

An Affiliate of the American Orchid Society

# FORT LAUDERDALE ORCHID SOCIETY

N • E • W • S • L • E • T • T • E • R

March, 2010

Program for March 8<sup>th</sup>

## Vandaceous Grower To Share His Knowledge and Enthusiasm

According to Tariq Sheikh's ad in *Orchids Magazine* Beau Monde Orchids is 'your Vanda Headquarters'. Certainly his varieties are extensive and includes these familiar genera: *Vanda*, *Ascocenda*, *Ascocentrum*, *Aerides*, *Mokara*, *Aranda*, *Rhynchostylis*, *Aranthera*, and *Renanthera*.

Tariq will supply plants for the raffle table which has not been stocked with a variety of Vandaceous orchids for quite a while. It's your chance to increase your collection, support the society, and have fun waiting for your lucky numbers to be called.

## April 3<sup>rd</sup> Bus Ramble

There is still room on the bus for YOU, and the fun you will have if you go will be well worth your \$25 cost. If you have never rambled, the bus leaves from the Cardinal Gibbons student parking lot at 8:00 AM and will return by 5:00 PM. The parking lot can be found by going east on Commercial, turning south on Bayview Drive for a 1-o-n-g block, then turning by the school sign on 47<sup>th</sup> and Bayview to the parking lot in back of the school.

One of the orchid places we will visit will have OFE supplies brought in for sale, and you might call OFE (305- 253-7080) ahead if you need something special. Do know that there will NOT be room on the bus for your desired dozen big bags of Aliflor.

Mail your seat holding check to the address on the newsletter and call 954-772-4836 with questions.

## Up-coming Programs

April- Segundo Cuesta (Quest), May- Jeff Adkins (Adkins), June - Jose Exposito (Soroa) and July- Wendy Griffin (Indian River)

## Money Thoughts and The Upcoming Membership Roster

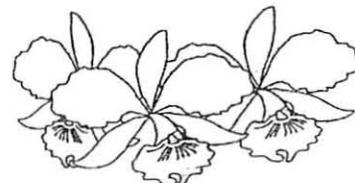
It's hardly news that the recession has made us cut back, and our orchid society is no different. True we have a nice cushion left for better days, but dues don't cover your membership. Our printing is one of the reasons why, and there are ways to cut back on that. The Roster will be in a less expensive format which will cost about \$1 less per copy.

One of the things that will be added to the Roster is your email address **if I have it, and IF you want it printed.** (Put orchid in the subject line and let me know [bobdot@bellsouth.net](mailto:bobdot@bellsouth.net).) It would be nice to be able to email changes in events due to something unknown when the newsletter is printed.

If you want to support the society with a business card sized ad in the Roster, send the card and \$30 to the PO box address on the front of the newsletter.

One way to help keep the newsletter in hard copy is to do away with the colored logos. Color costs 15 cents per issue or \$1.80 per year per membership. When we run out of already printed paper, can an all black and white copy work for you? **This newsletter is a sample of all black and white.**

Buying some or more raffle tickets at our monthly meetings is another way to insure that we can continue to do the things we do without raising dues or going to an on-line newsletter. D.H.



## Remembering

### *The Rev. Ronald W. Springer*

Pastor Springer had made our meeting at Christ Lutheran so easy and so pleasant. He will be missed. A memorial service is planned for a later date, and FLOS members may wish to join Ken Kone at that service.

## Hyla's Basic Program Was Great

Hyla Levine began her fast moving, informative program with a statement that made us nod our heads. She said, more or less, that no matter how beautiful orchids are at a show, the ones that are the most wonderful are the ones that open in our own growing spaces. Our own blooms keep us addicted to orchids.

It's not easy for me to review a program with so many points, but the following areas were in my notes:

\* **Repotting:** Phals, Paphs, and Phrags need to be repotted every year. Catts when they start to grow over the edge of the pot. Repotting is also necessary if the medium has broken down regardless of when the plant was last repotted.

\* **Medium components:** Lava rock was the first inorganic component used. Aliflor is harder to get these days and is being replaced by Hydrokorn which is also a clay product and does not hold fertilizer salts. *Orchiata* is a fir bark she uses since it does not break down rapidly. Sponge rock (course perlite) is great for adding aeration spaces. Catts, *Onchidinae*, and Dendrobes need good aeration. Dynarock or coconut products were mentioned as additives to media for Phals and other orchids that need more moisture.

