The Sheath

April General Meeting

Date: April 25, 2008

Time: 7:45 PM General Meeting

Place: San Mateo Garden Center

605 Parkside Way, San Mateo, CA

Take the Alameda de las Pulgas exit off of Hwy. 92. The Garden Center is located between 26th and 28th Avenues

Mailing address: P.O. Box 6894, San Mateo, CA 94403-6894

Skill Session at 7:00PM

Amy and Ken Jacobsen will show us how to test our orchids for viruses.

Meeting plus Show and Tell Table - 7:45 PM followed by

Speaker: Gerardus B.
Staal, PhD - Pests,
Diseases, and other
Nuisances

Opportunity table by **Gerardus Staal**

Everything you always wanted to know about those nasty little creatures in our greenhouses, but were afraid to ask!

Gerardus B. Staal, PhD

Gerardus is a Dutch native with a masters degree in tropical agronomy and a doctorate in entomology. He worked as a research entomologist for Bay Area companies developing both conventional pesticides and selective pesticides based on insect hormonal systems. He retired from entomology in 1990.

Gerardus' experience with orchids spans over 30 years. Today his interests are in hybridization and propagation. His flasks are commercially available under the Peninsula Hybrids label with emphasis on cool growing orchids from tropical regions. He has registered hybrids in the Odontoglossum, Cattleya and Pleurothallid alliances. More recently Gerardus has assembled a cross section of Bulbophyllum and cooler growing Dendrobium species, of which many hybrids and species propagations are now in the flasking stage.

Gerardus' work has been acknowledged by many AOS awards, including 3 (joint) Awards of Quality for Masdevallia hybrids and several Awards of Distinction for novel directions in hybridizing.. One new trigeneric hybrid genus was named Staalara. (The hybrid was Staalara Gerardus AD/AOS.)

Gerardus has served on the boards of three local orchid societies (MOS, POS, OSC), a term as president of the Pleurothallid Alliance and has been a member of the AOS Research Committee. He frequently lectures in orchid societies on topics such as Pleurothallid hybridizing, Epidendrums and their allies, Bulbophyllums, and Pest and Disease Control in Orchids.

Gerardus will share his in-depth knowledge about the various pests that affect orchids, how to recognize them, and what to do about them. He will provide some suggestions as to possible treatments for these pests. This is a very informative lecture that will provide much needed information to all orchid growers, from the novice to the expert.

Gerardus will also provide some wonderful plants for the opportunity table. Sure to please.

Skill Session:

Ken and Amy Jacobsen will discuss plant viruses. Here is your opportunity to check on that plant that has been a problem or a plant with suspicious appearance. Ken and Amy invite you to bring in a small piece of a questionable plant for testing (limit of one plant per participant).

- Make sure your plant piece is in a safely sealed baggie.
- The size of your plant piece is no more than 1 inch square.
- The cost for testing your plant will be \$5.

This money covers the actual cost of the detection system. This is an excellent opportunity to learn how to: use the system; interpret the test results; and where to buy your own test kits. It isn't necessary to bring in a plant part to learn, but if you do, please bring only one!

President's Corner

Spring is finally here and hopefully your orchids have shaken off their winter blues and are sporting new growths and spikes. It's a good time to check your plants for signs of disease and pests, and this month's orchid speaker will provide an in depth introduction to this topic. Gerardus Staal is a retired entomologist ("bug scientist") and his lecture will provide everyone with much needed information on how to recognize different pests, viruses and other signs of disease, as well as what to do when you find them.

We had a great turnout last month, and our vote to change our bylaws and articles of incorporation to be in compliance with the 501 (c) 3 regulations is about 50% complete. This month those who did not vote will be receiving a mail ballot-PLEASE, vote, and send your ballot back with the stamped, addressed envelope enclosed. We need a 2/3 majority of our membership in order for these changes to be made.

Mary Gerritsen	
President, POS.	

Coming up

Mark your calendars for the May 23rd meeting. **Dan Newman** will speak about miniature orchids and provide the opportunity table. Our June meeting will feature **Paul Chim** talking about orchids of China.

The greenhouse tour bus this year will take us to local greenhouses. We had an incredible bus and driver last year, and **Brett Francis** will be reserving our transportation through the same company this year.

