



June 2010

CALOOSA HATCHEE
BROMELIAD
SOCIETYs
CALOOSA HATCHEE
MERISTEM

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Although the highly colorful and patterned neoregelias are very popular among bromeliad collectors, the “*Neoregelia carcharodon* Group” of plants are unique, easy to care for and sun tolerate, albeit more adaptable to the landscape, they also deserve a place in your collection. On the front cover is a show winning *Neoregelia carcharodon* ‘Rainbow’. The back cover demonstrates a clump of this same cultivar growing in nearly full sun in the Miami yard of Moyna Prince and the late Ed Prince. *Carcharodon* is the genus name for some of the sharks of the oceans including the “Great White”. This plant’s large spines resembling shark teeth are apropos of this species name. Photos by Larry Giroux



THE CALOOSA HATCHEE BROMELIAD SOCIETY

MEETING TIME AND PLACE:

June Meeting Sunday June 20th 2010

ST. JOHN the APOSTLE CHURCH 3049 MCGREGOR Ave. FT. MYERS.

DOORS WILL BE OPEN AT 12:30 FOR SETUP.

Please come early and help with setup

MEMBERSHIP SALES WILL BE PERMITTED

at the June Meeting.

Friendship plants, Raffle items are always welcome.

There will be a Door Prize and Show and Tell

June Program

(Will start after our refreshment break)

“A Great Show from a Judge’s Point of View”

By Maureen & Bill Frazel

Master Judges and Judges’ School instructors, Maureen and Bill Frazel will comment on how Judges look at the many aspects of a Bromeliad Show. From Setup to Classification to the Horticultural and Artistic entries, Maureen and Bill are highly qualified to discuss this topic. Still have some questions about our last Show, this couple will be happy to talk you about them. And yes they were both Judges at our December Show.

June Workshop

(starts at 1:15PM)

By Eleanor Kinzie and Betty Ann Prevatt

A topic has not been chosen for this month’s Workshop, but there will be a program selected by meeting time.

After several years as Workshop Chairman, Steve Hoppin is giving up this position. Eleanor is looking for a replacement. If any of our members feel they can contribute to the CBS, by taking over this position, please contact either Betty Ann Prevatt or Eleanor Kinzie.

The Caloosahatchee Bromeliad Society is an active Affililate of:



FM-LCGC



Cryptanthus
Society



Bromeliad Society
International



FCBS

Society News

Our May Program



Craig Morell, the chief horticulturist at Pinecrest Gardens (formerly Parrot Jungle) in East Miami, again covered a technically complicated topic in an entertaining and informative manner.

Many thanks go to Craig for visiting us in spite of his busy schedule. Our membership truly benefits from programs like Craig's (fertilizers and previously, insecticides), which deal with topics so important to the care of our bromeliads and other plants.

Bromeliad Fertilizer Principles

(Presented by Craig Morrell May 16, 2010 notes taken by Gary Nelson)

Gary Nelson has been nice enough to again share his notes, which he took during Craig's program. Now you can keep this info for future reference.

1. Ideally maintain plant health w/o too rapid a rate of growth
2. Winter: "down time" – allow plants to become fertilizer hungry
3. FEED THE PROPERTY NOT THE PLANTS!!!!

Three Numbers of fertilizers: N-P-K

Nitrogen (green leaves)

Phosphorus (roots & stems)

Potassium (cell structure, stronger cells >> leaves)

Nitrogen - higher levels increase water demand; Phosphorus & Potassium together improve root systems; Phosphorus is great for orchids & some bromeliads; often high in local waters from run off; Phosphorus binds to iron preventing availability to plants (*personal thought - high iron well water could impact available Phosphorus*)

Potassium nitrate 13-0-44 (also called salt peter) ~\$35/bag Homeland Security Alert; larger nutritional demand with palms, water lilies, bananas**

Dose with 1 – 2 teaspoons per gallon 3-4x annually

Very soluble – short term fix; encourages thicker leaves, stems, roots, but does not reduce flowering

Magnesium Sulfate (Epsom Salts) – increase chlorophyll production; can't over use this!!! Buy thru commercial source-- generic \$15 for 25+ lbs

Yellow foliage – deficiency of K & Mg; Heat & cold stress – spray on K and Mg 1 Tablespoon/gal; (there appears to be no benefit for drought resistance)

