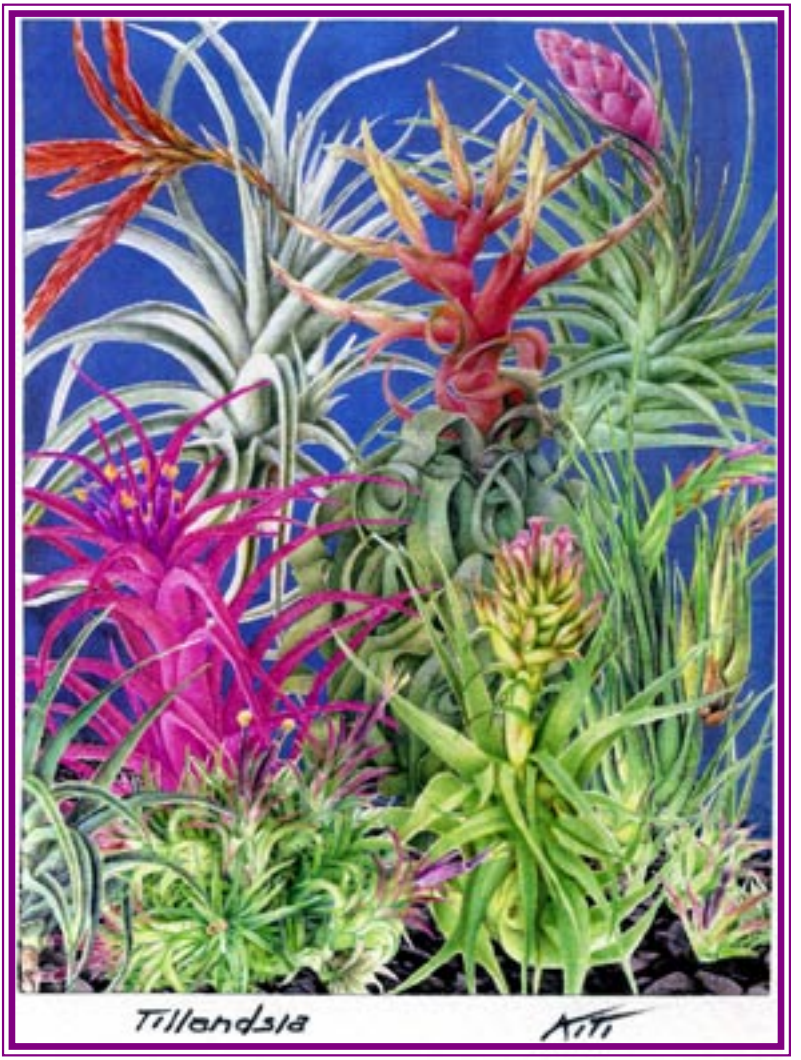
CALOOSAHATCHEE BROMELIAD SOCIETYs

CALOOSAHATCHEE MERISTEM

June/July 2007

3836 Hidden Acres Circle N
North Fort Myers Fl 33903
(239) 997-2237
DrLarry@COMCAST.NET



CALOOSAHATCHEE BROMELIAD SOCIETY OFFICERS

EXECUTIVE COMMITTEE

PRESIDENT	**Steve Hoppin (steveandlarry@comcast.net)**
VICE-PRESIDENT	**Tom Foley (tefoley24@earthlink.net)**
SECRETARY	**Chuck Ray (fishbig1@earthlink.net)**
TREASURER	**Betty Ann Prevatt (bprevattpcc@aol.com)**
PAST-PRESIDENT	**Dianne Molnar (capebrom@aol.com)**

STANDING COMMITTEES CHAIRPERSONS

NEWSLETTER EDITOR	**Larry Giroux (DrLarry@comcast.net)**
FALL SHOW CHAIR	**Steve Hoppin (steveandlarry@comcast.net)**
FALL SALES CHAIR	**Brian Weber (BrianWeber1b@aol.com)**
FALL SHOW Co-CHAIR	**Betty Ann Prevatt (bprevattpcc@aol.com)**
PROGRAM CHAIRPERSONS	**Debbie Booker/Tom Foley (tefoley24@earthlink.net)**
WORKSHOP CHAIRPERSON	**Eleanor Kinzie**
SPECIAL PROJECTS	**Deb Booker/Tom Foley**
Senior CBS FCBS Rep.	**Vicky Chirnside (vickychirn@aol.com)**
Co-Junior CBS FCBS Reps.	**Debbie Booker & Tom Foley**
Alternate CBS FCBS Rep.	**Dale Kammerlohr (tropdsk@strato.net)**

