

FLORIDA WEST COAST BROMELIAD SOCIETY NEWSLETTER

February 2010



FEBRUARY MEETING

Date & Time:

Tuesday, February 2nd, 2010
Doors open at 7 pm; meeting starts at 7:30.

Location:

Hope Presbyterian Church
1698 South Belcher Road
Clearwater, Florida 33764

Program

Terrie Bert returns just a few months after her last talk to our group, this time to tell us about how to find and use bromeliad information resources available on the internet. In her presentation, "The FCBS Bromeliad Encyclopedia Website: an International Treasure", she explores the major features, as well as the nooks and crannies, of the Florida Council of Bromeliad Societies website (*FCBS.org*). Terrie says that before she composed this talk, she thought she knew everything about the FCBS website until she discovered it is surprisingly intricate and loaded with links to everywhere in the bromeliad world. She says it truly is an encyclopedia of information, as one will see from this fun and informative presentation.

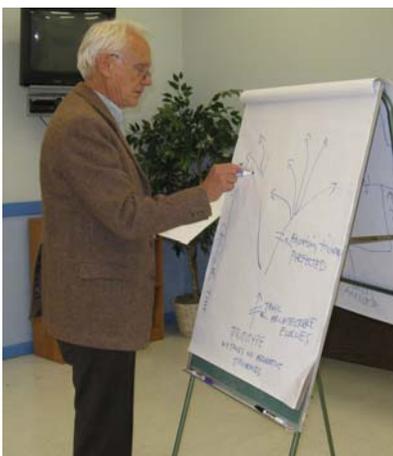
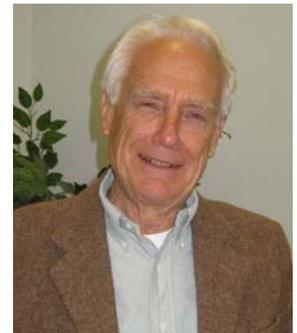
Refreshments

Jim Lockwood is now the Refreshment Chair and will be asking members to sign up to bring food for specific months in the future. We want to thank the many unsung volunteers who, each month, help set up the refreshments and then clean up afterward. Among these volunteers are Marianne and Bill Schumacher and Pat Frey.

JANUARY MEETING HIGHLIGHTS

Program

Dr. David Benzing gave a presentation on adaptive radiation, or the evolution of new species adapted to new environments, in bromeliads. He drew his examples of how species have adapted to different environments from the subfamily Tillandsioideae, one of three subfamilies in the plant family Bromeliaceae. (The two other subfamilies are Bromelioideae and Pitcairnioideae. But stay tuned! According to David, recent research has led to the conclusion that the number of bromeliad subfamilies should be expanded from three to eight. An article by Derek Butcher about this revision is on the FCBS website.)



A New World plant, bromeliads are widespread and able to live in diverse environmental conditions due to their many adaptations. They evolved from a common, primitive ancestor to multiple and diverse species within a vast array of habitats.

Early Tillandsia were grass-like, similar to the genus Puya, with simple leaves on short stems and a root system for obtaining nutrients from soil. The early forms evolved along two main lines: one with tanks and one without. Plants with tanks form a tightly bound structure with their leaves, which help capture water and nutrients. For plants without tanks, trichomes, in the form of scales or hairs, capture water and reflect sunlight in desert environments. According to David, trichomes have played a major role in the adaptive radiation of Tillandsia.

David had a specimen of *Catopsis berteroniana* as an example of a tank Tillandsioideae. It is carnivorous and grows in treetops where there is very little plant debris but a lot of insects for nutrition. He noted that bromeliads with well-developed open tanks, such as *Guzmania*, tend to be variegated, which is expensive, photosynthesis-wise, since there is less green in the plant but the tank is effective in gaining nutrition.

Catopsis berteroniana → →



David also showed examples of the following five different adaptations of Tillandsias that evolved with trichomes in lieu of well-developed tanks:

1. Extreme body reduction: Spanish moss, *Til. usneoides*, the ultimate example of this type, has a reduced size, only three leaves, and no internal cavities. It has a high surface-to-volume ratio (i.e., large external surface area compared to internal tissue volume), which yields a high rate of photosynthesis.
2. Cloud forest: In this moist, misty environment, Tillandsias typically have a hydrophilic surface (i.e., an affinity for, and bonding with, water) and thus fewer trichomes are needed.
3. Extreme xerophytes: Tillandsias that live in a very dry environment have abundant trichomes on their leaves and often have a low surface-to-volume ratio to reduce water loss.
4. Caulescent lithophytes: These Tillandsias, like *Til. funkiana*, grow in or on rocks, have a well-defined stem (caulis), and hang like curtains with long, pendant, unbranched limbs.
5. Ant-fed: *Til. bulbosa* is an example that harbors ants in its internal cavities, with the ants in turn providing detritus for nutrition.

Til. bulbosa → →



2010 Dues

Treasurer Brian Corey reminded members that society dues are payable through February. Members may pay their dues at the February meeting, or may send a check, payable to FWCBS, to Brian at 1153 Williams Drive South, St. Petersburg FL 33705.

Secretary Position

The position of secretary remains unfilled. Any member willing to step up to the task and help the society run more effectively should contact President Robert Herberich (bubbasotis@verizon.net).

Sales Chair

Marty Baxley has volunteered to serve as the chairman of the Sales Committee. This is a big job and volunteers will be needed to help him with the three sales in which we will participate this coming spring. (See **UPCOMING EVENTS**, below.) Get ready to assist and have fun while doing it.

Frost Cloth

Several society members expressed interest in obtaining frost cloth to protect their plants during cold weather, such as the recent bout experienced in our area. Linda Sheetz offered to find a supplier who had enough in stock for the interested members and to purchase it for resale, at cost, to them. The worst cold of this winter may be passed but it is best to be prepared should that not be the case.

Show and Tell

Barret Bassick *Guz. sanguinea*
Marty Baxley *Bil. elegans, Bil. sanderiana, Bil. kautzkiana, Bil. saundersii x Bil. kautzkiana, Bil. 'Wicket' (unregistered hybrid), Neo. correia-araujoii x Neo. nivea x Neo. carolinae*
Tom Crocker *Guz. 'Dolores'*
Dave Johnston *Neo. carcharodon*
Kathy Lockwood *Neophytum 'Galactic Warrior'*
Linda Sheetz *Aec. 'Gold Tone', Aec. tillandsioides (albomarginated form)*



Billbergia hybrid by Marty Baxley
(unregistered to date)



Neophytum 'Galactic Warrior'



Neo. carcharodon

UPCOMING EVENTS

March 27-28, GreenFest Plant Sale
University of Tampa, Tampa, FL

April (date to be determined), Florida Botanical Gardens Cleanup

April 10-11, USF Botanical Gardens Spring Plant Sale
University of South Florida, Tampa, FL

April 16-18, Bromeliad Judged Show and Sale
Bromeliad Guild of Tampa Bay, Tampa Bay Garden Center, Tampa, FL

April 17-18, Sarasota Bromeliad Society Annual Show and Sale
Marie Selby Botanical Gardens, Sarasota, FL

April 24-25, Green Thumb Festival
Walter Fuller Park, St. Petersburg, FL

July 26 thru August 1, 19th World Bromeliad Conference
New Orleans, LA; www.bsi.org/events

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