Member News

BIRTHDAY GREETINGS TO: Carol Blake, Gregory J Corrales, Don Creavy, Patsy Gower, Michael Green, Jocelyn Jamais, Carl E. Jukkola, Mark Khoo, Japheth Ko, Tanya Lam, Eric Langland, Chih Lee, Elizabeth P. Lee, Cece Paape, Elton Robinson, Valerie Tonkin, and Ted Wuerthner.

Congratulations to Marlene Beumer! The March door prize - a \$50 gift certificate from Angelic Nguyen's greenhouse - was won by Marlene. Door prize tickets were given to all March meeting attendees. Similar door prizes will be offered at random meetings throughout the year. The plan is to offer these at more than half of the meetings.

Thank you Scott Forrest, for your donation to the society. Scott made a donation along with his membership dues. It is very much appreciated!

Wishes for a speedy recovery to Rudy Gerusa, who is recovering from arthroscopic knee surgery. Hope to see you back at the meetings soon Rudy!

Our heartfelt condolences go to Ted Wuerthner on the passing of his wife Page.

We also send our condolences to **Christene Kradjian** on the loss of her mother.

Unfortunately, we must also give our condolences to **Jim Hamilton** on the loss of **Ron Ehlers**. Ron passed away very suddenly and unexpectedly this month. Ron and Jim owned Petite Plaisance. Ron was a past president of the San Francisco Orchid Society.

Editor's corner

Our March meeting featured the Stump the Experts panel. I sent in several questions and a photo to Mike Rector by e-mail, then missed the meeting due to one of those darn bugs. Mike reported back from the meeting that the photo of my phrag with brown leaves showed the culprit. I was using coconut husk chips in my potting mix - and they need to be rinsed may times due to retention of salts. (Water issues were ruled out as I have an RO system in the greenhouse.) I have a tendency to throw various things into the mix when I repot, but not with consistency or following any recipe. (Could this be one reason why my orchids don't resemble Anna Chai's?) I went out to my greenhouse and sure enough, all of my phrags that had this problem had been potted with the coconut chips. The phrags that were doing well had missed out on that particular repotting session.

Speaking of repotting sessions - our **annual potting workshop** will take place at Dennis Olivas' greenhouse on Sunday, May 18 beginning at 10AM. Details are in the Upcoming Events section.

Eric (my husband) and I took a long weekend and headed to Sonoma Orchid Inn. I had seen their ad at the San Francisco show the year before and was intrigued by an inn with "orchid" in it's name. We were not disappointed. There were several lovely orchids in bloom in the house and several stunning Masdevallias on the veranda. Our hosts, Brian and Dana, were very genial and knowledgeable about orchids. We had just missed the blooming of the small pink Calypso bulbosa var. occidentalis that grows in Armstrong Woods Redwood Reserve. Maybe next year! (Though the state has scheduled this park to be closed, along with many others.)

Gerardus will be speaking about orchid pests this month - just in time. Aphids, mealy bugs, and scale are out in force in my greenhouse this year. Right now I am trying out lady bugs - which are not free of controversy themselves. See you at the meeting! Chaunie

Upcoming Events

April 19 - Gold Coast Cymbidium Growers Sale - San Mateo Garden Center, 605 Parkside Way, San Mateo - 10 AM - 4 PM. Further information - e-mail GoldCoastCymbidiumGrowers@yahoo.com or call Audrey at (408) 741-2882

April 25, 26, & 27 - San Joaquin Orchid Society Show & Sale - Sherwood Mall, 5308 Pacific Ave., Stockton - 10AM-9PM Friday and Saturday, 11AM-5PM Sunday. For more information - www.sanjoaquinorchidsociety.org

May 9-11 - Orchid Society of California Mother's Day Sale - Lakeside Garden Center, 666 Belvue Ave, Oakland. Free Admission. Fri. - noon to 6 PM, Sat & Sun 10 AM to 5 PM. Information at www.OrchidSocietyofCalifornia.com

May 10 - Diablo Orchids Spring Sale - 101 Lockwood Lane, Pleasant Hill - 9AM to 4 PM for more information call (925) 946-9740 or http://www.diabloorchids.com/3.html. The website lists some of the orchids for sale.

