CALOOSAHATCHEE BROMELIAD SOCIETYs CALOOSAHATCHEE MERISTEM

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September 2007

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SPECIAL HOSPITALITY	**Betsy Burdette (betsy@burdetteinc.com)**
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RAFFLE COMMENTARY	**Larry Giroux**
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Orthophytum burle-marxii **represents one of the groups of the Genus -** ***Orthophytum*****, which flattens at anthesis and has central floral bract with white flowers. See article on Orthophytums in this issue and see more colorful photos of the various plants of this** ***Genus*** **on the on-line version of the Meristem.**

THE CALOOSAHATCHEE BROMELIAD SOCIETY

MEETING TIME AND PLACE:
August Meeting: **SUNDAY September 16th, 2007**
ST. JOHN the APOSTLE CHURCH 3049 McGREGOR Ave. FT. MYERS.
DOORS WILL BE OPEN AT 12:30 FOR SETUP.

Although Betsy McCrory will be bringing landscape plants for sale, MEMBERSHIP SALES ARE PERMITTED at the September meeting.

Friendship plants, Raffle items and Door Prizes are always welcome. (Please contact Barbara Johnson if you have a Door Prize to donate.)

September Workshop

"Selecting & Grooming for the CBS Show"

By Betty Ann Prevatt and Eleanor Kinzie
(Begins at 1:15 PM)

Time is very short before we will be having fun at our 2007 Show and Sale. For the next couple of Workshops, our resident judges, Betty Ann and Eleanor, will guide us through the steps to prepare plants for exhibition. At the October Workshop we will ask that members practice what they learned and bring in entries for a "Mini-show". So come to the September Workshop and take notes.

September Program

"Bromeliad Basics"

By Betsy McCrory
(Begins following the refreshment break)

Betsy, nearly a life-long enthusiast of bromeliads, will discuss "the basics" of soil conditions, light requirements, water, etc., with regard to growing bromeliads for landscape and home use. Betsy will also clarify the proper way to prepare the supermarket pineapple for planting. Please see her impressive resume elsewhere in this issue.

The Caloosahatchee Bromeliad Society is an active Affililate of:

FM-LCGC | **Cryptanthus Society** | **Bromeliad Society International** | **FCBS**

President's Message By Steve Hoppin

Do I appear to be one of those individuals that are anticipating the change of seasons with baited breath? If you have spent anytime with me this summer you wouldn't even have to look at me to note this is very true. As the Summer progresses, I have become more and more vocal about my dislike of this heat, that Fall is approaching way to slow and I find myself thinking about the cooler weather to come way too often.

I must admit one blessing in particular from this Summer is that I'm still enjoying the many long lasting blooms of the big dogs in the yard (i.e. - *Ae. blanchettiana*, *Ae. rubens* and Ae. eurycorymbus, etc.). But the bromeliads this year, in general, seem to have shown more wear. I don't know about you, but I've witnessed some bromeliads that routinely could handle full sun through Summers past, fade, blotch and/or acquire burn marks of greater magnitudes this year. One needs to be careful as bromeliads can suffer severe set- backs including secondary infections following burns. So, keep an eye on those sensitive types, address their needs and try to avoid moving plants into more sun this time of year. I always thought it funny how Arizonians would cover their cacti during the Summer as we do certain plants during the Winter, but I might have to try that with some of my bromeliads if it will help avoid damage. To those avid gardeners that must work in their yards during these extreme weather conditions, please keep yourself hydrated and take breaks whether you think they are needed or not. And although a cool rain may feel good, beware of the accompanying lightning just prior to the cloudbursts; Florida is the lightning capital!

While you are out in your yard, start looking around for any surplus landscape plants you can bring to our Fall Sale. And remember you need to get table space and a seller's ID from Brian Weber, in advance, to participate in the Sale. Although there is a list of rules you must follow (these will be available from Brian at the next meeting), they are very easy to adhere to.

One break you should definitely take is to attend the September meeting. Regardless of the weather conditions, you should know that when you join us for a meeting you can expect to be comfortable, in a pleasant setting where we all share similar agricultural interests and are provided the best Workshop and Programs attainable. Actually, for those yard workhorses out there, Betsy McCrory's program this month is just your cup of tea. She will be discussing the care and maintenance of those landscape bromeliads we've been working on. So don't miss this.

Steve

Aechmea eurycorymbus **in our N.Ft.Myers yard. Photo by L.Giroux**

SOCIETY NOTES

August Workshop

It was a big task but Betty Ann and Eleanor again came through for us and discussed the remaining half of the Sub-family of the *Bromelioideae*, which includes - *Hohenbergia, Hohenbergiosis, Lymania, Neoglaziovia, Neoregelia, Nidularium, Ochagavia, Orthophytum, Portea, Puedoaechmea, Pseudoananas, Quesnelia, Ronnbergia, Ursulaea and Wittrockia.*

The On-line version of this issue of the Meristem will include a copy of the excellent handouts given out by our speakers.

Again many thanks to the teaching duo of Betty Ann Prevatt and Eleanor Kinzie and to all who brought in plants for demonstration.

Welcome to New Members

Sandra Bishop
10961 Mahogany Run
Fort Myers, Fl 33913
xxx-xxx-xxxx

Ruthann Hawkins
3509 SE 8th Place
Cape Coral, Fl 33904
xxx-xxx-xxxx
calmingseas@comcast.net

Please add back to the

John Banta
17010 N. River Road
Alva, Fl 33920
xxx-xxx-xxxx

Please make this information correction

Joan Smorick
244 Hobnail Drive
North Fort Myers, Fl 33903
xxx-xxx-xxxx

August Program

Deb, Tom and I hope you enjoyed Bromeliad Trivia Bingo. The program is adaptable to many organizations by simply changing the questions. Originally designed for teachers to educate their students in a fun manner, the program is available online for all to use. You can find it at -

http://www.teach-nology.com/web_tools/materials/bingo/5/

September Speaker

Betsy McCrory's involvement with Bromeliads actually began many years ago when her mother Audrey McCrory first learned about bromeliads from a very good friend. Both her mother and father joined the Bromeliad Society of Central Florida back when the Society was only about six months old (the BSCF is now over 33 years old). Betsy started to attend meetings at the age of 16 with her parents. Even before establishing the family business, Boggy Creek Bromeliads in 1978 in Kissimmee, Florida, raising and selling bromeliads became the McCrorys' passion. Attending Bromeliad Shows,

selling bromeliads all over the Southeast and giving programs at garden clubs, Bromeliads Societies and even World Conferences, became a family tradition. Although, Audrey has passed away and Betsy's father, Bill has become limited in his participation, with six greenhouses' and five acres of property, the family continues to grow and sell plants appropriate to the landscape. They specialize mostly in neoregelias and aechmeas.

