The Florida East Coast Bromeliad Society

Next regularly scheduled business meeting Sunday, November 10, 2002 – 1:30 p.m.

Election of Officers for the Upcoming Year

President - Jay Thurrott - 386/761-4804
Vice President - Bud Martin - 407/321-0838
Secretary - Bob Roberts - 386/586-6221
Treasurer - Ted Nuse - 386/673-2648

A few words about the election process… For those of you who were unable to attend the October meeting - a nominating committee was appointed to develop a slate of officers for the upcoming year and we can expect to hear their recommendations at this meeting. Yes, it’s been a while since we’ve had an election of officers for our group and yes, no one likes to go through this process. Think of this like a routine medical exam – you can get by without one, but it’s important to your long-term health to go on a regular basis. Likewise, a club can get by without an election each year, but it’s important for the long-term health of any organization to rotate officers at some frequency. It’s important to introduce new ideas and new ways of conducting meetings if we wish to maintain a vital, active club. Equally important is the need to bring new members into the circle of officers so that more people have an opportunity to become involved in the “nuts and bolts” of running the club. It can be devastating to an organization to have a key officer suddenly leave or, worse, pass away if someone else, familiar with the duties of that position, isn’t prepared to step in. And, of course, the only way to become familiar with any officer position is to “give it a try”. That’s why it’s important that club members be prepared to serve if asked by the nominating committee. Give it a try – you may be surprised to find out that serving as an officer in FECBS is not such a terrible ordeal. For one thing – we’re all pretty nice folks to work with, and that’s important! You won’t have to be alone trying to understand what duties are involved or how they should be handled. I can guarantee that you will have plenty of help from the past officers as well as from the general membership. You will probably be meeting new people and working with our members more closely than you have in the past. New friendships will be forged and old ones
strengthened. So what’s the worst that could happen? If after a year’s time you are convinced that this isn’t for you – it’s time for election of officers again. If you are approached by the Nominating Committee, hear them out…give it a try!

Pots…

There are many, many benefits to joining a bromeliad society – and even more to those who attend meetings on a regular basis. Everyone who attended October’s meeting came away with plants and large quantities of clay pots – thanks to long-time bromeliad enthusiast Tom Seuss (and don’t forget to return the plastic crates that they came in!). For those of you who haven’t heard the long-standing debate over clay vs. plastic pots, here it is in a nutshell: Clay pots breathe and allow the potting mix to dry out more quickly than plastic during periods of dry weather. They also are quite heavy and provide stability to plants potted in them. Plastic pots hold the moisture in and can lead to rot problems during wet weather or if you are prone to overwatering. Dark colored plastic pots can also heat the potting mix to quite high temperatures if placed in the sun and can lead to problems for some plants (Guzmanias, for example) if you are not careful.

Which should you choose? It’s mainly a combination of personal preference and your own, unique growing conditions.

Words…

“Look it up in the dictionary!” That’s the advice we used to always get when we were kids and asked an adult what a particular word meant that we were unfamiliar with. Didn’t you hate that? Usually the dictionary would have half a dozen different meanings for the same word and some of the definitions used words that I didn’t understand, so I had to look them up as well. The whole process could get very frustrating! This same situation applies when a new hobbyist tries to learn more about bromeliads. Sometimes even the simplest things become complicated! For example, a frequently heard comment concerning bromeliads is that “bromeliads are relatively pest-free with the exception of scale”. My copy of Webster’s dictionary has no less than nine different definitions listed under the word “scale”:

1. a means of ascent
2. a graduated series of musical tones
3. something graduated when used as a measure or rule
4. a scheme or rank or order
5. a proportion between two sets of dimensions
6. a graded series of tests
7. to climb or reach by means of a ladder.
8. a standard rate of pay, established for a job
9. any of a group of small but prolific homoptorous insects.