OTHER COMMITTEES

AUDIO/VISUAL SETUP	**Tom Foley (tefoley24@earthlink.net); BobLura**
DOOR PRIZE	**Barbara Johnson (lion56@aol.com)**
HOSPITALITY	**Mary McKenzie (manytoes@aol.com); Martha Wolfe**
SPECIAL HOSPITALITY	**Betsy Burdette (betsy@burdetteinc.com)**
RAFFLE TICKETS	**Greeter/Membership table volunteers - Luli Westra, Dolly Dalton, Eleanor Kinzie, etc.**
RAFFLE COMMENTARY	**Larry Giroux**
GREETERS/ATTENDENCE	**Betty Ann Prevatt, Dolly Dalton(dollyd@comcast.net), Luli Westra**
SHOW & TELL	**Dale Kammerlohr**
FM-LEE GARDEN COUNCIL	**Mary McKenzie**
LIBRARIAN	**Sue Gordon**
ASSISTANT LIBRARIAN	**Kay Janssen**

Front cover: Kiti Wenzel has been a member of our society since 1985. It was about that time that her horticultural drawings started to include many bromeliads drawn from live plants. At age 99, Kiti is no longer able to create the intricate art as in the past; fortunately we can enjoy many of her hundreds of bromeliad drawings currently

THE CALOOSAHATCHEE BROMELIAD SOCIETY

MEETING TIME AND PLACE:
June Meeting: **SUNDAY June 17th, 2007**
July Meeting: **SUNDAY July 15th, 2007**
ST. JOHN the APOSTLE CHURCH 3049 McGREGOR Ave. FT. MYERS.
DOORS WILL BE OPEN AT 12:30 FOR SETUP.
MEMBERSHIP SALES ARE NOT PERMITTED at the June or July meetings.
Friendship plants Raffle items and Door Prizes are always welcome.
(Please contact Barbara Johnson if you have a Door Prize to donate.)

June Workshop

"Pitcairnioideae"

By Betty Ann Prevatt, Eleanor Kinzie and Steve Hoppin

(Begins at 1:15 PM)

July Workshop

"Bromelioideae"

By Betty Ann Prevatt and Eleanor Kinzie

(Begins at 1:15 PM)

Both of the next two Workshops will be structured as the May Workshop. The two remaining Sub-families of the Family of Bromeliads will be discussed using plants of the Sub-families hopefully brought in by the membership Please read further elsewhere in this issue about the plants we are asking members to bring to the next meetings.

June Program By Jason Mellica

"New Hybrids"

Last year we only were given a taste of Jason's hybridization program. On June 17th, we will get a chance to see the entire collection of the now registered hybrids, Jason has been creating. Many of which will be available for purchase at this meeting.

July Program By Dr. Terrie Bert

"The ABC's of Growing Unusual Bromeliad Genera."

Terrie will talk about the bromeliad genera, beginning with the letters A, B, and C. which are not usually grown. She will describe the natural habitats and geographic ranges of the genera, while showing examples of species in the genera, and talking about the growing conditions for cultivating these less common genera in Florida. This talk is a good introduction into the realms of bromeliads that many people do not commonly encounter.

The Caloosahatchee Bromeliad Society is an active Affililate of:

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

President's Message By Steve Hoppin

It was as though it was pre-planned:

1. In February, speaker Dr. Frank Howard presents a complete update on the "Evil Weevil" and FCBS Weevil Project.
2. In March the CBS Annual FCBS Benefit Auction, rallies to raise $2000 earmarked the FCBS project.
3. CBS May speaker Dennis Giardina, Fakahatchee Strand Park Manager, provides CBS members a photographic record of Dr. Frank's and his exploration of Weevil devastation in Guatemala.

Dennis had just completed his well received presentation when Dr. Frank requested that he read a letter from the State of Florida to our membership. A huge applause and congratulations were in order, as the project, now making some serious headway, had just been granted permission to release a parasitic fly, native to Mexico, which has been shown to attack and kill the weevil grub responsible for devastating many of Florida's native bromeliads. CBS certainly wishes Howard, Dennis and the FCBS much success in the project's future.

As we enter June we anticipate the rains of summer; let's hope any and all named storms stay at sea. Having recently reviewed the Sub-family *Tillandsioideae*, the next few Workshops will review and focus on the Sub-families *Pitcairnioideae and Tillandsioideae*. The speakers, which our Program Chair, Deb Booker has scheduled, Jason Mellica and Dr. Terrie Bert for the next two meetings, promise to be entertaining, as well as educational. They both will be bringing select plants for sale. Jason will have many of his own new cultivars for sale; while, Terrie has hard to obtain, unique species available. So, if you are with us through the summer please continue to attend and participate in our meetings… vacations permitted (grin).

We will soon begin to focus on our pending 2007 CBS Show and Sale to be held in late November. We are blessed to have a terrific group of members that volunteer for the numerous jobs that need to be done at each show and sale in order that this event is a success. I welcome you to join your fellow members and put to use your energies, talents and generosity and volunteer this season as well. I encourage all novice having an interest in learning and/or participating in the Show or Sale, please let me know. I have never heard any of our members say they did not enjoy working at our Show and Sale!

I am looking forward to seeing you all on June 17th and July 15th. By the way, there is a reliable rumor that *Pitcairnia* species seedlings, member of the *Pitcairnioideae* Sub-family will be distributed at the end of the June Workshop! Hmmnn…. Catch is… you need to attend in order to qualify for this gift from grower and member Jim Pearce.