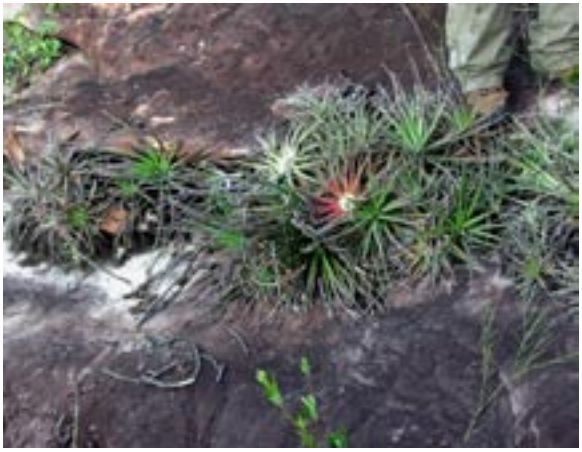
Betsy's decades of service to the Bromeliad Society of Central Florida as every office holder, Show Chair, newsletter editor and BSCF's representative to the Florida Council of Bromeliad Societies has earned her the honor of a Life Membership.

Betsy will be discussing the optimal conditions to maintain your landscape bromeliads. She will be bringing many plants appropriate for the south Florida yard. In addition she will bring a pineapple and demonstrate the proper way to start them in your garden.

Bromeliad Expose By Larry Giroux

ORTHOPHYTUMS

The genus *Orthophytum* was first named by Beer in 1854. The name comes from the Greek - *ortho*, which means straight and *phytum*, which means plant; the entire name refers to the erect inflorescence. Since the mid 1800's when this genus was given its name, several additional species have been included in this group, whose appearances no longer adheres to the meaning of their genus name. That being said, the majority of plants of this genus have an upright inflorescence, which bear the floral bracts and flowers. These tend to have soft spines along the edges of the easily fractured leaves. The stalk of the inflorescence is usually 6 to 15 inches tall with small rosettes of floral bracts with predominantly white petaled flowers. Pale and bright green petals are found on a few of this group of species.



A grouping of *Orthophytum albopictum* in its natural habitat in Bahia, Brazil. This clump is growing in a crevice between to large rocks. Photo by L. Giroux

In contrast there is a small group, which have the flowers and floral bracts nestled in the center of its flattened rosette. This

group has been considered some of the most eye catching bromeliads. Most have 40 plus narrow pointed leaves edged with sharp hard spines. At blooming, the center of the plant and sometimes the entire flattened rosette can flush with red, rose, pink or coral leaves with similar shaded floral bracts. The visually contrasting white flowers draws pollinators from miles away. There is a third set of plants in which the inflorescence is only slightly elevated above the rosette and has a spreading growth habit. One of these is *Orthophytum supthutii*. It is very unique in that it has large yellow flowers within the center of a green rosette that does not change color at anthesis. For nearly four decades after its description was first published, it was considered to be a cryptanthus. Examples of all three of these different types of orthophytums are demonstrated later in this article as well as additional information and photos about O. supthutii.

The natural habitat of these terrestrials, mimic closely that of another terrestrial genus, *Cryptanthus*. The 35 or so species grow from sea level to about 3,000 ft. along the north and central eastern coastal areas of Brazil. Orthophytums are better cold tolerate than their closest relatives - the cryptanthus. And if provided sufficient moisture, will endure higher temperatures. Orthophytums require as much moisture as do cryptanthus and are usually found growing in moist areas near rivers, streams and waterfalls. Although they may be found clustered on rocky ledges basking in the sun, these environmentally hostile areas during the dry season, are most likely watered by mountainous mists. On a recent trip to this area of Brazil, I did note species of *Orthophytums* growing on rocky outcrops, where they were receiving infrequent waterings; in addition, I also saw orthophytums growing along the dusty roadside among cacti.

Some horticulturalists consider many bromeliads, including orthophytums as semi-succulents or succulents. Penrith Goff of the S.E.Michigan Bromeliad Society has answered the question - What is a Succulent Bromeliad?

"Logically, any bromeliad capable of storing large amounts of water in the leaves is a succulent. Thus, it is fair to call the atmospheric tillandsias, the airplants, succulent, as J. Riha and R. Subik do in their book The Illustrated Encyclopedia of Cacti and Other Succulents (London:1992). However, the term succulent has become so closely associated with earth-bound desert dwellers that we will use the term for those terrestrial bromeliads which have developed succulence as an adaptation to a hostile climate. [illegible] sunny landscape to which they have adapted. In general they do not develop the degree of succulence which is common to agaves and aloes, yet there are many which can easily be mistaken for these because the plant structure is so similar."

Orthophytums, especially from the States of Minas Gerais and Bahia, Brazil along with other

A habitat shot showing orthophytums and cacti growing among rocks. Photo by L. Giroux

***Orthophytum gurkenii* is a relatively new plant in cultivation and probably the most popular of the Genus. Brian Weber found this "streaked" or variegated mutation of *O. gurkenii* among normal plants. Photo by L. Giroux**

Another attractive species is this *Orthophytum lemei*, which has white scurfy leaves and dark scape, bright red floral bracts and contrasting white flowers. Photo by L. Giroux

The variegated form of *Orthophytum vagans* is a member of the third group of orthophytums mentioned in the article in which the plants tend to form a spreading clump. The photo to the left by Ian Hook shows its upright and spreading nature while the right picture by Chanin Thorut shows the blooms and color changes at the top of each stalk. The colors of the leaves can be greatly variable depending on light exposure.

Leme and Esteves, two taxonomists from Brazil have just recently discovered and described *Orthophytum eddie-estevesii.* From the photo by Elton Leme, it appears to have orange bracts and yellow flower petals, unique for this Genus.

The types of orthophytums, which flatten and bloom in the center of the rosette, also tend to reproduce by stolons from underground or from the base of the mother as seen here with *Orthophytum navioides*. Photo by L. Giroux.

I found this picture labeled *Orthophytum hutchinsonianum* at www.desert-tropicals.com. It is being sold to Arizonia growers with the warning to give it moderate water and light shade to shady conditions. Its color in the photo may be due to extreme sun exposure.