\* **Containers:** Clay pots dry out faster, and plastic holds water longer. Net pots are great for those who like to water often and for some plants. Pots should not be too large. **Orchid roots need to be able to touch the sides of the pot.** Wooden baskets offer some moisture which plastic baskets do not.

\* **Pot clips:** All plants need to be held down with clips when they are repotted. You should be able to hold the plant up by its leaves even though you may have removed its roots.

\* **Nutrients:** It's good to top dress with a slow release fertilizer. Use Nutracote or Dynamite. They are the same thing. Osmocote will burn roots.

Jack's fertilizers are the old Peter's 20-20-20 or bloom booster. Hylas uses bloom booster every 4<sup>th</sup> time she fertilizes. Or to quote her 'grow- grow- grow, bloom, grow-grow-grow-bloom' Maxicrop is an algae based fertilizer that produces great root growth, and Dynagrow is a liquid that is good. Norman's is also a great nutrient and available at Green Barn. Powdered fertilizers must be used the same day, they change chemically after they are made up.

\* **Chemicals:** Potassium Plus Triple Neem seems to be great for most insect control. Orange Guard works well to make ants move on, Rose Pride is a good spray to spot treat buds to protect them from thrips, Orthene is the best product to use if you spray your whole collection to control thrips. Don't use too much Superthrive too often. It mutates.

*Continued on the next column.*

## Hyla Levine, continued:

\* **Repotting:** Hyla's assistant removed the *Dendrobium* from its pot and removed all its old medium and roots. He also removed dead, but not bare canes. He crocked the new pot with styrafoam, put the plant on top of the medium and held in place with two clips. He repeated the process with the *Cattleya*, and the comments were to keep the newly potted plant dry for a week or more which would encourage new root growth. (The old roots had been removed since they would have rotted anyway since they had been damaged.) **To help the plant grow straight, point the new growth south when placing the plant back on the bench.**

*Vanda* and phal roots should NOT be removed when they have to be put in a new basket or repotted.

Hyla is thanked for the great plant raffle table and the nice selection of basic supplies that she brought for us to buy. We also enjoyed her fast moving and clear program very much.

I was also glad to get two needy plants repotted. The white Catt. was *C. trianae* "Aranka Germaske" FCC/AOS. I got it for a raffle ticket at one of our meetings which is evidence for your **buying more raffle tickets?** D.H.

## February Ribbon Awards



- Mary Burtoff** /blue/ Lc. Betty Ford 'York'  
**Norma Jean Flack** /blue/ Epc. Rene Marques 'Tyler'  
/red/ C. Longtone x Yellow  
**Bill Knost** /blue/ Blc. Chyong Guu Linnet 'Water'  
**Tom Kuligowski** /blues/ Folk. After Dark,  
*Angem, florulentum x eburaneum*  
**Christine Marinella** /red/ Ascda. Yip Sum Wah x V.  
Gordon Dillon  
**Ron Lennen** /blue/ Paph. LEEANUM  
**Joan Lillagore** /culture/ Slc. Brastown Lipstick  
**Allan & Jan Mink** /red/ Lc. Redglen 'Eureka' AM/AOS  
**Tony Millet** /blues/ Blc. Purity, *Laelia pumila* /red/  
*C. walkeriana* 'Tijo'  
**Wayne Musgrave** /blue/ Lc. Gold Digger 'Orchid  
Jungle' HCC/AOS  
**Eugenia Nezvadovitz** /blue/ Onc. Golden Shower  
**Helen Rivenbark** /blue/ *Dendrochilum wezelii*  
**Mary Schul** /blue/ V. Manuvadee 'Sky' FCC/OST,  
AM/AOS /red/ Tolu. Fesciva x Crm. Just Dandy  
**John Wrench** /red/ *Rhy. gigantea*

## February Refreshment Providers

*Thank you:*

Leah Ostrander, Nora Dyke, Doshe Urosgenic  
Zoe Bejar, Betty Rundie, Vicki Trank,  
Petra Thomas, Carrie Akerman and Lisa Davis

## More Show Winners

The following vendors will have reduced entry into our show next year, because their displays were best in their divisions. They were:

- 300 square feet- Quest Orchids
- 200 square feet- Carib Plants
- 150 square feet- Mac's Orchids
- 100 square feet- Gold Country Orchids

Each show day visitors to the show entered a drawing to win \$100 worth of plants from the vendor of their choice. These winners and their choices were:

- Bobby Alhale (Hollywood) -Carmela\*
- Christina Mahadeo (Lauderhill)- Dan and Marge
- David Dolge (Greenville, S.C) Carter and Holmes

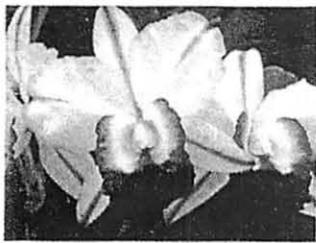
\* Carmela Orchids is thanked for donating this award to our society.

