## FLORIDA WEST COAST BROMELIAD SOCIETY 1954-2016



floridabromeliads.org

## April 2016 Newsletter

NEXT MEETING	
<b>Date &amp; Time:</b> Tuesday, April 5, 2016 Doors open at 7 pm; meeting starts at 7:30	<b>Location:</b> Good Samaritan Church 6085 Park Boulevard Pinellas Park, Florida 33781

## PROGRAM

**Dr. Terrie Bert** will present *Growing Uncommon Bromeliad Genera* at the April meeting and below is what she writes about the talk. "Only eight of the 55 bromeliad genera are commonly cultivated by bromeliad hobbyists throughout the world. A few of the other 47 genera can't be cultivated; but most can, at least in some environments. Some are relatively easy to grow but not widely cultivated for various reasons. In this presentation, we'll take a look at those 47 genera. We'll characterize the environments in which they grow naturally, learn about the cultivation conditions they need, and find the reasons they aren't widely cultivated. Along the way, we'll look at beautiful examples of each genus."

Terrie is a longstanding member of the Sarasota Bromeliad Society, where she has held multiple offices, and of the Caloosahatchee Bromeliad Society. She has authored bromeliad articles and given over 150 bromeliad presentations to numerous U.S. and international bromeliad societies, to other groups, and at international bromeliad conferences. She has been a Florida Director for the Bromeliad Society International (BSI), has chaired several international committees, and contributed articles to the BSI Journal. She is a BSI-accredited Master Judge and has chaired numerous bromeliad shows. She cultivates more than 2,000 different bromeliads in 30 genera at her home in Bradenton.

## PLANT AND NON-PLANT ITEMS SALES

While the speaker will be the sole plant vendor for this meeting, those who want to sell nonplant items such as driftwood and other mounting materials, potting materials, tools and such are welcome and encouraged to sell their wares.

## LAST MEETING HIGHLIGHTS

## PROGRAM

**Dave Johnston**, longtime FWCBS member and former president, gave a presentation titled *This & That, Lessons Learned from 30 Years of Growing Bromeliads.* In his more than 30 years of growing bromeliads, Dave has amassed a collection of about 1,500 different species and hybrids (down from a high of about 2,000). In 1990, Dave founded Exotic Landscapes, a full service landscaping business, and Bromeliads





Galore, a bromeliad retail business. With this background, Dave was well prepared to share with us lessons he learned over the years about bromeliad horticulture. According to Dave, the big four elements of growing bromeliads are, in order of importance, nutrients, light, soil and water. Below are highlights from his talk.

## Nutrients

- Dave stressed that growers should fertilize their bromeliads to enhance the quality of soil needed to transfer nutrients from soil to plant roots.
- Many commercial growers use Nutricote 360, a 360-day time release fertilizer, because it is formulated for bromeliads and has a consistent release over time. [Editor's Note: The overall length of time in which nutrients are released can be impacted by environmental conditions such as temperature and moisture in the soil.]
- Apply time-release fertilizer to newly potted pups and to supplement nutrients in older potted plants. The pellets should be placed below or at root level.
- Fertilizer packages have three numbers prominently listed on them, typically on the front of the package. The numbers represent the percentage of nitrogen (N), phosphorus (P), and potassium (K) in the fertilizer and are always listed in this order. For example, numbers listed as18-6-8 means the fertilizer contains 18 % N, 6% P and 8%K.
- Magnesium sulfate (aka Epsom salts) can be added to potted plants to correct magnesium or sulfur deficiency in the soil. It has a high solubility rate and does not significantly change the soil pH.
- Citric acid can be added to potted plants as an inexpensive way to lower soil pH, if needed for nutrients in fertilizers to work.
- Another method to fertilize plants is foliar feeding, a technique of feeding plants by applying liquid fertilizer directly to their leaves. With this method, plants are able to absorb essential elements through their leaves. Apply the mix with a sprayer.
- Foliar feeding works best on Vrieseas, Guzmanias, and Tillandsias, with possible discoloration of Tillandsias, and does not work as well on bromeliads such as Aechmeas, Neoregelias, and Billbergias.

## Light

- The amount of sunlight that works best for a bromeliad depends on the specific genus, species, or hybrid. For some, too much can bleach pigmentation and burn leaves while for others too little light can result in elongated leaves and loss of color. Finding the right balance can be a process of trial and error, especially for plants in the landscape.
- The amount of sun/shade for ornamental plant cultivation can be controlled in a shade house or greenhouse. These structures are also effective in protecting plants from excessive heat or dryness.
- Shade cloth is a lightweight UV-stabilized polyethylene that provides passive diffused light to plants. The white polypropylene fabric is perfect for use with flowering plants that will be affected by longer natural light exposure due to an increase in light quality and duration. It is water permeable, offers good ventilation, and keeps greenhouses cooler.