SOCIETY NOTES

June and July Workshops

As with the May Workshop, Betty Ann and Eleanor are asking CBS members to search among their plants and bring in representatives of the specific Sub-family , which will be discussed at the June and July meetings. They understand, certain rare or uncommon plants of some genera are not present in the typical

hobbyists' collections, but hopefully each member will find something to bring in to help along with the discussion.

For June please bring in plants of the Sub-family - *Pitcairnioideae*. These genera include: *Ayensua, Brewcaria, Brocchinia, Connellia, Cottendorfia, Deuterocohnia, Dyckia, Encholirium, Fosterella, Hechtia, Lindmania, Navia, Pepinia, Pitcairnia, Puya and Steyerbromelia.*

For July we need plants of the Sub-family - Bromelioideae. **Since this is such a large group, containing 29 genera, our speakers may divide this group and spread the discussion over two meetings.** An announcement will be made at the June meeting about change in plans. Members of this Sub-family are the better known group of genera, more of which are grown in cultivation; these include: *Acanthostachys, Aechmea, Ananas, Androlepsis, Araeococcus, Billbergia, Bromelia, Canistrum, Canistropsis, Cryptanthus, Deinacanthon, Disteganthus, Fascicularia, Fernseea, Greigia, Hohenbergia, Hohenbergiosis, Lymania, Neoglaziovia, Neoregelia, Nidularium, Ochagavia, Orthophytum, Portea, Puedoaechmea, Pseudoananas, Quesnelia, Ronnbergia and Wittrockia.*

June Presenter

Jason Mellica, who gave us a presentation last year, will be returning with a slide show of many of his new hybrids he has recently registered.

Jason is a Botany Graduate of the University of Florida and has been in the horticultural business since 1995. He has studied bromeliads in the wild in Northeastern South America with over 20 trips to Venezuela and Guyana. He also supports many environmental groups working to preserve natural forest systems throughout the tropics.

Jason has launched **Level 21,** a website created to introduce Advanced Bromeliad Culture to the World. **Level 21** is based in Sarasota, Florida. At his "nursery", Jason maintains a supply of some of the best and most unique bromeliads from hybridists in Florida. Avaliable bromeliads within the collection are constantly increasing due to his recruiting of new hybridists willing to join in his efforts ... with an emphasis on Australian and Hawaiian hybridists.

Jason invites all interested to visit the Contact Page at www.level21nrg.com and email, call, or submit a special request on the form provided. If you are interested in a price list - email him and he will send one to you by return email in PDF format.

July Speaker

Dr. Terrie Bert is a research scientist for the Florida Fish and Wildlife Conservation Commission, where for the last 20 years she has developed and led the Commission's Crustacean Research and Genetics Program. As a member of the Sarasota Bromeliad Society since 1988, she has held multiple offices. Besides being a member of the CBS since 1997, she has served on the Florida Council of Bromeliad Societies for 8 years and has held all executive offices in the Council. She has served and currently serves on the Bromeliad Society International (BSI) Board of Directors, where she chairs the Nominations Committee for the Board and is the Board's Librarian. Terrie has won top awards at the shows of local clubs as well as at BSI WBCs. She is a BSI internationally accredited judge and a volunteer for the Bromeliad Identification Center at Marie Selby Botanical Gardens.

Continued on page 18

Bromeliad Expose By Larry Giroux

At the Workshop last month Eleanor Kinzie and Betty Ann Prevatt discussed the *Tillandsioideae*. This Sub-family of *Bromeliaceae* consists of seven genera; five of which are commonly grown. These include *Alcanterea, Catopsis, Guzmania, Tillandsia, and Vriesea.* The other two genera, *Glomeropitcairnia* and *Mezobromelia* contain very few species and these are relatively rare in cultivation. Most growers of bromeliads consider this Sub-family user friendly since the plants contained in this group, lack the spines on the leaf edges found on many other bromeliads.

In the April issue of the Meristem I discussed and showed pictures of the genus *Vriesea*. This article will introduce you to the genus *Tillandsia*, which has the largest number of species and the greatest range of any of the genera of the family of Bromeliads. Tillandsias grow from the southern states of the United States, south throughout the islands of the Gulf of Mexico, Latin America, and all of South America. Bromeliad growers here in Florida are familiar with this genus with the majority of our native bromeliads consisting of tillandsias. "Spanish Moss" or *Tillandsia usneoides* is found in all areas of Florida and everyone that crosses Alligator Alley from Naples to Fort Lauderdale, have commented on the flame red inflorescences of native *Tillandsia fasciculata*, which grow high in the trees throughout the Everglades. "Ball Moss" or *Tillandsia recurvata* seems to have a preference for oak trees here in Lee County and over the years can appear to consume trees with their rapid proliferation.

The variety of sizes, shapes and other characteristics seem unlimited in this genus. Plants may range from less than one-half inch in size to having 3 ft. diameter rosettes with 10 ft. inflorescences. Although most of us are familiar with the violet-blue petals seen with *Tillandsia ionantha*, many species have white, pink, yellow or even chartreuse petals, as seen with *Tillandsia usneoides*. Some tillandsias have fragrant flowers; which is a rarity among bromeliads. The colors of the bracts are also quite variable, ranging from pale gray to bright red.