## Making Cut-Flowers Last Longer

To one quart of water and one teaspoon of sugar add: a pinch of salt, or a pinch of baking soda, or a quarter teaspoon of bleach, or a copper penny, or ¼ cup of Sprite or 7-up, or a few drops of vodka, or a multivitamin, or an aspirin.

You should change the solution every day, and the water you use should be tepid, not cold. *This may be too much trouble for mums, but think using this for orchids that you've cut off to let the mother-plant rest.*

January 30, email. Reader's Digest



### Carmela Orchids Sheldon Takasaki

P.O. Box 277  
Hakalau, Hawaii 96710

Phone: (808) 963-6189  
Fax: (808) 963-6125

Website: [www.carmelaorchids.net](http://www.carmelaorchids.net)  
Email: [carmelaorchids@hawaii.rr.com](mailto:carmelaorchids@hawaii.rr.com)

## It's Spring and Charity Bike Time

Chip Jones and Raul Pinho began 50 mile practice rides in early February to be in shape for the 150 mile ride they will make April 13<sup>th</sup> and 14<sup>th</sup>. Again they will bike from Miami to the Keys and back to raise funds for **Tuesday's Angels**. In the 13 year history of this event bicycle riders have raised \$900,000. to help people in Broward County with HIV/AIDS. This year they hope to reach the million dollar mark. This 501C organization gives every penny earned to the victims of the virus. At this point **Chuck Nichols** and **Ron McDonald** serves as administrators and major workers for the group.

To help in the push toward the million mark this year, FLOS members who write checks for \$25 or more to Tuesday's Angels will be given an orchid seedling in appreciation for the support.

April is also the month for **John Wrench** and the FLOS support team to join the bike ride to support M.S. If there is not a picture from last year's event on the back of the newsletter, this good event will get more coverage later. Please support our bicycle riding members who are helping others.

## AOS Membership, Increase Your Orchid Collection at Our Meetings

**YOU** can renew your membership for two years, or join AOS for the first time and get a free plant donated by Norman's Orchids. Norman keeps me supplied for show membership booths and has promised to keep me in orchids for you for the coming year.

If you are new to our Society, you may not know that at every meeting, except the auction, you can get a raffle ticket to win a plant by going to the Library table. Please show librarian Vicki Hallock your AOS membership card or the mailing cover for your magazine to get on that raffle list. D.H.

## How Some Orchids Have Evolved To Deal With Seasonal Drought

\* *Cattleyas* have evolved to have thick leaf cuticles to reduce water loss, and sunken and protected stomata.

\**Cychnoches* and *Catasetums* have deciduous leaves which are dropped during the dry season.

\* Ray Ratliff's leafless orchids no longer have water losing big leaves. They have evolved tiny scales to replace leaves, and chlorophyll has moved into other parts of these plants.

## GREEN BARN ORCHID SUPPLIES

Everything you need to grow beautiful orchids



5185 Conklin Drive  
Delray Beach, FL 33484  
(561) 499-2810

website: [www.greenbarnorchid.com](http://www.greenbarnorchid.com)

Co-Proprietors:  
Lynn Lappin and Hyla Levine

## Think Orchid Nutrition

Did you know that not all orchids require the same nutrients? Catts need twice as much Nitrogen as Phals, and Phals need twice as much Magnesium as Catts. Unless you own a mega nursery you can't be bothered with that. One bottom line though is adding too much Magnesium (Epsom salts) will have an adverse effect on orchids

While there is no food pyramid for orchids, a simple way to remember their main nutrients is to think:

### C. Hopkins CaFeMg

CaFeMg is 'café manager' and refers to Calcium, Iron, and Magnesium. Of course **C** (Carbon) is from carbon dioxide. **H and O** (Hydrogen and Oxygen) are from water and some of the Oxygen is from the air. **P** (Phosphorus) and **K** (Potassium) can come from several sources. Some algae use Iodine, but orchids don't. *It's there for clarity as in the rainbow's ROY G.BiV. It is also wrong since there is no indigo in a rainbow.* **N** (Nitrogen) and **S** (Sulphur) make up the end of Hopkin.