The majority of *Orthophytum* species produce a rosette of floral bracts atop a stalk with white flower petals. Many also have similiar tuffs arising from each leaf along the stalk. (See picture of *O. lemei* on opposite page.) This is *Orthophytum rubrum*. Photo by Ken Marks.

Many hybrids using orthophytums and a variety of other genera of the Sub-family *Bromelioideae* have been made over the years. *xNeophytum* 'Shiraz' (left top) made by Gary Hendrix with *Neoregelia* 'Dr.Oeser' #100 and *Orthophytum navioides* is unique by having spotted foliage all the time. Another hybrid using *Orthophytum navioides*, but with *Neoregelia* 'Meyendorffii' as the other parent is *xNeophytum* 'Ralph Davis'. The photo here shows *xNeophytum* 'Galactic Warrior', which is an albo- marginated sport of *Neoregelia* 'Ralph Davis' developed by Jimmy Antle in 1988. In spite of a neoregelia parent, these bigeneric hybrids flourish when given large amounts of fertilizer. Photos by Larry Giroux.

This unidentified *Orthophytum* species was seen growing in sandy soil with Aechmeas and grass. Note the thick crust of dust covering the leaves, indicating no rain for some time. Photo by L. Giroux

terrestrial bromeliads such as encholiriums, cryptanthus and dyckias have adapted using succulence for survival during their winter months of June, July and August when the only moisture is mountain mists, fog or the rare rainfall.

With consideration of their natural habitats, for optimal growth of this terrestrial genus, a medium, which is able to retain moisture while still able to drain well, should be utilized. I have notice, however that there is a slight difference in the type of growing medium preferred by most of the orthophytums and that small group, which includes *Orthophytum burle-marxii*, which has an inflorescence nestled in the center of its rosette. In habitat these plants were noted growing in rocky ground with their roots invading the crevices of the rocks. The soil at locations where others were growing was more sandy or coarse than the loamy soil one would expect; this suggests that these prefer a less water retention mix in cultivation. This will prevent the biggest problem with growing this group - rot! Epiphytic mixes are, however, to be avoided.

Orthophytum, like *Cryptanthus* are fertilizer hogs. A time release formula such as Nutricote, either 6 or 9 months is ideal with an occasional soluble 1/4 strength dosing of something like Peters for good measure. The desire for N-P-K is so great with the orthophytums, that we see with bigenerics of orthophytums and neoregelias (neoregelias routinely should not be fertilized due to loss of color and lanky growth) that these hybrids such as *xNeophytum* 'Galactic Warrior', flourish with heavy feedings.

Once you have achieved the aptness of growing these variable plants, they will reward you with offsets on the scape, from underground stolons and from the base of the mother. Seeds are easily set from species or new hybrids. To date bigeneric crosses have been made with *Aechmeas* (*xOrthomea*), *Cryptanthus* (*xOrthoanthus*), *Neoregelias* (*xNeophytum*) and *Nidulariums*

Seen here is another orthophytum in its natural rocky habitat. This species resembles *Orthophytum rubrum*, but has green floral bracts with white petals. Photo by L. Giroux

(*xOrtholarium*); many are worth owning.

So, with water, fertilizer, sun and a selective growing medium for the type of orthophytum you have, you can easily grow and enjoy for generations this unusual and quite distinct group of plants, either outdoors in the warmer climates or indoors in seasonal areas under lights.

Bibliography:
Bromeliads in the Brazilian Wilderness by Elton M. Leme and Luiz Claudio Marigo. Marigo Comunicacao Visual, Rio de Janerio, Brazil, 1993.
Growing Bromeliads by The Bromeliad Society of Australia, Inc. Barry E. Williams, Editor. Kangaroo Press, Kenthurst, Australia, 1988.
Bromeliads by Victoria Padilla. Crown Publishers, New York, NY, 1986.

The 2007 Bromeliad Extravaganza at the Airport Hilton in Fort Lauderdale

I can't encourage enough anyone interested in bromeliads, into attending the 2007 Extravaganza. This one day event which is only a two and a half hour drive from Fort Myers will be both fun and entertaining. Please see below for additional information to book a room at the Airport Hilton for an incredibly low price and make plans to attend the Saturday evening Banquet and Rare Plant Auction as well as all the other scheduled events.

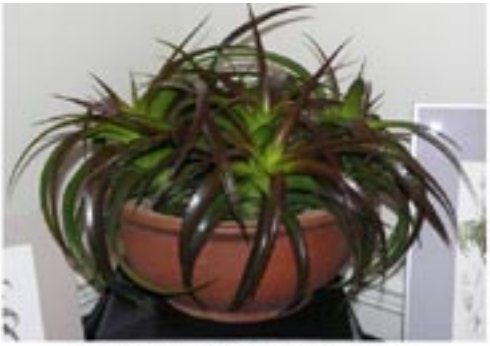
Saturday, September 29th, 2007
Hilton Ft. Lauderdale Airport Hotel
1870 Griffin Road, Dania Beach 33004
Room rates: Single or double $89
Rates effective until September 14th

Banquet Tickets contact Sara Donayre - 954-925-5112

WATCH FOR the MAILING of the OFFICAL PRINTED PROGRAM from the FCBS toward the end of August

Orthophytum benzingii **has most of its leaves along its stalk. Photo by Ken Marks.**

Orthophytum foliosum **is also a simple green plant with green floral bracts and white flowers. Photo by Ian Hook.**



Division XII - Regional Award of Excellence
Orthophytum glabrum - Joe Quijada

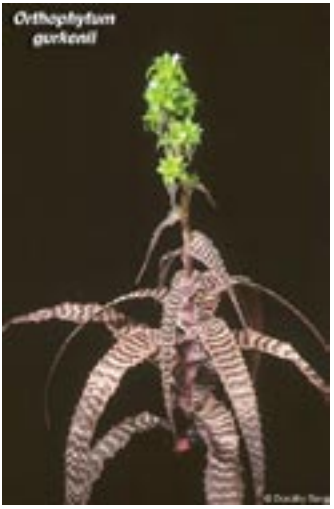
Orthophytum glabrum **is a glossy plant with little or no scurf on the upper surface of the leaves. This specimen above and to the left was grown in California in high light, which can turn the leaves a dark maroon-brown color. Photo by Larry Giroux. The same species is seen blooming in the photo by Derek Butcher above and to the right.**

Although not as dramatic as *Orthophytum burle-marxii, Orthophytum humile* has white contrasting flowers against bright red floral bracts. Photo by Dorothy Berg.