Two divisions of fertilizers: Organic and Synthetic

Synthetic - Soluble (Miracle Grow, Peters – short life, picked up fast)
Controlled Release –(slow release: Osmocote, Dynamite, Nutricote)- 2-4x annually
(depending on time release formula) . less for Aechmeas & Neo?s
Avoid ground surface dispersion; increases weed growth; Osmocote more so than
others reacts to sunlight & heat resulting in fast release & burning of roots. Mix
into potting mix or cover with mulch; more controlled release with watering.
Alcanteras – optionally, 1-2 slow release pellets in leaf cups; Vriesias & Guzmanias
prefer frequent & consistent fertilization (every 3 months); Neo?s in the open
sun - annual fertilization

Organic - Greater volumes required, rarely a complete fertilizer

Milorganite – 6-2-0 slow release, bad odor; NOT for edible plants. Great for
Staghorn ferns. Greens up plants. AVOID use with Bromeliads & Orchids.
ATTRACTS RACCOONS. **Blood Meal** – “hot” fertilizer- will burn – concentrated
nitrogen (Gingers enjoy it). **Sulfur of Potash & Green Sand**- Very strong 12x
stronger than Potassium Nitrate. Great for heliconias and bananas. Use
SPARINGLY on bromeliads! Very potent. **Bone Meal** – great on lilies! They
suck it up!

Miscellaneous information for a variety of plants

12-2-12 great on St Augustine 4x annually; Palms – 3x annually. Heliconias –
require vast amounts of fertilizer – lots monthly!!! (Sulfur of Potash). Roses –
love MgSO₄. Begonias – love “Rose Tone” - high stems bigger leaves & blooms.
Staghorn Fern – Milorganite 2x annually. Lilies - love Bone Meal

Publix Mild & Gentle Soap safe topical agent works as insecticide, helps control
snails & ants. By itself use 1 oz per 10 gallons sprayed (comes off with next
watering). Adding 1 teaspoon/gallon to liquid fertilizer – helps disperse it better
and acts as a sticker.

Gilmore sprayers - goes empty when fully dispersed, thereby dispersing more
constant concentration.

Plants in general – feed the roots directly when possible for better results (Fine
for terrestrial bromeliads, but many bromeliads are epiphytes and get their nutrition
from their leaf surface.)

To kill Grape Vine & Brazilian Pepper Trees – paint on Poison Ivy Killer on
woody stems/trunk – scrape off bark over 2ft area & repeat applications

May Workshop

Geri and Dave Prall need to be thanked for bringing back some great
pictures and memories from their recent trip to Brazil and sharing them with us.
The icing on the cake was the additional photos of their remodeling of their gardens
in Cape Coral. I have been fortunate to have seen the beginning of their landscape
adventure starting about 18 years ago. An empty Cape Coral lot has turned into a
tropical jungle, which is giving many residents and passer-bys great pleasure.
Thanks for sharing all of this with us too.

Included are some of the slides taken by Geri and Dave. Be sure to check
out the e-mail or online versions to see these pictures in full color.



Rob Branch, a former member of CBS, girlfriend Suzi and CBS members Geri and Dave Prall traveled to Brazil earlier this year to explore areas around Rio de Janeiro.

They spotted cactus, palms and many other tropical plants including bromeliads.

Seen here is an unidentified albomarginated bromeliad resembling a *Canistropsis*.



Holding several gallons of water, a possible cultivar of *Neoregelia cuenta* is seen growing high up in a tree, reminding us that a majority of bromeliads are epiphytes and do not necessarily grow in pots or in the ground as we tend to grow them in cultivation.



Nidulariums, such as this *Nidularium innocentii* are endemic and exclusive to the coastal and southern portions of Brazil. Brazilian taxonomist, Elton Leme has written several books about the bromeliads of Brazil, including one devoted to Nidulariums. He is the most knowledgeable expert on the Genus- *Nidularium* among several other genera endemic to his native country.



On the opposite page are two photos; one of a portea species and one of a bigeneric portea/aechmea hybrid. Had I included expanded pictures, you might realize that the left photo was taken at the Prall's home in Cape Coral, Florida and the other in Brazil. For nearly 20 years the Pralls have been transforming an empty lot next to their home into a small jungle. Photography by Geri and Dave Prall.



