

FLORIDA WEST COAST BROMELIAD SOCIETY

1954-2015

Celebrating over 60 Years in Bromeliads

floridabromeliads.org



September 2015 Newsletter

NEXT MEETING

Date & Time:

Tuesday, September 1, 2015
Doors open at 7 pm; meeting starts at 7:30

Location:

Good Samaritan Church
6085 Park Boulevard
Pinellas Park, Florida 33781

Program

Dave Johnston, longtime FWCBS member and bromeliad grower, will give a presentation titled *100 Bromeliads on a Card Table* in which he will show how to grow a lot of plants in a small space. The program is about small bromeliads, typically grown in 4-inch diameter pots. A must see for anyone that has space issues – isn't that all of us?

Plant Sales

The speaker will be the sole plant vendor for this meeting and there will be no member plant sales.

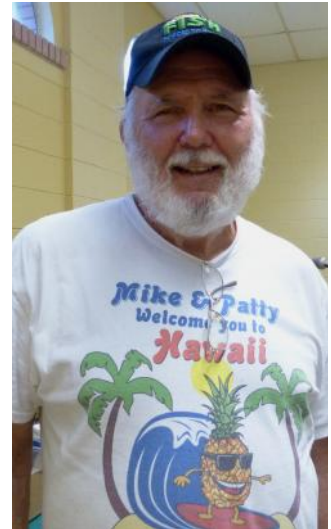
LAST MEETING HIGHLIGHTS

Program

Mike Michalski from the Bromeliad Society of South Florida told us about the techniques he has developed and uses for hybridizing bromeliads. You might recall that our member Marty Baxley told us about his personal hybridizing techniques at our August 2014 meeting. See *Growing Bromeliads from Seeds and Hybridizing* in the FWCBS September 2014 newsletter.

Mike used plants from the genera *Neoregelia* and *Billbergia* in his presentation as examples of the hybridization process. Of these two, he says he prefers hybridizing *Billbergias* because he finds they grow faster and he can see hybridization results quicker. Below are some points from his talk.

- Hybridization is the process of creating new varieties from already established plants, combining (crossing) genes of two plants to produce, hopefully, a new plant with the desired features of the parents. It is achieved by fertilizing flowers in one plant with pollen taken from flowers in another plant. The mother (or seed) plant is the one that receives pollen from the father (or pollen) plant. Note: Each bromeliad flower has six pollen stamens and one stigma.
- He cautioned that as you go through the hybridization process, be certain to use tags to document the names of both the pollen and seed plants and dates of various actions such as when pollen was removed from the pollen plant, when pollen was placed on the seed plant, and when seeds were cleaned and placed on soil for germination.
- Timing for collecting pollen from specific plants can be a problem. For example, while *Neoregelia* flowers typically open around 10 am, flowers in other bromeliads might open in the early hours of the morning and in other bromeliads might flower several months apart. In the latter case, pollen may be



saved by freezing for later placement into the seed plant when it is in flower and ready for the pollen. One can also gas the proposed parent plants to force bloom flowers for collection and/or placement of pollen.

- Begin the process of hybridization by removing pollen from a stamen (male part) on one plant (that will be the father (pollen) plant and placing it on the stigma (female part) in a flower of what will be the mother (seed) plant. Mike suggested tweezers, small brush, and/or a toothpick for tools to remove and then place the pollen.
- To avoid contamination of the pollinated mother plant by pollen from its own six stamens, remove the stamens in that plant. Such contamination can happen when bees, birds, and moths visit the flowers or when the flower is shaken in the wind.
- Mike noted that when Neos are ready to bloom they may have as many as 50 or 60 flowers and one can get zero to hundreds (depending on success of the cross pollenization) of seeds from a Neo cross. After pollination Neos typically take three months for seeds to develop. He added that Billbergias have a quicker timeframe for growing seeds and producing seedlings.
- After seeds have developed and matured, remove however many seeds you can (or want to) retrieve from the swollen seed pod (ovary) of the mother plant, place them in water (picture 1 below) and leave them there for about five days to clean. (Some people add soap and disinfectant to the water.)
- When the seeds are clean, remove them from the water, dry them and then place them on top of an appropriate seeding soil in a container (picture 2 below) with an air-tight seal. Sprinkle a little water on the soil surface and then seal the container. This will provide a 100% humidity environment in which the seeds will germinate. The containers Mike had looked like those one gets food in at a deli. Some folks use Tupperware, others place plastic bags over a pot of seeds and then seal the bag. Store the sealed containers in a location away from direct sunlight.
- About three to four weeks after being placed on the soil, seedlings will begin to emerge (picture 3 below). (The length of time until germination will depend of the type of bromeliad involved.) Keep the seeds covered until they have two to three leaves on them (picture 4 below). You can then uncover them, divide them up and transplant to multiple, larger pots with appropriate soil (pictures 4 and 5 below).