***Orthophytum albopictum* was still plentiful in its natural habitat during my recent trip to eastern Brazil. These were found growing in crevices between rocky outcrops. In July they get very little rainwater and rely on mountain mists at 3000 foot elevations.Cacti, aechmeas and succulents were often found growing in the same locales. Photo by Larry Giroux.**

The species pictured above, *Orthophytum braunii,* is a newly described plant discovered by Elton Leme and Eddie Esteves. It has beautiful bronze foliage and gold floral bracts. Photo by Eddie Esteves.

Normal form of *Orthophytum gurkenii*, below was photographed by Dorothy Berg.



"...A New Identity for a Mysterious Species by Elton M.C. Leme, J Brom. Soc. 45(1):3-5. 1995

For almost 40 years *Cryptanthus duartei* L.B. Smith has been the object of speculation and mystery since it is the only species of the genus with orange-colored petals. Collected originally in 1949 in the Serra do Cipo, Minas Gerais State, by Apparicio P Duarte, the species was presented to science in 1955 being named after its discoverer. This bromeliad has never again been collected despite the intense botanical work that has been carried out in the area where it was found, today a national park.

As a mandatory step in the work of revising the *Cryptanthus* genus, we had the opportunity of examining the isotype of *C. duartei* deposited in the herbarium of the Rio de Janeiro Botanical Garden. Although we were dealing with a dried specimen composed of fragments, it was possible to recognize the presence of two well-developed appendages at the base of its free petals, which characteristics were not observed in the original description. The fact is sufficiently relevant to alter the concept of the species, requiring a transfer to the genus *Orthophytum*.

When compared to species of the Orthophytum genus, Cryptanthus duartei was found to be similar to *O. supthutii* E. Gross & W. Barthlott, described in 1990, also collected in the Serra do Cipo, and also having orange-yellow petals. Although the original description of this species indicated some distinctions, we noted after re-examining the holotype deposited in the Herbarium Bradeanum that such differences were simply the result of faulty interpretation of identical morphological characteristics.

We confirmed that observation by examining live specimens collected by the biologist Pedro I. Nahoum in the same microregion. For these reasons, we conclude that *O. supthutii*, which in 1990 had impressed us because of the never-before-seen color of its flowers, is not botanically different from *Cryptanthus duartei*.

Taking into consideration the impossibility of a new combination for *Cryptanthus duartei* since there is *Orthophytum duartei*, a distinct species also described by L.B. Smith, we must adopt the next available valid name for the species, as follows:

Orthophytum supthutii E. Gross & W. Barthlott emend. Leme & E. Gross.

Synonym: *Cryptanthus duartei* L.B. Smith, Smithson. Misc. Collect. 126:23, 159, fig. 67. 1955.....

According to available information, *Orthophytum supthutii* is a species of restricted distribution even within the limits of its area of occurrence in the region of Serra do Cipo. For that reason, the long silence and uncertainty about its true identity should not be found strange. It grows in small populations on rocky walls at altitudes of more than 1000 meters. The plant varies somewhat in size, presenting a delicate appearance as a rule. When sterile, it resembles *Orthophytum amoenum* (Ule) L.B. Smith because of its size and the green and lustrous leaves. When in bloom, however, its orange-yellow petals have no equals in this genus...."

And in the other paper

"...*Orthophytum supthutii*, a Striking New Bromeliad by Elvira Gross and Wilhelm Barthlott, J Brom Soc. 40(5): 217-9. 1990

In course of a journey in February 1988 through the state of Minas Gerais, a remarkable dwarf terrestrial (epilithic) bromeliad was observed. Slides and a description of the plant were subsequently sent to Elton M.C. Leme (Rio de Janeiro), the specialist in Brazilian bromeliads. He informed us:

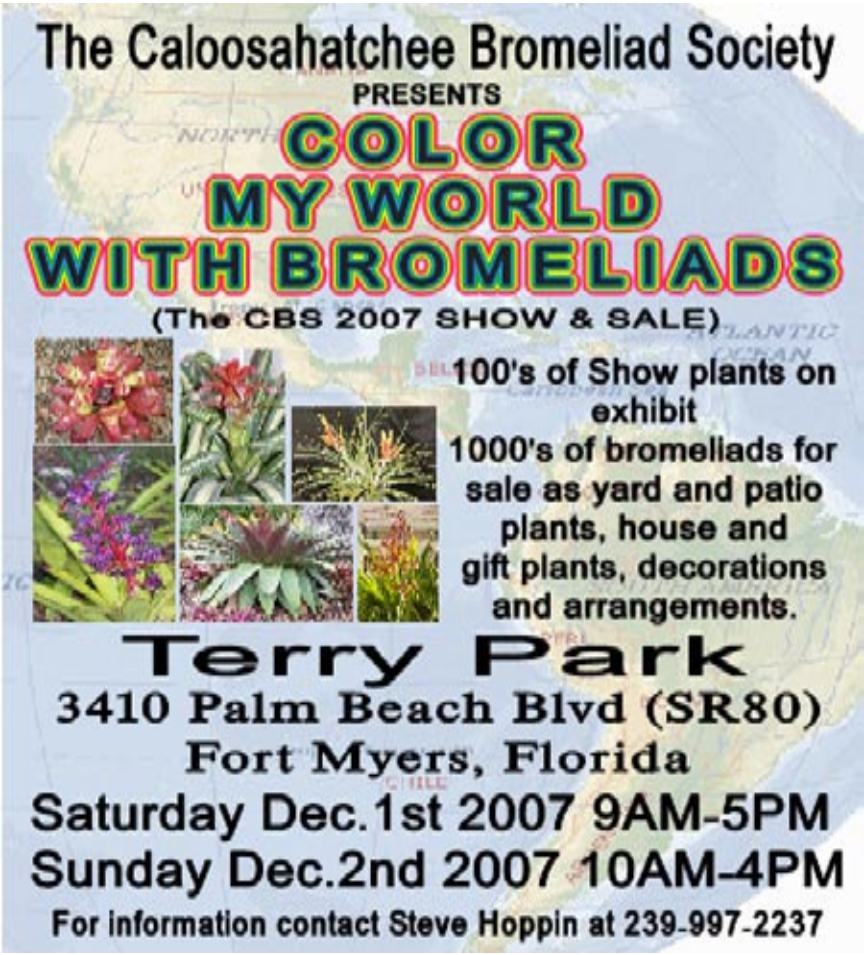
". . . it is really different from everything I have ever seen. As far as my knowledge is concerned, it is not closely related to any other known species because of its petal features."