Clone Preservation Project Update

Greetings,

I have finally completed the update that was scheduled for April. Unfortunately, I don't see any opportunity to produce the updates any faster over the next several months. This would be an excellent time for any of you who would like to write a review of your favorite group (hybrids or species) to speak up.

This past winter was horrible in Florida (relative to our normal weather). In Miami, we got less freezing weather than elsewhere, but it was still much colder than the plants were used to. I lost some clones in my own collection. The *Platyachmeas* were probably the most affected: not directly by the cold, but by the secondary fungus that set in later. I lost some clones of *Aechmea chantinii* to this fungus and am not too sure about *Aechmea retusa*.

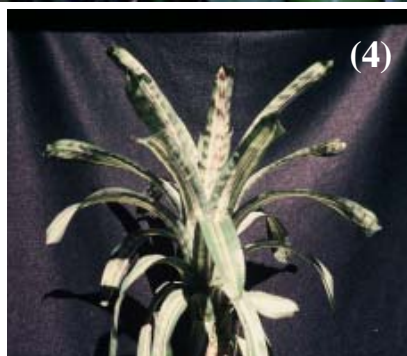
We need to start gathering information on what was lost. It is likely that some clones are much less widespread than before the winter, and we need to record this.

I hope everyone who suffered during the winter is seeing a resurgence in their collections as summer takes hold. May you all have perfect growing conditions for the next six months.

Alan Herndon

Clone preservation project update - May 2010

Aechmea fosteriana was first collected by Mulford and Racine Foster during their 1939 trip to Brazil (detailed in their book *Brazil - Orchid of the Tropics*). It is a tubular plant with wide, strap shaped leaves that are up to 2 feet long. The leaf surface has irregularly shaped, dark, usually incomplete cross bands with a matte green ground color. The inflorescence is composed of spreading



Unless you have accurate labeling or the plants are in bloom, distinguishing this group of plants from each other is difficult. (1) *Ae. fosteriana*; (2) *Ae. 'Bert'* - (*Ae. orlandiana* x *Ae. fosteriana*); (3) *Ae. 'Bert'* x *fosteriana*; (4) Variegated *Ae. fosteriana* (photo by Fred Ross); (5) Variegated *Ae. 'Bert'*. All other photos by Larry Giroux.



(6) *Ae. orlandiana* x ('Bert' x *fosteriana*) may have a bit less scurf on the undersides of the leaves compared to 'Bert' and *fosteriana*. (7) & (9) are specimens of *Ae. milsteiniana*. The color variation may be cultural, but most likely, since they were growing in the same collection close to one another, they may represent two different clones. (Photos by Larry Giroux) Alan includes *Ae. bambusoides* (8) (photo by Bromeliario Imperialis, courtesy of FCBS.org) and *Ae. gurkeniana* (10) (photo by Jarka Rehak, courtesy of FCBS.org) in this group of "*fosteriana* types".



branches. Flowers are separated from each other. In other words, it has a totally different appearance from *Aechmea orlandiana*. *Aechmea fosteriana* var. *rupicola* is similar in overall appearance to typical *fosteriana*, but has a shiny green leaf surface without any crossbands.

I currently have 4 different collections of typical *Aechmea fosteriana*. These represent at least 3 separate clones. The one I have had the longest came from the collection of aroid specialist Monroe Birdsey in the mid 1970's. It is characterized by a dark green ground color and drooping leaf tips. I do not know what the original source was. Monroe Birdsey did some collecting in Brazil, and may have brought back the plant himself. Two of the collections, one from Curt Dowling (through Moyna Price) and the other from Ralph Davis (through Eloise Beach) are similar in appearance and may represent the same clone. The green color on the leaves of these plants is lighter than found in the Birdsey clone, and the leaf tips have less tendency to droop. The other clearly different clone was obtained from Elton Leme by John Anderson (I received it through the good graces of Karl Green). In this clone, the cross bands are straighter in appearance, and more continuous, than in the other clones. This gives the clone a darker appearance overall.