May 17 and 18 - D&D Flowers Spring Open House and Sale - 9:00 AM to 4:00 PM - Half Moon Bay. The greenhouse is not open to the public except for the spring and fall open house events. Great prices on original divisions of Cattleyas, Oncidiums, Cymbidiums, Paphiopedilums, Phragmipediums and many more genera. Really good deals... priced to sell. We accept cash or checks but no credit cards. There is no list of plants available and divisions are sold on first come for serve. We are located in Half Moon Bay 1/3 mile east of Main Street off Hwy. 92.

Just east of Spanish Town on Hwy. 92 there is a house and firewood business. Turn onto the street between the house and firewood business and go over the bridge into the greenhouse complex. D & D Flowers is the first greenhouse on the right. If you go beyond the large dinosaur statues in front of the house and Spanish Town and you are at Main Street, you've gone too far.

Mahalo! Dennis Olivas

May 18 - POS annual potting workshop will take place at Dennis Olivas' greenhouse in Half Moon Bay - 10AM to noon. (This coincides with the D&D Flowers orchid sale. Dennis is one of the Ds. Please find directions above.) This is your chance to repot one of your pesky - but pest and disease free - orchids with expert help. If you don't have an orchid to repot, you can wander on into Dennis's greenhouse and probably find one to buy that could use the repotting. (Just a guess on my part - ed.) POS will supply potting mix, razor blades, gloves, and pots.

May 31-June 1 - Express Orchid Exhibition. 9AM-5PM both days and free admission - Holiday Inn Express on 4th in San Jose.

Meeting Refreshments

Earn a free strip of Opportunity Table Tickets by bringing refreshments to any of the meetings! Your fellow members love all kinds of goodies. Please see either Olga Ostrovsky or Rebecca Grubbs for your "thank you" strip of opportunity tickets!

This article courtesy of The Orchid House website and Peter Croezen

From Seed to Community Pot

It takes from six months to one year for a seed capsule to mature. It is not uncommon for a seed capsule to contain 10,000 to 100,000 seeds. Some seed capsules may contain as many as 3,000,000 seeds. Orchid seeds are very transparent and very small, tiny specs, at times barely visible to the human eye. Seeds having the possibility for growth are said to be viable. A viable seed must contain an embryo, but the presence of an embryo in a seed is no guarantee that it is viable. Seeds may be checked for embryo presence, or absence, by placing them under a microscope.

Orchid seeds have only minute reserves of nutrients and need a fungus for germination in nature, this is called "symbiotic" germination. The required nutrients are provided by the fungus. Growth of seedlings is rapid. Until 1922, it was the only known method of propagating orchids from seeds.

In 1922, Dr. Lewis Knudson of Cornell University provided us with a simpler method, "asymbiotic germination." Seeds are germinated and seedlings are grown on a sterile, jelly like, culture medium containing sugars and many other nutrients. Germination takes place without the aid of a fungus. Today, Knudson's formula "C" medium is still being used in laboratories all over the world. Since unwanted bacteria and fungi grow even faster on a sugar rich medium than orchid seedlings, all seeds, flasks, medium, and tools used must be sterilized. All the work involved, like sowing, transferring seedlings etc, is performed in a sterile environment, such as a laminar flow hood or a glovebox.

Sowing of orchid seeds in a "mother flask" is done in a sterile environment, like a laminar flow hood. Filtered through a HEPA filter, sterile air enters the cabinet and passes over the work area. Sowing of seeds is a simple procedure. Germination medium is prepared and poured into clean flasks. Flasks with medium are then autoclaved at 120 degrees Celsius and 15 lbs. pressure for 20 minutes if small quantities of medium per flasks; longer for larger quantities. Cooled flasks are moved into the laminar flowhood where sterilized seeds are distributed evenly on top of the medium. Flasks are tightly sealed and may have a filter to allow air and moisture exchange between inside and outside. The filter must be dense enough to keep micro organisms out. The latter would spoil the germination process. Flasks are then placed under fluorescent lights for a 12 hour photoperiod, for most epiphytic species. Some orchid seeds need total darkness to germinate. After two to three months in the "mother flask", seedlings are large enough to be transferred to a richer medium and larger vessel. The transfer process is called replating.