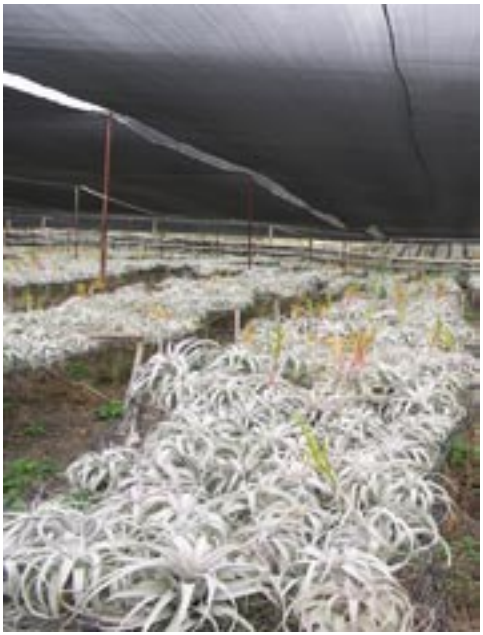
There are noticably two types of tillandsias. There are the soft leafed species, which come from moist (mesic) forests. These resemble many of the plants in the genus *Vriesea*, tend to be wide leafed, do not tolerate full sun and form small rosettes, which may retain some moisture in the cups produced by overlapping leaves. The second group

Tillandsia novakii **(Red Form), shown here tied to a piece of wood with a wire, is one of the few tillandsias which will not develop roots for attachment. In its natural habitat, the stem will twist around its support, such a branch, to provide anchorage for this relatively large plant. Photo by Larry Giroux**

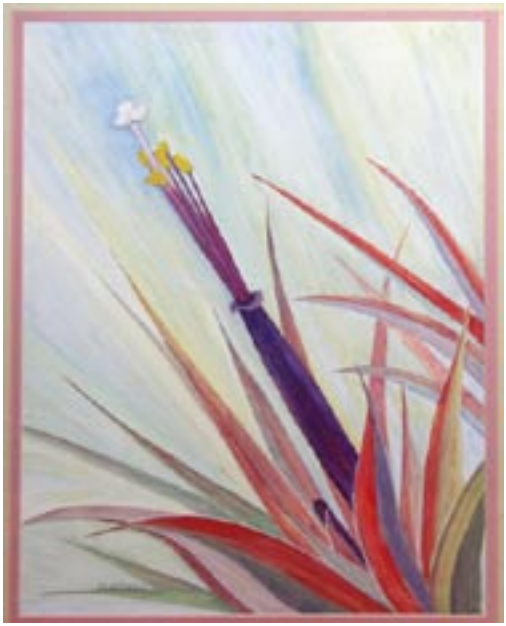
and the most common, are the species with silvery scales. It is the presence of these scales or highly developed "trichomes", which permits this group of xeric plants to exist in areas where many other plants find it difficult: for example – arid sandy deserts, full sun exposed treetops and dry, rocky outcroppings and cliffs. Although all bromeliads have these trichomes, it is their density, shape and mechanism of action, which adapt specific plants to different environments.

The majority of the members of this genus are epiphytic. Most people are familiar with the term "airplants". These are plants, which are found growing attached to other plants or objects such as rocks, wires or rooftops. The major function of their roots is to provide support or anchorage and they derive the majority of their water and nutrients by absorption through their leaves. There are exceptions, of course; some tillandsias such as *Tillandsia novakii* or *Tillandsia duratii*, do not develop roots at all and twist around their "host" for attachment; while some tillandsias like *Tillandsia cyanea* seem to have more functional roots and do better when potted in a mix. Regardless of their appearance and density on a tree branch, tillandsias are not parasitic and do not harm their living mount. So please tell your friends who are prone to strip off "Ball Moss" (*Tillandsia recurvata*) growing on their trees, that these bromeliads are innocuous to the trees and benefit the ecology.

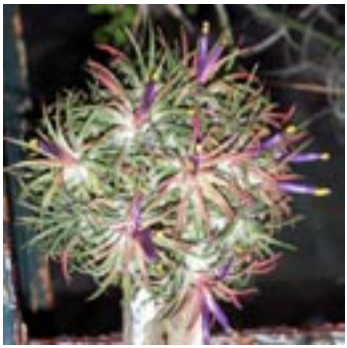
In reality, other than *Tillandsia usneoides* and a handful of tillandsias, which do not form roots, tillandsias are not obligatory epiphytes, particularly the soft leaf types. It is my experience that these bromeliads will do better growing in a epiphytic mix consisting of charcoal, coarse perlite or sponge rock, tree fern



Due to the overharvesting of plants such as orchids and bromeliads from their native habitats throughout the world, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) has issued a list of endangered plants and animals, which cannot be collected from the "wild" and exported. The only bromeliads on the CITES list are *Tillandsia harrisii, T. kammii, T. kautskyi, T. mauryana, T. sprengeliana, T. sucrei and T. xerographica.* As a result of these strict rules, many nurseries in Central and South America are cultivating these plants rather than collecting them. Pictured here is such a nursery in Guatemala, which reportedly has 1,000,000 *Tillandsia xerographica* in cultivation for export.