Selby Botanical Gardens living collection contains a plant reported to be a descendent of the type clone from Foster's collection (Sel 1979-1767). I do need to add a note of caution concerning this plant. According to the Smith and Downs Monograph, Foster made two collections of the species from the same site approximately a year apart. Only the descendants of the 1939 collection could be considered descendants of the type clone, since a specimen made from this collection was originally designated the holotype (Foster 177). If the Selby plant is a descendent of the 1940 collection (represented by the specimen Foster878), it must be treated as an early collection without any connection to the type. This holds true even if Foster was able to collect plants from the same vegetative clone in both years. In either case, this is a very important clone to preserve in cultivation. It is possible that evidence bearing on the relationship between the two collections is awaiting discovery in the Foster archive at the University of Central Florida.

Aechmea gurkeniana and *Aechmea milsteiniana* are similar in vegetative appearance to *Aechmea fosteriana*. I have recently had the opportunity to compare the flowers of *Aechmea gurkeniana* and *Aechmea milsteiniana* with those from *Aechmea fosteriana* and *Aechmea orlandiana* and found all shared the same relationship between the petals and stamens. Other potential members of the orlandiana-fosteriana complex, such as *Aechmea bambusoides* and the recently described *Aechmea atrovittata* have not been available for study yet. *Aechmea correia-araujoi* is another potential member of the complex that I have not studied

in detail.

No species in this complex appears to be self-fertile, much less to set seed without pollination. You should assume that at least two clones will be needed to produce viable seeds for any of the species. However, it is quite easy to cross *Aechmea orlandiana* and *Aechmea fosteriana* with each other and with other *Aechmea species* (consider the number of reported *Aechmea orlandiana* hybrids). Of course, if you have humming birds around (they tend to be around when plants of this complex are in bloom), there is always a quick little beak ready to cross-pollinate any two open flowers that provide a sip of nectar. The fruits turn blue when seeds mature inside.

If you find these seed-filled fruits, you can try your hand at growing some seedlings. These will all be hybrids, of course, and it is unlikely that any will be worth propagating, but it could be interesting to spend some time trying to figure out what the unknown pollen parent might be.

I need to make some comments on *Aechmea* ‘Bert’, the hybrid between *Aechmea fosteriana* and *Aechmea orlandiana*. I have some plants that probably came from Foster’s original cross (although this is hard to prove given the uncertain distribution of the Frase hybrids); they basically do not have any of the orange colors present in the leaves of *Aechmea orlandiana*. Plants currently for sale as ‘Bert’ are much more colorful, and have better form, than these old clones. These newer clones could be remakes of the original cross, or the result of more complex crosses within the complex. Since these clones are just as large as the original, they are clearly not *Aechmea* ‘Little Bert’. I don’t know what *Aechmea* ‘Viktor’ looks like, so, in theory, this name could apply. However, since no separate cultivar names are attached to these newer clones, we will probably have to come up with new, artificial names (think Clone 1, Clone 2 ...) to distinguish them. Unfortunately, this also means we will probably never be able to decipher their history.

The variegated form of *Aechmea* ‘Bert’, although readily available, has apparently never been given a cultivar name. It is apparently unique in the way the variegation skips generations. Offsets of variegated plants frequently lose all trace of variegation, but offsets from these plants also frequently appear with fully developed variegation.

This trait means you don’t want to discard plants that have lost variegation. It also suggests that you should grow this plant in a clump in order to maintain some variegated rosettes at all times.

As always, if you have any information to add concerning plants in this complex, please let me know. In particular, information concerning older clones still in cultivation or wild-collected plants from some of the many BSI members who collected in Brazil over the years would be welcome.

The following is an excerpt and photos from Brazil - Orchid of the Tropics by Mulford B. Foster and Racine Sarasy Foster. The Jaques Cattell Press, Lancaster, Pennsylvania, 1945.

*(The story is told by Racine Foster of the occasion of collecting *Aechmea fosteriana* for a second time, one year following its initial discovery.)*