On the advice of E.M.C. Leme and W. Rauh (Heidelberg), we decided to describe this new species:....

...*Orthophytum supthutii* is a striking new species that seems to have an isolated position within the genus *Orthophytum*. The determination, with help of the key in L.B. Smith and R.J. Downs (Flora Neotropica 14/3, 1979), leads to *O. navioides* (L.B. Smith) L.B. Smith but that species is quite different from *O. supthutii*. The latter differs from *O. navioides* in the following characteristics: Leaves only 15 cm long, beneath very densely white lepidote, above green, not 30 cm long, obscurely lepidote and reddish. Inflorescence with many flowers, not few-flowering. Sepals only 2 cm long, not 3 cm. Petals bright orange-yellow, not white. Ovary up to 10 mm long, not 5 mm. Further collections must show if we have to erect an own subgenus for O. supthutii.

The plant is dedicated to D. Supthut, director of the Stadtiche sukkulentensammlung, Zurich (Switzerland), who is very interested in xerophytic bromeliads...."

Thanks to Chanin Thorut for his beautiful picture and to Uncle Derek (Butcher) for bringing this article to light.



Please Come Join Us

Enter Plants in the Friday, November 30th Show and be eligible to win over 30 Award Prizes!
In October request your Show Schedule and Entry Cards!

Sell plants Dec. 1st & 2nd under the tent.
Contact Brian Weber to reserve your free table space and obtain your seller ID!

Come, bring your relatives and friends and BUY.
With thousands of plants, supplies and mounting materials, everyone is bound to find something for your home & garden!

CBS AUGUST MEETING MINUTES

DATE: August 19, 2007. LOCATION: St. John the Apostle Metropolitan Community Church, Ft. Myers, FL. ATTENDANCE: 34 members and guests. Introduction and welcome to new members: Sandra Bishop, Ruthanne Hawkins and returning member John Banta.
WORKSHOP: Start time: 1:15 pm - Eleanor Kinzie, Betty Ann Prevatt: Part 2 - Review of the Bromeliad Sub-family "Bromelioideae" (H-Z).
Meeting called to order: 2:15pm by President Steve Hoppin.
Minutes: Motion to approve June/July minutes as published in the August Meristem made by Ed Wenzlaff seconded by Oscar Hoffman. Minutes accepted. Door Prize - Neoregelia 'Silver Chalice' donated by Buddy Singleton won by Lyle Bowen.
OLD BUSINESS: none. NEW BUSINESS: none
COMMITTEE REPORTS: FCBS REP: Steve (in Vicky Chirnside's absence) announced the new bromeliad book from Australia is here and on sale for $18.00 from Betty Ann until the show and sale when it will be on sale for $20 to all. Steve also reminded all about the **FCBS Extravaganza** to be held on Saturday, September 29th, 2007. Info. is available in the Meristem and on the front desk. Request for 5-6 plants for the Saturday Auction was made. Contact Steve Hoppin, Larry Giroux or bring it with you to the Extravaganza. **MERISTEM:** Larry Giroux encourages all to subscribe to the E-mail version of the MERISTEM, please consider this, you are saving our resources and get a full color, expanded publication. You can also view the full color 20 page version at www.fcbs.org under What's New! Past issues are available for viewing within the Affiliate Societies – CBS listing.
ANNOUNCEMENTS: 1. SW Bromeliad Guild and International Cryptanthus Shows are scheduled in Beaumont,Tx Sept 7,8 & 9 2007. Information in the Meristem and available at front desk. **2.** Thank you letter from Six Mile Cypress Preserve for our donation of $100.00. **3.** BSI World Conference to be held in Cairns, Australia June 24 2008, information available online in the Meristem or from your BSI representatives, Larry Giroux and Terrie Bert. **4.** Sept and Oct workshops will focus on the show selection and presentation of plants for exhibit. **5.** Steve recognized Ross Griffith for always helping, always setting up and decorating. "Your efforts are well noticed and appreciated by All of Us, Ross, A BIG THANK YOU !"
Donations for the CBS Bromeliad Show Awards – Larry Giroux announced that we are trying to raise about $600 for the 30 or so awards and prizes for the winners of our fall Show. Sponsorship of a specific award or contributions to the general award fund can be made to honor a relative or friend or can be given anonymously. Please contact Larry Giroux ASAP with your donation and to reserve an award. Money can be sent to Betty Ann Prevatt. Please do this soon so you can be recognized per your wishes in the Show Schedule.
CBS Election of officers for 2008 – Steve Hoppin, CBS President, will appoint a Nominating Committee Chair prior to the September meeting. At the September meeting two members to assist the Chair will be elected by the membership. A Slate of nominees for 2008 will be presented to the membership at the October meeting, with additional nominees accepted from the membership. Elections will be held

at the November meeting. **SHOW & TELL:** Conducted by Dale Kammerlohr; there was a very nice selection of plants available for viewing and discussion. **BREAK:** 25 minutes to eat & visit. **REFRESHMENTS SET-UP**: Thank you to Mary McKenzie and her crew of helpers as well as all who bring in food. All you do for us is appreciated. **PROGRAM:** Bromeliad Trivia BINGO. Our Caller was Deb Booker, assisted by Tom Foley. Fun was had by all in this uniquely interesting, entertaining and educational game. Thanks to Deb Booker and Larry Giroux for providing the questions, answers and game cards. Our winners included Lyle Bowen, Bob Lura, Eleanor Kinzie (2) Luli Westra and our Prez Steve Hoppin. **RAFFLE:** Commentary by Larry Giroux, ticket sales by hospitality table, ticket caller Luli Westra and runner Bob Lura.
ADJOURNMENT: Meeting adjourned at 4:37 pm
Thanks to all who stayed to help clean up.
Respectfully submitted,
Tom Foley, CBS Vice-President (acting Secretary)

PLEASE SPONSOR A SHOW AWARD

The following is a book review by Karen Andreas of a new bromeliad cultural manual. The CBS has purchased a supply of these colorful and informative books for all levels of bromeliad enthusiasts. Books are available from Betty Ann Prevatt for $18 until December 1st when they will cost $20.