These nutrients are listed below along with how they are used and the signs of a deficiency.

\* **Hydrogen** and **Carbon** are both components of plant molecules, if they are lacking the plant does not grow well.

\* **Oxygen** is also a molecular component and required for respiration. Plants die without Oxygen.

\* **Nitrogen** is a component of amino acids, proteins, DNA and RNA, ATP and chlorophyll. A lack of Nitrogen is shown in a lack of growth and yellowing of leaves.

\* **Potassium** is involved in the opening and closing of stomata and transport mechanisms. If lacking look for weak stems, root disease susceptibility, and limited growth.

\* **Calcium** is necessary for cell membrane permeability, chromosome movement, and functioning of some enzymes. Lack of Calcium is seen in the death of root and shoot tips.

\* **Magnesium** is a component of chlorophyll and needed for some enzymes. When Magnesium is lacking look for reddish leaves, leaf times folded inward, and reduced growth in Catts, Dendrobies, and Phals.

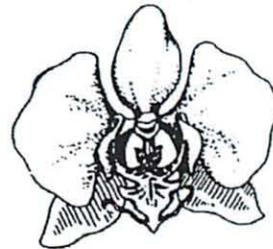
\* **Phosphorus** is involved with nucleic acids and synthesis of sugars. If this is lacking look for dark green reddish plants and stunted growth.

\* **Sulfur** is associated with proteins and vitamins. Look for dark green veins in lighter colored leaves when this element is deficient.

\* **Iron** is a component of chlorophyll and if it is lacking you can expect yellowing leaves and short, thin stems.

Some of this information from"

Ardetti, J. 1992. **Fundamentals of Orchid Biology**. New York, John Wiley and Sons. Pp. 197-200



## Welcome New Members

Gregory and Cynthia Burkey

Sandra and Trip Camper

Dr. Debbie Davis

Ken Kane and Bob Barra

Edward Lindberg and Todd Recenik

Dr. Leonard and Ann Leonardi

Sherry Miller

Elizabeth Pulice

Robert Rinn

Jay Stiskin

Joyce Spencer

Randy Stand

Sarah McTigue

Gerri Vatovec

## Mesophyll Cell Collapse

Sometimes the inner cells of leaves slowly collapse and die in response to unusual cold or heat. This is not evident right away, but may show up months later as black or brown spotting on the leaves.

*Phalaenopsis* are especially susceptible to this and those who had them growing on trees during our long cold spell may see this happen later. Some think it is a good idea to remove such tissue if possible since pathogens may enter leaves through the damaged area.

## Known Since 1602

The U.S. Library of Congress recently obtained a Chinese map dated 1602. The map was drawn by an Italian cartographer whereby China was in the center of the large map which measured over 5 feet x 7 feet. North and South America were amazingly well defined. The Italian cartographer did not draw pictures which was often done to show the fauna and flora of specific areas. He used Chinese letter/words to explain what one might expect to find in various geographic areas of the world. The area which we now know as Florida was shown as "The land of Flowers."

*Thank you Chuck Nichols for forwarding this bit of history. Aren't we lucky to live here?*

## Orchid Care/ Orchid Function 101

### On foliar feeding:

Such feeding is unlikely to harm orchids, and is ; almost impossible not to do, when we fertilize with a liquid fertilizer. Orchids with thick leaves and cuticles and few stomata (leaf openings for the exchange of oxygen and carbon dioxide and the release of waste water) are unlikely to take in an appreciable amount of nutrients. On the other hand orchids with thinner leaves and more stoma would gain more. New growths on even thick leaved *Cattleyas* would probably benefit from foliar fertilizer since the cuticle (water-proof protective leaf covering) would not have developed to a great extent. It is also a good idea to try to spray fertilizer on the underside of the leaves, since the cuticle is absent or less dense and since most stomata are located on the underside of the leaf. This location is nature's way of keeping these vital openings free from debris that falls by gravity on the upper surface of the leaf. *(The same biological reason your nostrils are not on top of your head!)*

The **bottom line** is to drench your plants when you do fertilize with liquids so that the roots do get fertilizer. Absorbing water and nutrients is their job!