Mulford B. Foster was renown for his work in the collection and growing of bromeliads since the 1940's. Among his other talents was drawing. This is a copy of an original drawing owned by Dean Fairchild of *Tillandsia ionantha,* painted by M.B.Foster. It demonstrates the classic violet-purple color of many of the petals of this genus.



For comparison, the photo to the right shows a ball of live *Tillandsia ionantha.* The epiphytic nature of *T. ionantha*, like most tillandsias, permits the grower to hang a plant and develop symetrical spheres of plants after several generations. *Ionanthas* have become a favorite "airplant"and are readily available. There are many varieties including this mini *Tillandsia* 'Peanut'. Each clump seen in the photo to the left is about 4 inches across.

This *Tillandsia gardneri* if mounted to wood or such, would develop roots for attachment; however, when suspended by a wire hanger as seen here, few roots form. The plant has not suffered and has multipled and is blooming. This soft leafed plant has many overlapping leaves at its base and tends to trap water. When grown horizontally as in this case, pooling of water and rot are avoided.

In spite of its resemblance to a vriesea inflorescence, the bright orange bracts and small white flowers distinguishes this as *Tillandsia dyeriana*. CBS member Betty Ann Prevatt has bloomed this plant every year, while I have "buried" 4 specimens in the last 10 years. It has an elegance about it with its tubular shaped rosette and fragrant flowers. Because of its beauty and challenge, I will keep enjoying this species from Ecuador as long as I can. This next plant may be familiar to our members. It was brought in for Show and Tell earlier in the year. *Tillandsia platyrhachis* has many characteristics of a vriesea such

as the size and shape of the leaves and inflorescence, but the base of the petals are missing the appendage, used to separate plants of the two genera. *Tillandsia didisticha* has a lot of bang for its size. The pink bracted, multi-branched inflorescence is nearly the size of the rosette. It is not uncommon for additional spikes to emerge from the axils of the leaves. Toting the Selby barcode label, this *Tillandsia globosa*, earned its way from the back greenhouse to the display house in time for the SBS Show and Sale.

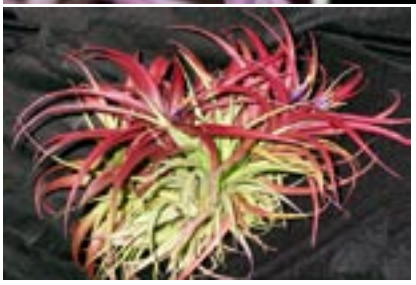
***Tillandsia seleriana* (L) and *Tillandsia balbosa* (Below) are referred to as myrmecophilic or "ant loving" bromeliads since the base of the rosette of leaves is swollen into a hollowed chambered bulb which is ideal for the nesting of ants. The presence of ants in an outdoor collection is not always bad. Ants help control certain infestations of scale and other small insects as well as pollinate your plants.**

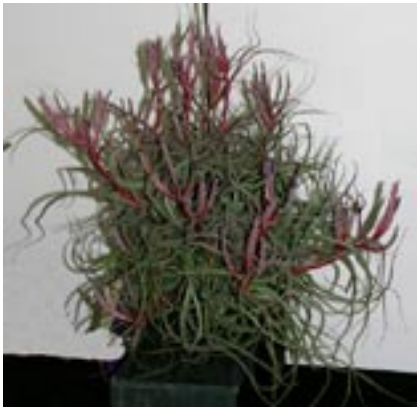
***Tillandsia hondurensis, (L)* first discovered in 1981, has a perfuse, dense covering of the specialized scales or trichomes, which epiphytes rely on to adapt to their variable habitats. The trichomes are so thick they create a velvet feel to the upper and lower surfaces of the leaves.**

***Tillandsia leiboldiana* (R) has been in cultivation since 1844. With its spotted, wide green leaves it can easily be mistaken for a vriesea. Although found growing as an epiphtye in its Central American habitat, it does as well as a mounted or potted plant. With its pendulous inflorescence, it is ideal in a hanging basket.**

Like *Tillandsia novakii*, *Tillandsia duratii* does not develop roots, but rather has adapted its leaves to twist and spiral around its support. There are two forms of this plant, a large and small, but both are among the few tillandsias, which have fragrant flowers. Note in the insert the relatively large, purple flowers, which form on the long spike.

Tillandsias can have many different colors to their flower petals as well as their floral bracts. Presumably this is to attract pollinators. The lilac colored branched inflorescence of *Tillandsia cacticola* bears white petaled flowers with purple tips. Its flower has a sweet smell and yes, it gets its name from the fact that it is found growing on cactus in its native Peru. The *Tillandsia brachycaulos* (L) on the other hand has adapted its upper leaves or primary bracts to attact pollinators by turning a bright red at blooming time.