Replating, or moving seedlings from the old vessel to another with fresh medium, is done in a sterile environment. Seedlings are replated when they have reached a stage of growth at which they will greatly benefit from being placed on nutrient richer medium. Seedlings will now grow very rapidly and usually remain in these flasks for approximately one year, or until they are large enough to be planted out to a community pot.

The community pot may hold from fifteen to 30 seedlings. Plants may spend up to one year in the community pot, before being transplanted to individual pots. After several more transplants and lots of tender loving care in years following, the orchids reach the "flowering size" stage, finally! From seed to flowering plant takes from three to seven years, depending on which orchid species seeds were sown.

Caring for Flasks

It is fun and educational watching orchids grow inside flasks. Flasked seedlings need light/dark, proper temperature and humidity. Handle flasks by grasping them near the bottom, away from the foil covered filtered top. Covered filter tops keep out micro organisms that could spoil the contents when allowed to enter the flasks.

Never place flasks in direct sunlight, unles you wish to cook the seedlings. The light should be of low intensity, 300 footcandles, gradually increased as seedlings grow bigger. Place them 30 centimeters below two four feet coolwhite 40Watts fluorescent lamps that cover a growing area of two by four feet. Lights must be on 12 hours per day. Remember the 12 hours uninterrupted darkness is equally important for seedling development.

Temperatures in the 24 degrees C (75 degrees F) range are adequate, give or take 2 degrees C. Keep the variation between day and night time temperatures to an absolute minimum.

Flasks that have filtered tops allow air and humidity exchange of the inside with the environment in which they are placed. To prevent the culture medium from drying out, place flasks in an environment where the relative humidity is about 60%. Keep air movement in the flasking area to a minimum. No fans!

Deflasking Seedlings

Seedlings stay in replate flasks for about one year, but can stay longer if the medium has not yet been depleted of necessary nutrients. Seedlings are deflasked, when leaves are at least 5 centimeters long, cleaned of all agar and transplanted to a community pot.

Pour some tepid water into the flasks and carefully swirl it to break up the agar. A spatula may be used to gently aid the breakup. Pour water and seedling mix into a bowl half filled with tepid water. Rinse seedling roots and leaves free of agar. Submerge the seedlings for about ten minutes in a weak systemic fungicide solution, like Benomyl, then place them on paper towels to dry.

Preparing Community Pots

Use a well drained, clean pot and line the bottom with drainage material. Fill the pot to within one inch from the rim with damp, loosely packed sphagnum moss. Wrap the roots of a dry seedling loosely with the same damp sphagnum moss and place the "package" in the pot. Repeat the process until the pot is filled with seedling packages touching each other. Finish by filling gaps between seedlings and pot edge with some loose sphagnum. Write the proper orchid name plus the "compot date" on plant labels and put one label in every pot.

Taking Care of Community Pot Seedlings

Seedlings deflasked have come from a 100% relative humidity environment inside the flask. Do not shock them by moving them to a 50 or 60% immediately, but rather do it gradually. This can be done by placing the pots in a tray covered with a clear plastic dome with top vents closed, which over a period of time can be gradually opened. Keep the pots about 30 cm below two 40W fluorescent lamps, as described above for flask lighting. Keep temperatures around the 24 degrees C. Prevent seedling medium from drying out, but do not have it soaking wet and cause root rot. Start a regular watering program right away; fertilizing program in one or two weeks from compotting date.

- Peter Croezen email:<u>orchids@golden.net</u> The Orchid House website: <u>http://retirees.uwaterloo.ca/~jerry/orchids/index.htm</u>l

Gold Coast Cymbidium Growers 2008 Orchid Show & Sale

Saturday, April 19, 2008 10 AM - 4 PM

See some of the most beautiful cymbidium orchids in Northern California on display!

Unique & rare orchid plants available for purchase for 1 Day Only!

San Mateo Garden Center 605 Parkside Way San Mateo, CA 94403

(From Hwy 92, turn South at the 'Alameda de Las Pulgas' exit.