I think that a number of these definitions might seem reasonable to the newcomer. For example, if I fall off a ladder while hanging a Tillandsia from a tree branch is this an example of my own clumsiness or a scale problem(see definition #7)? And if I neglect a bromeliad that has been grown in partial shade for so long that one side of the plant has leaves twice as long as the other, is this laziness on my part or can I also blame this on scale(definition #5)? As a part time instructor with the University of Fl,
I am familiar with the usual grades of A, B, C, D, and F, so when I read a name tag on a sales plant ending in f1 or f2 should I not buy this plant since it must have faired poorly on some sort of test (definition #6)? For those of you who have been growing bromeliads for a while: Sometimes we need to be reminded that everyone in the audience doesn’t understand all of the terms that we use. Take time to explain those words that may not be familiar to the listeners. Beginners have a hard enough time learning about plant names and good growing conditions without being confused by words.

For those of you who are new to the world of bromeliads: Ask questions – it’s the only way that you will learn. If you don’t understand terms that are being used, stop the speaker and ask him what they mean…in layman’s terms!

Scale – part 2...
Scale on bromeliads is a fact of life – it goes with the territory. Everyone who grows bromeliads deals with scale at some point. Often scale is at its worst when plants are crowded in together and the humidity is very low. These are very same conditions that we provide when we try to protect our plants from those sudden cold fronts that will soon be sweeping through the state. Recently I came across what, I think, says it all. This paper appeared in the Central Florida Bromeliad Society’s newsletter (and excellent newsletter by the way – check it out in our library!).

Management of Scale Insect Pests of Bromeliads
R.F. Mizell, III, North Florida Research & Education Center, Monticello, FL


Introduction: Management of scale insects which infest bromeliads and other plants is often difficult. Scales are small and difficult to detect especially as eggs and in the crawler (early larval) stage. Infestations can get started and become widespread in a short time. Scales may spread particularly rapidly in the greenhouse environment where natural enemies are absent, whereas outdoors, they are often controlled naturally by beneficial organisms such as parasitic wasps, predatory lady beetles, and pathogens such as fungal and bacterial infections. Parasitic wasps may only attack a few scale species, but lady beetles (adults and larvae) that attack scales usually eat many different species. Be very cautious if you are considering the use of a harsh chemical pesticide because these substances will often kill the beneficial, natural enemies of insect pests and may lead to even larger infestations.

Identification: Eggs of scale insects resemble fine grains of sand and are found under the bodies of the adults. The larvae are mobile with six legs (crawler). The adult scale is heavily armored and it is necessary to look under this armor in order to see the living scale body. Individual scale insects undergo a single cycle from egg to adult but populations consist of many generations of individuals and these separate generations may overlap. Adult scales attach themselves tightly to the plant and often remain on the plant long after death. Adult males emerge, mate and die, so it is generally the adult females that are observed on the plant. The adult females also die, soon after producing eggs, so it is most productive to target scale...
insects during the more vulnerable crawler stage.

**Monitoring & Detection:** Careful, periodic inspection of plants is critical to the prevention of major infestations of scale insects. Once scales are identified the surroundings should also be examined for the presence of natural enemies. Lady beetle larvae and adults are easily seen feeding on the scales. Parasitic wasps can be detected by looking for scales which have small holes in the armor where the wasps have emerged after the scales death.

**Mechanical Control:** Early detection of a few scales may allow them to be successfully removed from plants by carefully using a finger or tool to mash and/or remove the insects. Successful mechanical control requires thorough destruction of all stages including the eggs. This may be aided by washing the plants with water under moderate pressure following removal of the adults. At this level of presence there may be no sign of natural enemies since it takes some time for predators to locate them.

**Biological Control:** The suppression of an unwanted pest species by its natural enemies; that is, pathogens, parasites, or predators, is termed biological control when it is caused to happen by human action, and is called natural regulation when it occurs without deliberate human action. Biological control and natural regulation are just two components of integrated pest management (IPM). IPM is a pest control philosophy which seeks to manage pests in an economically, environmentally and socially acceptable manner. Using appropriate growing and management practices helps plants remain vigorous and resistant to pest attack. Periodic inspection and monitoring of pest populations detects outbreaks before they reach destructive levels. If the pest population is not contained by natural enemies, then other more aggressive methods of control may be required. IPM seeks to use the least toxic method, but if these fail, chemical pesticides may be used as a last resort. Finally, an evaluation follows to ascertain what, if anything, can be done to prevent future outbreaks.