Many tillandsias as individual plants such as *Tillandsia stricta* (above) and *Tillandsia pseudobaileyi* (L), are not very appealing by themselves, but when let to grow into clumps for several generation they become show stoppers. This grouping of *T. psuedobaileyi* actually won headtable position at the BSBC Show in Ft. Lauderdale this past April.

The seed dispersal method of tillandsias is enhanced with these plants growing high off the ground. Some tillandsias such as this *Tillandsia cyanea*, at least in cultivation, do quite well growing in clumps in containers. The media should not retain as much moisture as terrestrial mixes, but it is apparent that this group of tillandsias have more developed roots for absorption of nutrients through their roots.

There are some tillandsias, such as *Tillandsia propagulifera* (L), which are unique in that they reproduce by producing offsets along the stem of the inflorescence.

There are many beautiful and unusual tillandsia species. *Tillandsia imperialis,* (above) is one of the most attractive. Unfortunately, this is another high altitude plant which requires moist conditions and cool night temperatures to grow well. *Tillandsia capitata* (L), which is available in a variety of color forms, here is seen the 'Yellow', is well adapted to most growing conditions, easy to grow and is attractive in or out of bloom. The covering of trichomes on the leaves of *Tillandsia xerographica* (bottom L) produce a nearly white coloration. Its curly leaves and long lasting inflorescence has made this tillandsia very much sought after. Since it is on the CITES list, hobbyists now depend on cultivated plants to satisfy their desires for this tillandsia.

Hybridizing of tillandsias is a time consuming undertaking and the rewards are not always worth the effort. Enhancing the appearance of the parents has always been a primary reason to create hybrids. In some cases the results of crossing hard to grow plants with easier to grow ones may give us new cultivars with traits of the more tender parent, which can be grown nearly anywhere. Such was the attempt of the cross of the high altitude *Tillandsia imperialis* with the easier to grow, *Tillandsia deppeana*. Once this plant is more plentiful, we'll see what the vertict is, but it looks promising. There is no question about the cross of *Tillandsia jalisco-monticola* with *capitata* 'Red" (Bottom left). This a beautiful cultivar to be welcomed into anyone's collection.

CBS members, Dolly Dalton. Bob Fasq, Larry Giroux, Sue Gordon, Steve Hoppin, Eleanor Kinzie, Betty Ann Prevatt, Donna and Gary Schneider and Homer Sosa, attended the SWFOS field trip to The Redlands, as members or guests on Saturday, May 19th. Although orchids dominated, bromeliads such as *Tillandsia capitata* (L and above) and an exquisite *Tillandsia chiapensis* (L, very bottom) was spotted among the thousands of orchid species and cultivars for sale. Pictured here are Eleanor, Sue and Betty Ann taking a lunch break between the shopping and seminars.

fiber, pine bark and peat. They benefit from the added absorption of moisture and nutrients from the mix besides their predominant absorption through their leaves. Just as in nature, in cultivation, tillandsias require air circulation, water and particles of materials containing nutrients to land on their leaves and appropriate light for their leaf type. Unless you have your plants growing out in the trees in the yard, they will be hard-pressed to receive these factors naturally. Misting, watering or soaking tillandsias as well as spraying with a weak solution of water-soluble fertilizer on a regular basis, will enhance their growth and appearance. Your required efforts will be somewhat less for those plants, which you choose to grow in a lite mix (as mentioned above), inside a well draining container. I should emphasize that more frequent, dilute feedings are preferred over excessive dosing. Mounted tillandsias can do just as well as potted plants, but again understand that for the same reason you use a lite media to pot tillandsias, you need to mount your plants in such a way as to avoid retention of moisture around the base of the plants, thereby avoiding rot. Mounting a tillandsia horizontally or hanging it upside down will seldom retard the plants' growth, and it prevents a damp base.

Most of us will have to rely on offsets, offshoots or pups to replenish or increase our collection of Tillandsias. These baby plants, which will resemble the parent, are produced from the base of leaves, from the base of the inflorescence, on short stems called stolons, from the inflorescence stem or flower or from the base of the mother. The progeny of this genus are generally slow growing; taking from one to four years to reach maturity. Leaving the pups on the mother, produces in most cases an attractive clump, which will reward you with multiple, simultaneously blooming plants. Cautiously removing old bloomed-out mothers, will maintain a more appealing clump as well as avoid rotting of the bases of the mounted plants.

Of course you can grow tillandsia species from seed. In the yard, shadehouse or greenhouse this may occur without really even trying. Many tillandsias are self-pollinating or easily pollinated by insects like ants. Within the capsule produced by the maturing ovum (at the base of the flower) hundreds of very fine seeds form. When ripe and under dry conditions, the capsule will burst and release seeds. These seeds are suspended from feathery parachutes; these resemble dandelion seeds. Many will stay around the mother plant and eventually developed into small plantlets, while many others will be carried by a breeze and attach to surfaces to begin their development. A trick which I have found useful for collecting the seeds in order to grow them yourself or donate to others, is to tie a paper bag around the inflorescence when it appears that the capsule is ready to explode. Don't use plastic and try to keep the bag from getting wet.