**Another bottom line**, do flush fertilizer salts off your orchid leaves with plain water at least once a week. If left they will support the growth of surface algae, which will deprive your leaves of light.

**The last bottom line** is to fertilize before 11:00 AM by the sun. Stomata tend to close up about that time to keep plants from dehydrating during the heat of the day, and nutrients won't enter through.

### How plants use the litter box!

Repeat after me, plants are just slow green animals. Animals take in water and release surplus chemicals in liquid body wastes (Urine/urea). Plant roots absorb water, and leaves release waste water through their stomata, which are usually open at night and early in the day. Students call this process 'transpiration' on biology tests.

Solid wastes are also produced by plants but are not eliminated right away. They are stored as crystals in the spongy middle layer of leaves. When the leaves are 'full' of crystals they turn yellow and drop. Some orchids replace all of their 'dirty' leaves every year, but in most cases the leaves may last about 3 years. Old leaves are usually discarded, when new leaves are emerging. **The bottom line** here is not to be concerned when your orchids are dropping their oldest leaves in the spring when new leaves are emerging. Be sure you change the litter box and remove these spent leaves from your growing area!

## Your Orchids Have Idioblasts

This one is not unlike 'your epidermis is showing' which we all used in grade 5. An idioblast is vacuole which contains crystals. Higher plants can't use the litter box so they store their solid waste as crystals and when they drop their leaves they 'relieve themselves'.

## Orchid Cells' Plastid Quiz

Use these choices:

A/ chloroplast, B/ amloplast, C/ chromoplast,  
D/ leucoplasts, E/ protoplasts

1. container for chlorophyll (See this is easy.)
2. holder for clear fluids
3. holds red, orange, yellow pigment in flowers
4. can turn into other plastids when needed
5. starch container found in seeds

*Answers: (I get a cut if you win Millionaire money by learning this.)*  
I-a, 2-d, 3-c, 4-e, 5-b

## Photosynthesis and Remembering

While I'm in a teaching mode, let me tell you that there are different photosynthesis pathways. Orchids with thicker leaves live where trees and other plants take up too much of their needed carbon dioxide so they use a less efficient CAM pathway. They take up their carbon dioxide at night while the competitive plants are not using it. Since they make food less efficiently, they grow slower. *Cattleyas* are good examples of plants using this pathway.

Thin leafed orchids live where there is adequate carbon dioxide and water and they turn these into glucose and other food in the daytime. They tend to grow faster using this C3 pathway.

*About 20 years ago, I took the Florida students to a national science competition in California. We met and got to talk to the Nobel Prize scientist who had clarified one of the pathways. He told the students that the only thing that really counted in life was family. D.H.*

## An Orchid and Human Fertility

Around 249-207 B.C. barren Empress Yohik-hi became so intoxicated with the odor of a *Cymbidium* that she produced a son. The first son was followed by 12 more sons. Her change inspired the Chinese to make the word/symbols for orchid translate into 'thirteen great treasures'.

Ibid. Ardetti, p. 5

## A Bit on Cattleya Flower Genetics

### The Laelia influence:

You can sometimes be sure about the traits of a hybrid and sometimes just know your odds for a given color or other trait. Sometimes 'clueless' fits! In *Cattleyas* genes for purple flowers are dominant and hide recessive yellow flowering genes if they are present. A species *Cattleya* or a pure hybrid *Cattleya* would need a recessive gene from each parent to be yellow. The reverse is true in *Laelias* where a yellow gene is dominant. If a yellow *Laelia* is crossed with a purple *Cattleya* with pure (homozygous) purple genes, the resulting Lc. (laeliocattleyas) will be yellow.

The genes for flower size seem to be non-dominant, also called co-dominant. If a large flower is crossed with a small flower the offspring will have medium sized flowers. Medium x medium should produce 1/4 large flowers, 2/4 medium, and 1/4 small flowers.

There are good reasons to make crosses resulting in Lcs. The *Laelia* adds richer color and brings flowers up about the foliage since the floral stem is longer. *Cattleya* flowers tend to have a more pleasing shape so an Lc. hybrid gets the best from both parents.