STARTING WITH BROMELIADS

A New Bromeliad Culture Book
A Review by Karen Andreas

The Bromeliad Society of Queensland <http://www.bromsqueensland.com/> has published Starting with Bromeliads, A Guide to the Growing of Bromeliads, an excellent and comprehensive book about bromeliad culture. This soft cover book has 100 pages, 36 of which are full pages of color photographs. In addition to information about the most popular genera, it offers advice about light, temperature and air movement; watering; potting mixes; fertilizing; pests and problems; and propagation.

How-to information, such as removing pups and growing from seed, are accompanied by helpful photographs. The landscaping with bromeliads

section is full of useful tips and, again, is amply illustrated.

Although this book was published in Australia, its information is basic to all bromeliad growers and is easily applicable to our own varied growing conditions here. In fact, the Council was so taken by this book that it ordered 500 copies which will be distributed to the affiliated member societies.

We haven't seen such a comprehensive publication in years, and this is a must-have book for any bromeliad library. The Bromeliad Society of Queensland is to be commended for providing such an inexpensive and valuable resource for our bromeliad community.

This book is available at this time only through the Council and its Affiliated members <../members.htm>

This review was originally printed in the Newsletter of the Florida Council of Bromeliad Societies, May 2007, Vol. 27, No. 2, (c)2007.

EVENTS CALENDER

September 29th, 2007 - (Saturday only) The 2007 Bromeliad Extravaganza. Commercial and member sales, Seminars, Banquet and Rare Plant Auction. Special Dinner guest speaker, Chester Stotak, hybridizer from Costa Rica. All activities will be held at the Hilton Ft. Lauderdale Airport Hotel. Special rate of $89 per single/double available. Reservations: (954) 920-3300. (Mention The Bromeliad Extravaganza) For more information about events and to obtain an ID number to sell please refer to your May 2007 issue of the FCBS Newsletter or call Jose Donayre(945) 925-5112 or e-mail him at jcadonayre@bellsouth.net. (Please include E2007 in the subject line when addressing e-mail.)

November 30th, December 1st & 2nd - The Caloosahatchee Bromeliad Society's 2007 Sale and Show Judged Show-"Color My World With Bromeliads", Friday, November 30th with Sale and Show Saturday, December 1st and Sunday, December 2nd. Terry Park, 3410 Palm Beach Blvd (SR80) Fort Myers, Fl. You can contact Steve Hoppin at steveandlarry@comcast.net or 239-997-2237 for information.

June 2008 - BSI World Conference in Cairns, Australia. Inquiries to Lynne Hudson 47 Boden Street, Edge Hill QLD 4870 or Lynnie@Ledanet.com.au.

To All Our Members: Enjoy your hobby more

Join the Bromeliad Society International
for less than $0.60 per week
Join the Cryptanthus Society
for less than $0.40 per week
and as a first time subscriber the CBS will pay for 1/2 of the first year. So for $0.50 per week you can get 2 great colorful Journals and be part of the bigger picture.
See Betty Ann Prevatt for more information.

Caloosahatchee Bromeliad Society
3836 Hidden Acres Circle N
North Fort Myers, Fl 33903
E-mail - DrLarry@comcast.net

2007 Bromeliad Extravaganza

A Hotel room at the Hilton for $89???
Only until September 14th!
Call 954-920-3300
Don't forget to mention the FCBS Extravaganza

Time is also growing short to reserve your dinner reservations for the Banquet and Auction.
Call Sara Donayre at 954-925-5112 ASAP and select your entree.

Orthophytum navioides
Shown by Steve Hoppin
BSCF Show 5-04
Photo by M. Andreas

PLEASE SPONSOR A SHOW AWARD
Call Larry at 239-997-2237

SUB-FAMILY BROMELIOIDEAE A - G

1. *Acanthostachys*
2. *Aechmea*
3. *Ananas*
4. *Androlepis*
5. *Araeococcus*
6. *Billbergia*
7. *Bromelia*
8. *Canistrum*
9. *Canistropsis*
10. *Cryptanthus*
11. *Deinacanthon*
12. *Disteganthus*
13. *Fascicularia*
14. *Fernseea*
15. *Greigia*

Do you wonder where bromeliads get their names? They are named after people - for those who discovered it, or in honor of someone. They are named for the location they were discovered, such as a country, region, mountain, seashore, etc. They are named for their appearance or description (plant and/or inflorescence) such as shape, color or size.

A species name agrees in gender and person with the genus name. i.e.

Vriesea fosteriana *Aechmea fosteriana*
Cryptanthus fosterianus *Canistrum fosterianurn*

Genus - A subdivision of a family consisting of one or more species which showcommon characteristics and appear to have a common ancestry.
Species - A unit in classification; a group of plants which have in common one or more characteristics which definitely separate it from any other group.
Variety - A plant having slight but distinct differences which distinguish it from the type of the species; a botanical variety as opposed to a cultivar which is a horticultural variety.
Forma - A sub-group within a species displaying a minor character, but not great enough to be called a variety.

Material gathered from Harry Luther's Bromeliad Binomials - July *2006,BSI Judges Handbook, "Bromeliads", by Victoria Padilla, "Blooming Bromeliads", by Baensch, "Bromeliads, for Home, Garden & Greenhouse" by Werner Rauh.*

1. Acanthostachvs - (a-cantho-steak'-is) means t*thorny spike", native to the high campos of central and southern Brazil, Paraguay and Argentina, where it grows as an epiphyte in tropical rain forests and on sandstone peaks at elevations of 2,200 to 2,500 ft. There are 2 species, strobilacea, meaning conelike fruit, and pitcairnioides.

2. Aechmea- (eek-me'a) from the Greek word aechme, spear tip, referring to the points on the perianth (floral envelope) Native habitat ranges from central Mexico to Argentina, growing high on trees, low on the forest floor, or on rocks. It is a large genus with 243 species, 58 varieties and 8 forma. Because they adapt to cultivation, Aechmeas are among the most widely grown of all bromeliads. Ae. Fasciata became a favorite houseplant shortly after its introduction in Europe in 1826. They range in size from a few inches to 9 ft. in diameter. Their spiny-edged leaves may be soft or rigid, glossy or covered with scales, plain green or maroon, rose or purplish brown. They may be one solid shade or bicolored. They may be barred, striped, mottled or a combination of all three. The inflorescence is usually borne on a sizable scape with conspicuous, colorful bracts. They can be various sizes, shapes and colors, erect or pendent and are distinguished for their brilliant berrylike fruit. A new genus, Ursulaea, was formed by moving Ae. macvaughii and tuitensis to it.