**Chemical Control:** When scale populations reach numbers so large that they cannot be controlled mechanically or biologically, they can be controlled with chemical insecticides labeled for ornamentals or greenhouses. However, the grower is again cautioned to read the label for information on use rates and potential phytotoxicity (toxicity to the host plant). Most conventional insecticides will not kill the adult scales so they should be applied when scales are in the most vulnerable crawler stage. Usually, 2 applications of insecticide about 7-14 days apart are needed to manage scales. When plants are heavily infested, the best course of action may be to remove and destroy the plants.

**Conventional Insecticides:** Diazinon, Malathion, Orthene, and Cygon are the most effective available scalicides. These chemicals are sold by several distributors under different product names and are available wherever gardening and plant materials are sold. If the risk of phytotoxicity is unknown, a few plants should be treated and observed for 3-5 days for browning or burning of leaves before treatment of large numbers of plants is initiated.

**Biorational insecticides** like insecticidal soaps and oils act on scale by desiccation or smothering. They are safer to use but they have no residual toxicity. Mortality is caused by direct contact to the scale's soft body tissue (under the armor). These substances
will kill adult scale but, like conventional insecticides, they are also more effective against the crawlers. Soaps and oils will usually require 2-4 applications 3-7 days apart to control an infestation. Soaps and oils can be found wherever conventional chemical pesticides are sold. Soaps and oils can also cause phytotoxicity, especially to sensitive plants and when the temperatures are very high or very low. Testing on a few plants first is suggested before widespread use.

From Eloise Beach: Never use oil-based, copper, zinc or spreader-stickers- these can destroy bromeliads. Water dripping from unpainted pressure treated wood will rot centers & cause terrible leaf damage. Leaf shins should also not be used. Never spray dehydrated plants. Water the day before spraying and re-spray after 7-14 days to kill newly hatched crawlers. Root mealy bugs are another very hard-to-control problem- lurking beneath the soil. Dipping or using a systemic product can increase control of these sucking insects.

- **BAYER ADVANCED GARDEN- ROSE & FLOWER INSECT KILLER** ($4.95) sold at Lowe’s & Home Depot is an option for the hobby grower and should do a good job of controlling scale if used repeatedly to kill the next generations that hatch. Its active ingredient, **imidacloprid**, is found in commercial grower products Marathon & Merit. Look for a $2 rebate & more info at [www.bayeradvanced.com](http://www.bayeradvanced.com)

- **DAWN DISHWASHING LIQUID**: Using one or two drops of this grease-cutter in a batch of insecticide can increase the effectiveness of sprays by helping to break through the insects' protective coatings.

Thanks, Eloise for these tips!

**Looking ahead:**
I realize that some of these events are quite a distance away, but if you are in the mood for a drive or if you are going to be in the area anyway, you may want to check these out!

- Nov. 1,2 – Symposium on the Mexican weevil and Family Day at the Dagger Wing Nature Center in South County Regional Park, Boca Raton. For details, contact Heidi Aspen Rhodes at 561-243-1642

- Nov. 9,10 – Caloosahatchee Bromeliad Society annual sale at Terry Park on Palm Beach Blvd. in Ft. Meyers. For details contact Brian Weber at 941-591-4268

- Nov. 30, Dec. 1 – Boggy Creek Bromeliads going out of business sale at 3615 Boggy Creek Rd., Kissimmee. 8 a.m. to 4 p.m. on Sat., 9 a.m. to 4 p.m. on Sun. Volunteers are also requested to help with the sale. For details contact Betsy McCrory at 407-348-2139

March 13-16, 2003 – Everybody’s Flower Show at the Daytona Beach Ocean Center.