### The Brassavola influence:

Hybridizers were overcome with joy when they found that *Brassovola digbyana*, (now *Rhyncholaelia digbyana*) often added size and a magnificent frilly lip to cattleyas and laeliocattleyas and the Blc's and Bc's were born. New colors from these mixes included pink, which appears to be non-dominant- from the whiteish green *digbyana* and a lavender cattleya. Green flowers were also produced through *digbyana*. Some other *Brassovolas* were used in hybrids and those crosses are spotted by the lack of the frilly lip.

### The Sophronitis coccinea influence:

Blood reds and deep pinks were produced by breeding with this small flowering red plant. The red holds well for the first generation as do the small flowers, but later generations can carry larger flowers of more varied, but rich, tones.

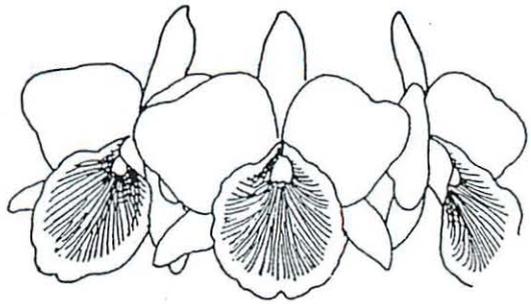
### The Potinaras:

Relatively few crosses have been made to produce these. They are a 4 way combination of cattleya, laelia, brassovola, and sophronitis. Guessing the offspring's traits is not so easy.

### About blue, white, and semi-alba:

Blue is complex and under study, as far as I know. White is not clear either. Two white flowering plants can produce all lavender offspring. Probably several pairs of genes work together to produce white and semi-alba (white with a colored lip) flowers.

Biology 101 and Northern, Rebecca. 1990. *Home Orchid Growing*. Simon and Schuster, NY, N.Y. pp.67-75



### More Dunstervilles

## About Orchid Flowering Times

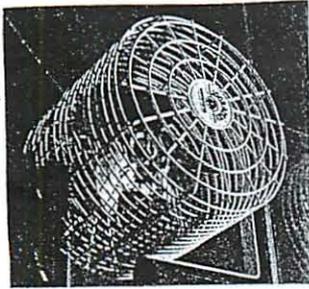
The Dunstervilles recorded the flowering times of 280 orchid species over a two year period. In 1967 they reported that very few orchids have a short, once-a-year flowering time. Most flower over a period of two to several months each year. *The only firm rule of blooming is that they won't be ready in time for judging!*

Dressler, Robert. 1981. *The Orchids Natural History and Classification*. Harvard U. Press. Page 93

## Homemade Rooting Compound

*(Many of you have heard my aspirin sermon. Willows secrete salicin, the magic ingredient in aspirin which helps my orchids fight fungi and virus and grow better. I just read another good thing from willows in the London Orchid Society Newsletter. (p.9, April, 2006)*

The article stated that willow will root readily in water, and release growth hormones called auxins. Auxins will stimulate the root growth of other plant cuttings. To make the rooting solution, chop 3-4 willow twigs into 1-2" angled pieces. Label the container and cover the twigs with water and leave for several days. Strain this willow-twig water and set aside. Plant your willow twigs upright in a container with rooting medium (*sand, Pro-mix?*) to use for future brews. Dilute the strained willow water to make 1 gallon, pour this gallon of willow water on plants where root growth needs to be stimulated or for watering freshly planted cuttings of other plants. *(More editor's comments: The London Orchid Society editor credited Martha Stewart for this idea. If you wonder where to get willow twigs, buy some curly willow from a florist, or look in a Florida ditch! FLOS member and friend Choe Cheah gave me some rooted curly willow that she had purchased for an arrangement and then stuck in water. At the moment it is a unique and beautiful house plant. Willow is listed as an end zone 8 plant, but I see it growing all along ditches in Florida. Grow willow, and use it to help your orchids!)*



*The New Grower*

## **Rots! Yucky Deadly Rots!**

*Black, Brown, Basal, Soft, and Crown Orchid Rots!*

As your orchid collection grows, your chances of meeting one of the 'penta-pathogens of evil' grows as well. Your plants get jammed together, the air movement is worse, you're behind on repotting, **you are ready for an attack.** Affected plants have black, purple, or brown tissue. The infested areas often look wet and mushy, and the rot will spread to other plants unless you are alert and work fast to stop the attack. **Both fungi and bacteria cause rots, and sooner or later you will meet them. Plan ahead!**

### **Plan one, be ready for the attack:**

You will need to isolate any plant with rot as far as possible away from your other orchids. Remove the rotten part with a clean blade, and if possible cut off 2-3 inches of healthy tissue as well. Often the pathogens send their 'parts' into healthy tissue and it takes a day or two for the spreading rot to show. Put something on the cut area to inhibit the entry of new pathogens. Safe for you and cheap are these household things to use on the cut surface: cinnamon, athlete's foot products, Neosporin or Polysporin, and hydrogen peroxide.