Growing from seed is the only way you can produce a new hybrid. Many interesting new hybrids are available in cultivation. Although I still think that making a cross and producing a new hybrid is one of the great challenges in keeping bromeliads, at least with tillandsias, there are so many unusual species available and being introduced all the time, which can provide just as great a challenge for the hobbyist.

Many techniques have been suggested for growing tillandsia seeds. One method I found effective it is to purchase a plastic embroidery hoop and cover with nylon mosquito screening. Smear the seeds evenly over the surface; spray the surface with a weak solution of Captan (an anti-fungal pesticide) to adhere the seeds to the screen. Although hanging the hoop horizontally or vertically and misting occasionally, will work quite well; using the hoop as a cover over a small

plastic bowl such as a Cool Whip container, will provide more consistent moisture as water in the container evaporates. I give tillandsia hybridizers a lot of credit, for it will take four to seven years of patience, perseverance, occasional separating and frequent remounting before they know the results of their efforts. Seeing a new plant with the best characteristics of the two parents, will make this endeavor well worth it.

There are few pests, which affect tillandsias. Outside, squirrels may eat the leaves; scale and mealybugs, as with many other bromeliads, are a constant nuisance. The latter problems are easily treated with weak solutions of insecticides such as Imidacloprid. A major exception to this rule about effects of pests is the devastation of the larger native tillandsias of Florida such as *Tillandsia utriculata*, which are declining in population in their habitat due to the " Evil Weevil", (*Metamasius callizona*), which was introduced from Mexico several years ago. Although the weevil can be treated in the confines of our own growing areas with insecticides, the range of this insect is so great in Florida, that the best we can expect, according to the experts, from the biological controls currently being developed at the University of Florida, is to contain the destruction at a decreasing level.

It is no wonder that many people have become infatuated by tillandsias and that these plants represent a large portion of their collections. They come in all sizes and shapes; and can be grown under many different conditions. They can be potted, hung from wire or fishing line or be mounted to almost any material. Space is seldom a problem for these plants. As a matter of fact while I was in Hawaii, I visited many growers who had their tillandsias hanging in sheets; with each Tillandsia hanging from the one above it, from the roof to the ground, row after row. They require minimal care and eventually reward you with their unique foliage and colorful petite flowers.

(All photographs in this article are by Larry Giroux.)

May Program

After an attempt to search northern Guatemala was aborted in the Fall of 2005 due to Hurricane Wilma, Dennis Giardina and Dr. Howard Frank returned in late 2006 to the central portion of Guatemala, south of Lake Atalan to seek out the weevil and hopefully discover natural enemies of this pest. Dennis, through several hundred slides, documented their success as well as entertained us with the sights and diversity of this beautiful country. Thanks to Dennis for this eye-opening documentary about the "Evil Weevil Project".

Following Dennis's program, Dr. Howard Frank, who has been working on the weevil project for over a decade, surprised our members by having Dennis read aloud the long awaited letter authorizing the next phase of the weevil project - the release of the parasitic fly into areas of weevil activity within the native bromeliad habitats here in Florida. (See mailing cover of this issue for picture of this event.)

It seemed apropos that Dr. Frank announced this news at our society meeting, given that the CBS has been a major contributor to the project since its inception. Congratulations to Dr. Frank and his team for all their efforts and perseverance and thank you to the FCBS and all those bromeliphiles, who have made this happen. Let us all pray that these trials will show promise in bringing back the native bromeliad populations to Florida.

2007 Bromeliad Extravaganza

Presented by The Florida Council of Bromeliad Societies and Hosted by The Bromeliad Society of Broward County. Saturday, ***September 29, 2007*** at the Hilton Ft. Lauderdale Airport Hotel, 1870 Griffin Rd. Dania Beach, FL 33004. 954-920-3300 or 954-920-3348 (fax). Room rates: Single or double $89.00. Rates in effect until September 14, 2007. Sale, Seminars, Banquet, Raffle and Rare Plant Auction will take place at the same location. This Extravaganza and others which may follow will be the only major Bromeliad events in the Continental US as the 2008 World Conference will take place in Australia.

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 at (945) 925-5112 or e-mail him at jcadonayre@bellsouth.net. (Please include E2007 in the subject line when addressing e-mail.)

THE GOLDEN TRIANGLE BROMELIAD SOCIETY

is hosting the:

33rd Annual Southwest Bromeliad Guild Show & 10th International Cryptanthus Show

MCM Elegante Hotel

2355 IH 10 S, Beaumont, Texas 77705 (409) 842-3600

September 7th, 8th , 9th, 2007.

Because of scheduling problems, the 10th International Cryptanthus Show has been moved to the MCM Elegante Hotel in Beaumont, Texas on September 7, 8,& 9, 2007. This event will be held in conjunction with the 2007 Southwest Bromeliad Guild Show, which is hosted this year by the Golden Triangle Bromeliad Society. Hotel rooms are available for $79 per night and a $50 registration fee will include entry to the Show and Sale, Seminars, Tours and a Banquet, which will precede the Rare Plant Auction. For registration form and schedule of events, e-mail Larry Giroux at DrLarry@comcast.net or call Cynthia Johnson at (409) 753-3652.