Drive about .7 miles & turn right on Parkside Way)

Website www.Geocities.com/GoldCoastCymbidiumGrowers

Questions? Email GoldCoastCymbidiumGrowers@Yahoo.com
Or phone Audrey at (408) 741-2882



Orchid Show & Sale

April 25, 26 & 27, 2008

Fri. 10 am - 9 pm

Sat. 10 am - 9 pm

Sun. 11 am - 5 pm

Sherwood Mall

5308 Pacific Ave., Stockton

by The San Joaquin Orchid Society, Inc. www.SanJoaquinOrchidSociety.org

Orchid Greenhouse Tour

Santa Clara Valley Orchid Society
Saturday May 3, 2008 9:00 a.m-1:00 p.m.

Public Invited!

Four Greenhouses Open for your Enjoyment and Learning
Please visit them in any order at your convenience, 9 a.m. to 1:00 p.m.
Come see and enjoy hundreds of orchids in bloom in our member greenhouses.
Learn growing methods. See how experts do it.

Doug Pulley, 245 Vista Del Monte, Los Gatos, 408-354-1412 Doug grows and breeds many indoor and outdoor orchids. Orchids for sale—including Cattleyas, Cymbidiums, Lady Slippers, Stanhopeas, Ghost Orchids, many species.

Bud Segraves, 115 LuRay Drive (off Blossom Hill) Los Gatos, 408-356-8435 Bud grows all kinds of orchids, has used his engineering in greenhouse features. Orchids for sale—Phalaenopsis, Cattleyas, Cymbidiums and others.

Eanghak Quach, 459 Savstrom Way, San Jose 95111, 408-316-4320 Eanghak specializes in unusual cymbidiums and outdoor orchids. Cymbidiums, Cattleyas and other outdoor Orchids for sale. Open till 5:00.

Angelic Nguyen, 1361 Plum St (near Almaden & Alma) San Jose 95110, 476-7153 Angelic loves big Cattleyas, Vandas and Australian Dendrobiums. For sale—Cattleyas, Vandas, Cymbidiums, Den's, Laelias—cool to warm Species & Hybrids. Open till 5:00.

Car Pool Corner

Have more fun! Talk about your orchids all the way to the meeting! Carpool with other members. You can advertise for a ride or offer a ride to and/or from the meeting. It's up to you whether you want to share gas costs, trade driving, whatever. Send your car pool ad to the_sheath_editor@earthlink.net by the 5th of the month.

Unclassifieds

Members may advertise orchid related items. The ad is free and will run three times unless you cancel or extend it. E-mail your ad to the sheath editor@earthlink.net or mail to 878 Cashew Way, Fremont, CA 94536. Be sure to include your name and phone number. Ads must be received by the 5th of the month to be included that month's newsletter.

Mort and Isabelle Block have free greenhouse equipment: a 220 heater and fans. Call 650-493-0280. Chaunie Langland has a 1 gallon water distiller with low miles for sale for \$75. 510-494-8850.

May Board Meeting

The May Board meeting will be held on Wednesday the 14th at 7:30 p.m. at the home of Mike Rector, 730 Hillcrest Way, Emerald Hills. The board meetings are open to all members and we'd like to encourage you to attend. If you have any issue that you'd like brought to the board, but cannot attend, you can call any board member and they will present your issue for you.

2008 Board of Directors/Chairpersons

President: Mary Gerritsen 650-348-6492 Vice President: Mike Rector 650-366-3401 Treasurer: Sue Rose 650-322-9853 Rec. Secretary: Rebecca Grubbs 650-560-9037 Corr. Secretary: Jocelyn Jamias 650-678-6575 Ways & Means CP: Brett Francis 650-369-2329 Membership CP: Su McMurtry 650-367-7515 Director at Large: Scott Dallas 650-355-8767 Director at Large: Ken Jacobsen 650-508-8308 Director at Large: Dennis Olivas 925-969-1246 Director at Large: Fred Shull 510-569-9940 Librarian: Rex Castell 650-576-4637 Web Editor: Fred Cox 650-321-3542 AOS Rep: Dennis Olivas 925-969-1246

Refreshment Chairpersons: Rebecca Grubbs 650-560-9037 & Olga Ostrovsky 650-631-0218

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If you haven't already voted on the 501(c)(3) issues -

Please remember to send your ballot in!

Your Vote is Needed!

Thank You to the 70 + members who have voted already!!

Peninsula Orchid Society The Sheath Chaunie Langland, Editor 878 Cashew Way Fremont, CA 94536