Shade cloth comes in a variety of densities to let different amounts of sunlight penetrate. This is measured by percentage of sun that is blocked out. Most plants will do best with a maximum of 40% to 60% shade.

 White opaque greenhouse polycarbonate films are used in single- or double-layer applications to achieve just the right shade and cooling requirement for a range of horticultural applications. This film has a 55% diffused light transmission per layer, and contains UV protectors.

#### Soil

- The 80% of bromeliads that are epiphytes use their roots solely as an anchoring mechanism. But when grown in soil their roots also act as a nutrient uptake mechanism.
- Dave uses Fafard-brand potting soil for his plants. Its ingredients are Canadian sphagnum peat moss, bark, vermiculite, dolomite (limestone), and a wetting agent. The grade he uses is Fafard #4, a versatile middle-weight blend that offers a higher degree of water retention Dave needs in his greenhouse. Most growers might find this too wet for their plants, especially for Vriesea and can add perlite to increase soil drainage.
- Soil in a pot can break down in about a year and results in decreasing levels of nutrients and changes in drainage capability. Plants in poor soil will suffer, become unhealthy, and lose leaf luster. To refresh old soil, pull the plant from the pot, shake off the old soil, add new soil and then fertilize.

#### Water

- Not all water is equal. Water choices for bromeliads are, in order from best to least desirable are:
  - Rain water is the best choice.
  - Well water is second best, depending on water quality. Some well water can contain salt minerals that can harm plants.
  - City water contains chlorine, calcium, and magnesium that can stain bromeliads.
  - Reclaimed water is the least desirable because it has salts and chlorine. Some bromeliads might acclimate to it. Most sensitive to it are Guzmanias, followed by Vrieseas, and then Billbergias.
- Rain water can be collected as runoff from a roof into a cistern, depending on the roofing materials. If the roof is composed of asphalt shingles, it can take up to 15 years of exposure to the elements to bleach harmful minerals out of the shingles. A galvanized metal roof has zinc that can impact the runoff water and burn holes in plants. A metal, baked enamel roof is good to use for collecting runoff but expensive.

## Cold Protection

- For those who do not have the use of a shade house or greenhouse, frost cloth placed over plants in the landscape can help protect bromeliads in most cold spells.
- When a cold front is approaching, water the soil beneath the plants then cover them with frost cloth. Moist soil absorbs more heat and can hold four times more heat than dry soil. Soil warmed by the sun in the daytime is the source of heat for frost protection at night.

- The thicker the cloth the warmer it can keep temperatures beneath it, compared to outside conditions.
  - 0.5 oz frost cloth keeps temperatures up to 4 degrees higher
  - o 1.0 oz frost cloth keeps temperatures 4 to 6 degrees higher
  - 1.5 oz frost cloth keeps temperatures 6 to 8 degrees higher
  - o 2.5 oz frost cloth keeps temperatures 10 degrees warmer or more
- Do not use plastic to cover plants in cold spells. The cold will go through the plastic and leaves that touch the plastic can burn.

## Plant Tags

- If you care to know and remember the names of your bromeliads, make plant tags for them. Use a number 2 pencil to mark the labels; magic marker will fade over time, especially when exposed to the sun.
  - o Capitalize the first letter on the genus name, for example, Aechmea.
  - The species name is all lower case, for example, fasciata.
  - Both the genus and species names are *italicized* in print, for example: *Aechmea fasciata.*
  - The hybrid name is capitalized, enclosed in single quotes, and not italicized, for example, *Aechmea* 'Foster's Favorite'.

## Scale

- Dave feels scale really is a big deal and he applies the insecticide Cygon 2E to control it. He finds grey scale is easy to control while black scale is hard to control.
- Scale can be removed by hand using a toothbrush but it is labor intensive.
- [NOTE: Another insecticide option for dealing with scale is Bayer Advanced All-in-One Rose and Flower Care Liquid Concentrate that uses the active ingredient Imidacloprid. Imidacloprid is also used to spray bromeliads when the Mexican weevil is present or suspected to be present. Note also that Imidacloprid belongs to a class neonicotinoid insecticides that recent research suggests may be contributing to honey bee colony collapse disorder and the decline of honey bee colonies.]
- Good air circulation around bromeliads can reduce the likelihood of scale. Leave space between your plants; do not crowd them.