On one of our innumerable excursions we came to a tall tree laden with plants of *Aechmea Fosteriana*, a new bro-meliad discovered the year before. Mulford was considerably tired from his exertions of the morning plus all the scrambling over rocks; he had climbed five trees already and when he came to this particular one he stopped a moment wondering if, in his fatigue, he should make the attempt. As we stood gazing into the branches above, out of the distance came a voice in broken English, "Hello, mister." We welcomed this surprise. When we beckoned he came closer. In a few broken English words he explained that he had been in New York and was now happy to use the English he had learned there. We asked him if he had a son who could climb the tree. He looked at us almost in pity. He told us that he had a grandson who could climb it, but he himself could do it much better. When we explained what we wanted up in the tree, off came his shoes and he started immediately to scale the trunk; barefooted he inched his way up the difficult and slippery trunk. At last he secured our plants. When he reached ground again the look on his face made us wonder who was happiest, we who wanted the plants, or he who wanted to do something for a Norte Americano, or the children grouped around proudly smiling over their father's achievement and apparent friendship with the *estrangeiros*. He came down puffing for his exertions. We offered him some money for his trouble, because we had no better way of showing our gratitude, but he politely refused. We tried our best to persuade him to accept a few coins, but he was equally polite and insistent in the negative. So we said that we would give some coins to his children. When we asked which ones were his of the large group who in wonderment had collected around us, he waved his hand and said that all of them belonged to him! We were astonished and questioned him again. There were all sizes and colors, from very young and very dark to very white up to about four-teen years old. He himself was of medium dark skin. Looking at the variations in color we still were skeptical when with a wave of his hand he said *todos*, all were his. We looked long at a blonde, fair-skinned child with blue eyes and tried to see some small resemblance in feature to the dark-skinned, black-haired man standing in front of us.

"So these are all your children," we sighed, counting about fifteen in the circle.

"Yes," he replied, "Me Brazilian, me no sleep nights much."

Such an aid to the population of Brazil should be rewarded. So we emptied our pockets of change but alas there was not enough to go around!



Vriesea hieroglyphica in its zigzag glory is the most spectacular of all the Vrieseas!

All of them bagged in one day's hunting!



A collection of mounted epiphytic bromeliads including two blooming *Aechmea lueddenmanniana* 'Alvarez', tillandsias and other colorful patterned neoregelias. Photo by Jim Bixler.



A bizarre container garden at Bullis Nursery in Miami, Florida. I believe this is a blooming *Aechmea mariae-reginae* atop of a huge clump of *Neoregelia* 'Fireball'. Photo by Jim Bixler.



An assortment of bromeliads displayed in containers at Bullis Bromeliads. Photo by Jim Bixler.



A variegated *Neoregelia concentrica* cultivar called Neo. 'Blue Bullis' photographed at Bullis Bromeliads by Jim Bixler.



A blooming *Aechmea tayoensis* displayed on the lanai of Jim Bixler. Photo by Jim Bixler.

In the last issue of the Meristem I showed you Lyle Bowen's *Vriesea vinacolor*. This month Lyle was able to capture one of the first large flowers in full bloom.



There is still time to plan your vacation around a trip to New Orleans and the 19th World Bromeliad Conference

Greetings!

Just want y'all to know that the conference Show Schedule and Entry Form is now available on the web site.

We will be using standard BSI entry cards which are readily available thru all affiliates and will also be available at the conference registration desk.

I encourage all bromeliad enthusiasts to attend the conference and to participate in the show - it's not too late - Register Now!!

See you in the **Big Easy!**

Bonnie Boutwell, WBC Co-Chair



Catch the Fun.... July 26-August 1, 2010

19th World Bromeliad Conference

Hosted by BSI & GNOBS

Astor Crowne Plaza Hotel

New Orleans, LA USA

For Conference Schedule and Registration Information

visit our website: GNOBromeliads.com

**For Hotel reservations contact the Astor Crowne Plaza
at (504) 962-0500 or visit www.astorneworleans.com**



Read the Expanded Newsletter

I have been asking members who have e-mail, if they can start receiving the Meristem exclusively by e-mail and I have gotten a good response from the membership. I want to remind the members that even if they can not receive the e-mail version, because they have dial-up internet service, they can still go to www.fcbs.org and read the expanded Meristem directly online. The June issue has some great photos from some of our members. Go to www.fcbs.org to view this expanded electronic issue, if you are not already opting to receive it or let me know if you want me to send it to you. Editor

Calendar of Bromeliad Events

July 26-August 1, 2010

**The BSI World Bromeliad Conference - Bromeliads in the Big Easy (Astor Crowne Plaza - New Orleans).
“Catch the Fun”.**

**NEW EDITOR IS NEEDED FOR THE
CBS MERISTEM. Please contact Dr.
Larry Giroux at DrLarry@comcast.net**

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See Betty Ann Prevatt for more information.



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BSI Judges Maureen and Bill Frazel are our speakers this month. No change in the order of meeting events this month.