooks the night before the exam.

As I sit here with Dressler and half a dozen other orchid books open on the desk and floor around me, I feel quite inadequate to the task of describing an orchid. Then again, maybe I can convey what I have learned in a simplistic fashion. Just don't confuse me with an orchid expert!

Though orchid plant growth is distinct and interesting, what botanists generally use to distinguish our favorite plants from the rest of the plant world is the flower. Orchid flowers are unique, for all that many seem to mimic non-orchid blooms in an attempt to trick pollinators into a quick visitation.

The first characteristic I learned to use in identifying orchids is their bilateral symmetry, discussed by the Sheehans (Tom and Marion, *Orchid Genera Illustrated*) as zygomorphic flowers. Orchids have an often showy lip around which the rest of the flower parts (petals, sepals) are arranged symmetrically. If you cut a flower in half through the lip, the two halves are mirror images of each other. But you must cut through the lip to get this symmetry. Other flowers are either symmetric (e.g., a lily) or irregular (e.g., a canna).

What everyone mentions, from the scientific Dressler to the coffee table Alikas and Nash (*Orchids*), is the column, which is unique to

orchids. As a novice, I wondered what an architectural element had to do with plant structure. I have since learned that the column is the name for the sexual parts of an orchid. In most flowers, the male and female parts (stamens and pistils) are separate. Dissect a lily, or a rose or a daylily, to verify the truth of this. Orchid stamens and pistils have fused to form the column, thereby distinguishing orchids from other flowers.

Many authors discuss resupination as a distinguishing characteristic. This means that the lip is on top when the bud is forming, but the bud twists around just before blooming so the lip is on the bottom. However, Pridgeon (*Illustrated Encyclopedia of Orchids*) notes that species like *Cycnoches* do not rotate while some others like *Malaxis* rotate too far.

Orchid pollen is unlike that of other plants. Rather than being powdery, it is clumped together in two to twelve clumps called pollinia. The number of clumps is also useful in distinguishing between species.

Orchid seed is quite unusual. While other flowering plants produce seed consisting of embryo, endosperm (food for the embryo) and seed coat, most orchids eliminate the endosperm. They produce instead millions of tiny seeds dependent on finding a nice bit of fungus that will feed them until they can photosynthesize. (In the lab, the fungus is replaced by that goeey nutrient medium at the bottom of flasks.)

There are other significant characteristics, but these, I think, are a good beginning, and easily distilled into a list:

- 1) Bilaterally symmetric – get a mirror image only if the flower is cut through the lip.
- 2) Male and female parts fused together into a column.
- 3) Flower bud twists before opening to get the lip at the bottom of the flower.
- 4) Pollen is clumped together (pollinia).
- 5) Tiny seed copiously produced.

When you see a potential orchid flower, the column and the bilateral symmetry with a lip are easiest to identify. But be reassured that orchids sometimes are hard to spot at a glance. The judges of the first awarded *Bonatea speciosa* insisted on dissecting a flower to make sure it really was an orchid.

Announcements

- **OSSB DUES for 2004!** Dues are \$25. Pay at the meeting, or send a check made out to OSSB to Carole Cowan, 209 Cedar Drive, Santa Barbara, CA 93108. If anything about your name, address, telephone number, or email has changed since the last roster *please* provide the current information to Carole Cowan or Heidi Kirkpatrick.
- **29th Annual Cymbidium Congress, March 20, 2004, University Club of Santa Barbara, 1332 Santa Barbara Street.** Full registration by March 1 for CSA members is \$110 (\$125 non-members) and includes 6 lectures, 2 panel discussions, free unlimited admission to the SB International Orchid Show, free admission to the Friday night show party, continental breakfast, luncheon, and gala awards banquet. The speakers are as follows: *Ray Dix* on red cymbidiums, *George Hatfield* on pendulous mini cymbidiums, *Milton Carpenter* on warmth tolerant cymbidiums, *Glen Decker* on phragmipedium breeding, *Norito Hasegawa* on section Barbata paphiopedilums, and *Francisco Baptista* on complex paphiopedilums. For more info, contact our own Al and Sandy Svoboda at 969-4536 or asvoboda@earthlink.net

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