3.Ananus -(anay'nus) "Anana" language of the Guarani tribe in Brazil. There are very few species, 7 plus 2 varieties. The pineapple is the best known bromeliad. Columbus took the first pineapple to Europe in 1493 returning from his second voyage to America. Ananus bracteatus - 'with bracts', referring to the large bracts.

" " var. tricolor means 3 - colored. Ananus comusus means crested;referring to the leafy tuft. Ananus nanus, means dwarf; referring to the small size.

4. Androlcpis - (an-droH'cois) from the Greek andro, man or male, and lepis, scale,referring to the pair of scales on each stamen. There is only 1 species, skinneri to befound in cultivation. Native to Central America it was named after botanist Skinner. It has stiff spiny leaves and when grown in good light, the leaves assume a bright rose hue.

5. Araeococcus (a-ree-o-cock'us) named because this genus has the smallest fruit with the fewest seeds in the family. From the Greek araeo meaning few and kokkos meaning seed. There are 6 species, pectinatus is native to Costa Rica and the others are from Amazonian Brazil, Columbia, Venezuela and Surinam. Two species are in cultivation: flagellifolius meaning whiplike leaves & pectinatus meaning comb-like, referring to floral bracts.

6.Billbergia - bill-berj'ea) named for Gustave Billberg, a Swedish botanist. Most are native to Brazil, but may be found from Mexico to Argentina. Billbergias were the first bromeliads to be introduced into cultivation in the United States. They are easy to grow and multiply rapidly. They are epiphytes, but appear to do equally well in the soil. They are easily distinguishable from most other bromeliads -they have fewer leaves, usually from 5 to 8 and with a few exceptions are tall and tubular. The inflorescences are nodding or cascading and unfortunately the bloom is short-lived, lasting no more than 2 weeks. There are 65 species and 25 varieties and 1 forma. B. amoena means beautiful, attractive, B. pyramidalis means pyramid shaped, referring to the inflorescence and B. zebrina means with a zebra pattern.

7.Bromelia - (broh-meel'ea) named to honor Olaf Bromel, a Swedish botanist. There are 56 species, 1 variety and 2 formas. They can be found throughout tropical America, but the greatest number are from Brazil. Most are large plants with heavy spines. Bromelias have been planted as barriers for humans and cattle. The most common cultivated Bromelia is balansae.

8. Canistrum - (can-is'-trum) from the Greek kanos for basket, referring to the inflorescence, which resembles a basket of flowers. A small genus of 12 species, it is native to Southeastern Brazil, growing at coastal elevation up to 1800 meters. They grow on trees or rocks and prefers shade and moisture. Two common species, aurantiacum, meaning orange colored, referring to inflorescence and seidelianum, named after a family of gardeners by the name of Seidel in Brazil. Their inflorescences are long lasting, usually several months.

X CANMEA- generic hybrid between Canistrum and Aechmea

9. Canistropsis - There are 11 species and 3 formas. This is a newly formed genus, once part of Nidularium. All these plants prefer heavy shade and are quite cold hardy.

10. Cryptanthus - (cript-anth'us) from the Greek word cryptos meaning hidden, and anthos meaning flower. They come from Eastern Brazil and have 58 species, 2 varieties and 2 formas. They are small, terrestrial plants sometimes known as "earth stars" because of their flattish form and symmetrical pattern of leaves. They average a dozenleaves to a plant and vary in length from 2 to 12 inches. They are usually crinkled and often mottled and striped. All species have white flowers that barely emerge from the center of the plant. C.acaulis means stalk-less, C. sinuosus, means undulated, having wavy edges. And C. zonatus, means banded, zoned, or striped leaves.

11. Deinacanthon - only 1 species, urbanianum. Also known as BromeUa urbanianum.

12. Disteganthus - only 2 species, basilateralis and lateralis.

13. Fascicularia - (fasick-u-lar'ea) from the Latin fascis ,meaning bundle, and area, pertaining to the flowers which grow in bundles. Although there are 5 species that make up this Chilean genus, only two are to be seen in cultivation. They resemble Pitcairnias with long grassy leaves, but their inflorescences are deep in the center leaves. They grow at sea level and delight in strong sunlight and brisk winds that come from the seashore. They are hardy plants, probably being the only bromeliads that will survive outdoors in southern Britain.

14. Fernseea- (fern-see'a) named to Honor Heinrich Wawra, Knight from Fernsee, 1831-1887 German botanist and collector. There are only 2 species. It is a small xerophytic plant that grows on rocks at 9 - 10,000 ft. elevation in Brazil. This genus resembles a delicate type of Dyckia. It is not known to be in cultivation.

15. Greigia (grayg'ea) named in honor of Major General von Greigia, president of the Russian Horticultural Society in 1865. There are 33 species and 2 varieties. It ranges from Mexico to Chili, but mainly in Columbia and Ecuador. It is a large terrestrial and grows in high places. It likes cool moist cloud forests at 7 - 11,000 ft. elevation.

Unlike most other bromeliads, Greigias do not die after flowering, but continue to bloom every year from the same rosette. They are rare hi cultivation. One species, G. van-hyningii, was named after O.C. Van Hyning of Florida, a bromeliad collector, who introduced this plant into Florida.

August Workshop 2007

The Bromeliaceae is broken down into 3 large subfamilies.

A. Bromelioideae
B. Tillandsioideae
C. Pitcairnioideae

Today we talk about part 2 of the Bromelioideae sub-family H - Z

Hohenbergia	Orthophytum
Hohenbergiosis	Portea
Lymania	Pseudoaechmea
Neoglaziovia	Pseudoananas
Neoregelia	Quesnelia
Nidularium	Ronnbergia
Ochagavia	Wittrockia

Hohenbergia - (hoe-en-berj'ea) named after German botanist, Hohenberg.. In native habitat the greatest concentration is found in Jamaica, with Brazil being next. There is over 40 species. The plants look similar to Aechmeas, but the inflorescence are quite different. Their needs are similar to Aechmeas, but because they come from warm climates, they are cold sensitive. They most common species in cultivation is H. stellata, means star-like, and H. correia-arauji, which was just discovered in 1979 in Brazil and has outstanding foliage as well as the inflorescence.

Neoregelia – (nee-o-ree-jeerva) named by L.B. Smith in 1955, in honor of Eduard von Regel, a Russian botanist. There are over 100 species today and one of the most popular genus, mostly native to Brazil, growing on or close to the ground, and distinguished by the colorful centers when in bloom. They vary in size from 1 inch to 4 feet across. Their flowers are nestled in the heart of the plant; thus, the attraction lies in their often-brilliant foliage. Some of the most common species are N. spectabilis, (meaning spectacular), N.