1. Cleaning seeds in water
(Look closely to see them; also note tag)

2. Seeds placed on seeding soil

3. Seeds germinating



4. Seedlings ready for larger pots



5. Large seedling

Additional notes

- Some plants are self-pollinating and cannot be hybridized.
- Hot water in a bromeliad's cup can burn flowers and damage the pollen and stigma. To reduce the likelihood of this, flush out the water tank to keep the water fresh.
- Neos can take up to three years to mature before one can really see what kind(s) of offspring (grex) have been produced.
- The term 'grex' is applied to all the hybrid offspring of a seed plant in a given cross. (Note: This is different from the term 'clone' that refers to pups or offsets, which are produced asexually from a single plant (not from seeds) and usually look just like the parent plant.)
- The grex that result from a single hybridization effort can produce many different versions of both parents and only a few might look similar to the parents. Below on the left are two different Neoregelia hybrids from the same Neoregelia parent plants and on the right are two different Billbergia hybrids from the same Billbergia parent plants.



Different offspring from same Neoregelia cross



Different offspring from same Billbergia cross

- Select the offspring have the characteristics you like most and then throw the rest away. The plants you save will need to produce several generations of pups (clones) to determine if the cross will hold in subsequent generations of pups. On the right is one of Mike's Billbergia crosses that he considers successful.

Billbergia 'Pink Champagne' x 'Spotted Leopard'



Show and Tell

Reported by Helga Tarver

Nicole Matwijczyk *Catopsis berteroniana* (picture below)
Tillandsia leiboldiana

Kathy Risley *Aechmea weilbachii*, stunted pups (picture below), found in a pot, buried under soil. She said she showed it to encourage growers to save what might appear to be dead or unsalvageable. She gave the pups to our youngest member Abdul to grow and bring back in to show their progress.

Linda Sheetz *Aechmea chantinii* 'DeLeon' (picture below)
Aechmea 'DeLeon's Candy Stripe' (picture below), a red variegated form of *Aechmea* 'Fulgo-Ramosa', a clone allegedly developed by Nat DeLeon and named by Dennis Cathcart at Tropiflora Nursery.

Janet Stoffels *Aechmea fulgens* x *Aechmea ramosa* (picture below); Janet said this is her favorite bromeliad. She started with one plant several years ago and now has many of them (sound familiar bromeliad lovers?) and has lined her garden walkways with them. She also uses the blooms in flower arrangements such as the one (picture below) that she made for the information desk at the St. Petersburg Museum of Fine Arts. (She and her late husband have been strong supporters of the museum where Janet is heavily involved in their annual *Art in Bloom* exhibit.)



Show and Tell plants



Aechmea weilbachii
(stunted pups)

Catopsis berteroniana

Aechmea chantinii 'DeLeon'



Aechmea 'DeLeon's Candy Stripe'
(Note red color and stripes on underside of leaves)



Aechmea fulgens x *Aec. Ramosa*

THIS AND THAT

John Arden

The recent Saddleback Valley Bromeliad Society newsletter carried the sad news that their longtime member John Arden passed away in July. It also reported that he was a first class bromeliad grower who had made over 80 hybrids, mainly Vrieseas, registered in his name. For those of you who grow Vrieseas it is highly likely at least one or more of them is one of John's hybrids or something related. Here are two examples of his work (photos from fcbs.org website).



Vriesea 'Sweet Success'

Vriesea 'Gigant Jade'



BLOOMING THIS MONTH



Tillandsia didisticha
(submitted by Gary Lund)



Nidularium fulgens



Tillandsia houston



Neoregelia 'Magali' variegated

UPCOMING EVENTS, 2015

September 26, Bromeliad Extravaganza, *Bromeliads in the Magic City*

Hosted by the Bromeliad Society of South FL (<http://www.bssf-miami.org>)

October 2-5, Tropiflora Fall Festival

Tropiflora Nursery, 3530 Tallavast Road, Sarasota, 941-351-2267 (tropiflora.com)

October 10-11, USF Botanical Gardens Fall Plant Sale

University of South Florida, Tampa, FL (cas.usf.edu/garden)

October 30-November 1, Sarasota Bromeliad Society Annual Show and Sale

Southgate Community Center, 3145 Southgate Circle, Sarasota (Theresa.Bert@MyFWC.com)

December 5-6, Caloosahatchee Bromeliad Society Sale

Terry Park, 3451 Marion Street, Fort Myers (bpreattpcc@aol.com)

2015 FWCBS BOARD OF DIRECTORS

President	Ashley Graham, adglaw@gmail.com
Vice President	Larry Sousa, lawrencesousa@yahoo.com
Secretary	Sal Vactor, salbiah93hafiz@gmail.com
Treasurer	Gary Lund, garybrom@yahoo.com
Immediate-Past President	Susan Sousa, susansousa1@yahoo.com
Newsletter Editor	Linda Sheetz, lsheetz@tampabay.rr.com
Trustees (3)	Judy Lund (2014-2015), glund@tampabay.rr.com Carol Schultz (2014-2016), carolcurrieschultz@gmail.com Barbara Stayer (2015-2017), bnice@tampabay.rr.com

Website: floridabromeliads.org

Webmaster: John Edwards, JOHNRN56@aol.com

Contact: Judy Lund, 727-439-7782

Address: Florida West Coast Bromeliad Society, P.O. Box 4185, Clearwater, FL 33758