### **Plan two, change your growing conditions:**

Spread your plants out as much as possible, and have good air circulation over your collection. Pictured above is an outdoor fan which costs about \$200. from OFE. Our fans like that have run non-stop, except for really cold spells or hurricanes, for the last 6 years. The fans have been far cheaper than the loss of even a few orchids to rot. You should also repot most orchids every 2-3 years, and you will want to repot phals, phrags, paphs, and some others more often. You also want to fertilize on a strict weekly or bi-weekly schedule. Healthy orchids are more resistant to pathogens.

## **Now the penta-pathogens, one by one**

**Black rot** is probably the most destructive thing to hit any orchid. *Cattleyas* are the most likely to get this one. The symptoms are dark color on a new lead. If it is not stopped it will spread to the roots and kill the  
Continued next column:

### **Black rot continued:**

plant. It also spreads rapidly to nearby plants. Using high calcium fertilizer in the spring may help prevent black rot in new growths. Captan, Diathane M-45, or Physan 20 may help control black rot on mature plants.

**Brown rot** is often seen in paphs, it starts as small round water spots on leaves when water has been lodged on leaves too long. Leaves will turn brown all over. Remove the leaves with a clean blade, or remove the whole fan of leaves if the plant is large.

**Basal rot** affects both seedlings and mature plants. Severely broken down potting medium is often the major cause, or poor drainage with newer medium may also be a cause. Look for the attack on rhizomes and pseudobulbs. Leaves and pseudobulbs may become hollow and shrivel. New growths will not be as large as old growths due to root loss. The cure, if you catch it in time, is to remove the infected parts of the plant with a sterile blade and to repot in a clean pot with fresh medium. Isolate the plant for several weeks to be sure that you have indeed removed all of the infected parts of the plant.

**Crown rot** affects phales and is first seen in the yellowing of leaves, then a blackening in the center of the plant. Isolate that phal at the speed of light, remove the damaged tissue, apply one of the agents already named. Chances are that you will lose the plant, but if you treat early the roots may give you a baby plant. Phals should be grown where night rains can not settle in the crown of the plant which often causes this ugly disease.

**Soft rot, the last of the penta-pathogens,** is caused by bacteria and can affect most of the species we commonly grow here. Usually bacteria enter the plant due to improperly sterilized cuts made when repotting. Soft rot can be spotted by the foul odor it produces. Again cut off the infected area, isolate the plant, and clean everything in your growing area except other potted orchids. Benches and your growing area can be cleaned with a Clorox solution or a copper compound such as Koside.

*This information comes from decades of growing and from **Orchid Pests and Diseases**, an AOS publication that everyone with more than 4 orchids needs to own. D.H.*



# FORT LAUDERDALE ORCHID SOCIETY

P.O. Box 4677  
Ft. Lauderdale, FL 33338

**Regular meetings:** Second Monday of each month  
**Time:** 7:30 P.M. Workshop, 8:20 P.M. Program  
**Place:** Christ Lutheran Church Social Hall  
1955 East Oakland Park Blvd.

**Directions:** Use Oakland Park Blvd. from **1-95**.  
Go East for 2.4 miles, go to the rear of the church  
which is on the North side of Oakland Park Blvd.  
Or take **US-1 (Federal Hwy.)** to Oakland Park  
Blvd. And go West for 2 blocks.

President.....**Joan Connors**  
1st Vice President..... **Wayne Musgrave**  
2<sup>nd</sup> Vice President.....**Allen Cogar**  
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Corresponding Secretary.. **Zoe Bejar**  
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**Call these numbers:** Sunshine (954) 491-1267  
Newsletter (954) 772-4836

**Web Site:** [www.flos.org](http://www.flos.org)

Please see the inside story on our charity bikers. Pictured here at a former ride for M.S. are, left to right, Michael Schaberl, Steve Herman, and rider John Wrench.