'Fireball', (for the color), N. carolinae, (in honor of) N. carcharodon, (with shark teeth). They grow from sea level to 5,000 feet and grow in full sun to shade.

Nidularium - (nid-u-lar'ium) - means 'nest like'. Rather small genus with around 60 species, all endemic to eastern Brazil growing at low elevations on the ground or low on trees in dark, humid forests. They flourish in shady places. Usually the long lasting inflorescence stays close to the heart of the rosette, as in the genus Neoregelia, with which it is some times confused; but in several varieties, the flower spikes are borne on lengthened stems.
Some of the more common species are Nid innocentii (named in honor of M. Saint Innocent) and one of the most decorative, Nid.. burchellii, (named for Burchell, a plant collector), Nid. procerum, (means tall).

Orthophytum - (or-tho-fy'tum) - from the Greek ortho, straight, and phylum, referring to the erect inflorescence. More than 20 species and varieties are in cultivation. They show diversity in form, shape and interesting blooms. They take little space and adapt easily to other groups of plants. Native to eastern Brazil, they grow exclusively terrestrially and absorb water and nutrients only through their well developed root system. Orthophytums are semisucculent plants that at first might be mistaken for Cryptanthus or Dyckias until blooming time (inflorescence can be as tall as 18 inches). The leaves have soft spines, are green or copperish in color, and are swirling in character. All species have white flowers. They require little attention in cultivation, demanding only plenty of light.
Some of the most popular are O. gurkenii, O. saxicola (sax-ic'o-la) (means growing on rocks), O. navioides (like a member of the genus Navia), and O. sucrei.

Portea - (por'te-a)- named to honor Dr. Marius Porte of Paris, who collected this plant in 1885. Only 7 species and 2 botanical varieties, found along the coastal regions of Brazil from Rio to Bahia. They grow as terrestrials in full sun in sand and on rocks. They are robust plants with prominently spined, green leaves, 2-3 ft. long. Their inflorescence are among the most decorative in the bromeliad family, generally combining delicate lavender and pink tints to make a highly colorful display. Most are too large to grow as potted plants and make impressive displays when grouped together in your garden.

More common species are P. petropolitana var.petropolitana, (named for the town of Petropolis in Brazil, P. petropolitana var. extensa, P. leptantha(slender flowered), P. alatisepala, and P. kermesiana (crimson, referring to color of bracts).

Quesnelia - (kwes-nail'ea) - named for M. Quesnel, who introduced this genus into cultivation. They are endemic to eastern Brazil, where they grow mostly in great masses close to the seashore. Some close to the oncoming tide, & some back in swampy forests. Only a few found growing as epiphytes. There are 2 groups, one being small and tubular resembling Billbergias (Q. marmarata & Q. humilis) and the second group being large rosette plants (Q. testudo & Q.quesneliana). All have brilliant inflorescence with bright rosy red bracts and petals of pink, lavender blue, or red purple. The leaves are spined. Other common species are Q. arvensis and Q. edmundoi.

Lymania - named for Lyman Smith by Dr. Robert Read (who was a member of CBS when he retired to Naples) around 1984 and presently holds 6 species. Three of which have been transferred from other genera because they were taxonomically misplaced. They are native to Bahia, Brazil. The shape of the rosette could be the model of a plain classic vase. L. alvimii, is a plain species, which blooms for weeks. After flowering it produces black berries lasting for many months. L. spiculata is also found in collections.

Ronnbergia - ron-ber'jee-aV named in honor of Ronnberg, director of agriculture and horticulture in Belgium at the beginning of the 19th century. This is a small genus of epiphytic and terrestrial bromeliads that grow in the dense, damp forests of Costa Rica, Panama, Peru and western Columbia at elevations ranging from almost sea level to 6,500 ft. They are small to medium-sized stoloniferous plants with a few leaves that either form a rosette or have long conspicuous petioles. The inflorescence is a simple spike with blue-petaled flowers. This genus is not often seen in collections. R. columbiana, (from Columbia) is a real jewel R. brasiliensis 'RedForm', (from Brazil) is one of the latest discoveries. These require simple care and semi-shade.
Wittrockia- (wit-rock'ee-aV Named for the Swedish botanist, Veit Bracher Wittrock. This genus consists of 7 species, all native to the coastal regions of southern Brazil. They are both ephiphytic and terrestrial plants, growing on rocks or on the ground, often in iull sun, or midway up trees, where there is medium-intensity light and

humidity. W. superba is easy to grow in full sun or semi-shade. The inflorescence, usually sunk within the heart of the rosette, is similar to that of a Neoregelia or a Nidularium. Most of the species are not in cultivation.

Neoglaziovia - (ne'o-gla-zee-o'vee-a) - Named in honor of A. Glaziou, a French collector and landscape architect. According to Harry Luther's binomial, there are 3 species. N. burle-marxii, N. concolor and N. variegata. It has whip-like leaves and is best known for the fiber in the leaves, which is used for weaving and making rope. Offshoots are produced on long stolons. It is endemic to northeastern Brazil. It is adaptable to the succulent garden, but is seldom seen.

Ochagavia - (bch-a-gah'vi-a^ - Named in honor of S. Ochagavir, minister of education in Chile when the plant was classified in 1853. It is a small genus of 4 species found in Chile. They are succulent plants, clustering in habit and growing either on rocks or in the ground, in sunny location at elevations of 150-2,800 feet. Only 1 species, O. cornea, is commonly found in cultivation.

Pseudoananas – (soo-do-a-nay'nus) - Means false pineapple. Only 1 species, P. sagenarius, in this genus found in Paraguay, southern Brazil and southeastern Bolivia. The leaves can reach 4 ft. in length and 3 inches wide. The fruit is edible and pleasant tasting, but is not grown commercially. The name sagenarius is taken from sagena, meaning fishnet. This plant has strong fibers that are used by Brazilian fishermen for making their nets.

Pseudoaechmea - The only information found was listed in Harry Luther's binomial. Only 1 genus, P. ambigua, described by Lyman Smith and Robert Read.

Hohenbergiopsis guatemalensis - The only information found was listed in Harry Luther's binomial. It was described by Lyman Smith and Robert Read.

References:

A Bromeliad Glossary, Bromeliads, by Victoria Padilla, Blooming Bromeliads by
Baensch, Handbook for Judges, Exhibitors & Affiliates and Harry Luther's Binomial.