## Propagation

- Two ways bromeliads propagate are pups and seeds.
- Remove pups at the right time--when they are about one-third to one-half the size of the mother. If they are smaller they might not be able to develop a good root system. If they are too big and have been crowded by the mother and other pups, they can be lopsided with uneven size leaves. Some bromeliads look fine when pups are left on and they are grown in a cluster. Others look better when grown individually and leaves can achieve full form.
- If pups are removed from the mother plant, more pups may soon appear, as long as the mother plant has a few good leaves left.

- Another way to encourage more pups is to destroy the meristem. The meristem is the growing point of bromeliads, and is located in the center of the tank where the inflorescence grows. Using a flathead screwdriver, gently twist the meristem, being careful not to go too deep into the plant. Keep the center dry for several days afterward.
- To grow bromeliads from seed, Dave places seeds in wetted sphagnum moss inside a one gallon zip lock bag and sets it aside until seedlings begin to sprout.

#### Force Blooming

- Commercial growers often force bloom their plants with ethylene to speed the blooming process, for example, for an upcoming sale. They also force bloom them to be able to cross two plants (for hybridization) that would otherwise bloom at different times.
- Ethylene can come in gas, liquid or a crystal form.
- Unless you are a commercial grower you will most likely want to use the liquid form. Commercial growers often use the gas form, but it is much more difficult to work with. Tropiflora, a bromeliad producer and seller, recommends Florel brand-name product, but anything with the active ingredient *ethefon* will work.

#### **Future of Bromeliads**

- The future of bromeliads will include these events.
  - More DNA mapping
  - o More new hybrids
  - o Advancements in tissue culture
  - o Discovery of new species and new natural hybrids

## SHOW AND TELL

Reported by Helga Tarver

- Mary Sue Beeler Orthophytum rubiginosa (picture below); grows in full sun, rarely gets watered. Neoregelia, unknown variegated hybrid, with an albino offset with a small bit of green and pink on it. Mary Sue put it on the raffle table with the challenge for someone to see it they can get the pup to prosper.
- Alton Lee Billbergia amoena 'Beryl Allen' Guzmania musaica (picture below)
- Franne Matwijczyk Billbergia unknown species or hybrid
- Susan Sousa Aechmea 'Foster's Favorite' Aechmea orlandiana 'Bert' (picture below) After efforts to grow this plant in soil in a pot failed, Susan put it in a wood hanging basket, bare rooted. It has been happy there for the last few years and has put out offsets. This species also grows well tied to a tree or mounted on a piece of wood where it puts out strong, woody stolons that can support a large clump.

## Barbara Stayer

# *Billbergia* 'Hallelujah' (picture below)—growing on a bit of an old tree trunk

## Show and Tell Plants





Orthophytum rubiginosa





Guzmania musaica



Aechmea orlandiana 'Bert'



Billbergia 'Hallelujah'

## **NEW MEMBER**

**Roland Martens** joined our society at the March meeting. Seek him out and welcome him. (Sorry, no picture available!)



Aechmea 'Foster's Favorite'

#### **BLOOMING THIS MONTH**



Aechmea nudicaulis





Submitted by Gary Lund.

Ananas lucidus var. 'Lava Burst'; a variegated form of Ananas lucidus (now Ananas comosus var. erectifolius). According to the BSI Bromeliad Cultivar Registry (BCR), it has been grown in error for years as 'Lava Flow'. (The BCR is the only authorized registry under the International Code of Nomenclature for Cultivated Plants).

Submitted by Barb Gardner *Pitcairnia* 'Flaming Arrow'



## UPCOMING EVENTS, 2016

April 1-3, Tropiflora's Spring Festival

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

<u> April 2-3, GreenFest Plant Sale</u>

University of Tampa, Tampa, FL (friendsofplantpark.com/greenfest)

<u>April 9-10, USF Botanical Gardens Spring Plant Sale</u> University of South Florida, Tampa, FL (cas.usf.edu/garden)

<u>April 16-17, Seminole Bromeliad and Tropical Plant Society Sale</u> The Garden Club of Sanford, Sanford, FL (*Ben Klugh at Klughka@yahoo.com*)

<u>April 23-24, Green Thumb Festival</u> Walter Fuller Park, St. Petersburg, FL (stpeteparksrec.org/greenthumb)

June 13-19, 22<sup>nd</sup> World Bromeliad Conference, Houston, Texas (http://www.bsi.org/new/conference-corner/)

June 25-26, USF Botanical Gardens Summer Plant Sale University of South Florida, Tampa, FL (cas.usf.edu/garden)

<u>August 20-21, Seminole Bromeliad and Tropical Plant Society Sale</u> The Garden Club of Sanford, Sanford, FL (Ben Klugh at Klughka@yahoo.com)

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