CBS MAY MEETING MINUTES

Date: Sunday, May 20, 2007. Location: St. John the Apostle's Metropolitan Community Church; 3409 McGregor Blvd. Ft. Myers, FL Attendance: Approximately 40 members, five new members and one guest. Guest - Marlene Bradley, New members - Christian Jalbert, Marie Stevens, Laura Cordell, Nancy Yadon & Marcine Smith. Workshop: Eleanor Kinzie and Betty Ann Prevatt; A

Review of the Sub-family *Tillandsioideae*. Thank you ladies. Call to Order: President Steve Hoppin called the meeting to order at 2:08 PM. Introduction of New Members (see above) President Steve reminded members that fellowship starts at 12:30 PM. He encourages members to come at that time to assist in setup and to remain after meeting to help with meeting breakdown. The March 2007 meeting minutes were published in the May Meristem, the CBS Monthly Newsletter. There were no corrections, additions or deletions to the minutes; A Motion to Approve was made by Vicky Chirnside and seconded by Robert Fasq. Passed by member vote. Old Business: None to discuss. New Business: None to discuss.

Announcements: 1.Member Joe Bailey passed away on May 1. Charter Members of CBS, Joe and wife Peggy have been strong supporters of CBS since 1980. President Steve announced with pleasure that many members attended the memorial held in Tampa on Thursday, May 10. Joe and Peggy were featured in the May Newsletter; thanks to Larry Giroux. 2. On May 17 Jim Schrenker passed away from heart disease. Jim and wife Virginia, both BSI Judges, were strong participants and supporters of The Bromeliad Society of South Florida (Miami Club). They retired to the Carolinas a few years ago. Jim and his wife judged many of our shows in the recent past. 3. CBS Birthday Party - a GREAT THANK YOU to Bill and Betsy Burdette for providing a beautiful location (their home on the Orange River) and their inspired hospitality. It rained a bit during the party, but that only served to pull the members into closer fellowship and enjoyment. Betsy came up with a new type of raffle, which caused much merriment. 4. Meristem Editor and creative anchor Larry Giroux again requests members to consider receiving the Meristem on-line. Contact Larry and he will add you to the list of members who are receiving the expanded electronic, colorful newsletter directly e-mailed to them. Other members, who are unable to download the relatively large pdf file can still read current and past issues on-line at www.fcbs.org. The Newsletters for June and July will be combined due to Editor's vacation.

Break: A 20 minute break was held for refreshments. Thanks to Mary McKenzie and her assistants and all who brought in food items, for a tasty and lovely lunch. Show and Tell: Dozens of fascinating bromeliads were provided by the membership and discussed by Dale Kammerlohr. Program: Dennis Giardina, Park Manager of the Fakahatchee Strand State Preserve, presented "Bugging out Again". He showed several hundred entertaining slides and narrated his trip to Guatemala in search of bromeliad weevils and their potential parasites. At the conclusion of the program, Dr. Frank announced and produced the authorization to release the parasitic fly in limited areas of the native bromeliads' habitat here in Florida. Raffle: Approximately 50 bromeliads and related items were raffled to lucky winners

and were distributed by Commentator Larry Giroux, assisted by Tom Foley and Luli Westra. **Adjournment**: The meeting was adjourned at 4:37 PM **Breakdown:** Accomplished by Ross Griffith and Tom Foley with assist from many members. Thanks to you all.

Respectfully submitted by

Chuck Ray, CBS Secretary

Continued from page 5

Her personal bromeliad collection consists of approximately 1,400 different types of bromeliads in 23 genera. Her main interests are the species of which the majority of her collection are composed. Whenever Terrie is selling plants, buyers are sure to have an opportunity to acquire unusual and hard to obtain plants at great prices. She will be bringing to the meeting lots of her plants for sale.

Welcome to New Members

Laura Cordell
14041 River Road
Fort Myers, Fl 33905
XXX-XXX-XXXX
floralaura@juno.com

Marie Stevens
5581 Berkshire Dr. #102
Ft. Myers, Fl 33912
XXX-XXX-XXXX

Christian Jalbert
425 15th St. N.W.
Naples, Fl 34120
XXX-XXX-XXXX
keysey@earthlink.net

Don Woods
3260 6th Ave
St. James City, Fl 33956
XXX-XXX-XXXX
daddio815@earthlink.net

Marcine Smith
2021 King Tarpon Dr.
Punta Gorda, Fl 33955
XXX-XXX-XXXX
pms22@earthlink.net

Nancy Yadon
1423 Whiskey Creek Drive
Ft. Myers, Fl 33919
XXX-XXX-XXXX
NMYadon@aol.com

MAY WORKSHOP

Many thanks for the discussion of the Sub-family *Tillandsioideae* by Betty Ann Prevatt and Eleanor Kinzie. Also a big thank you to all who brought in plants for demonstration.

Using the magic of modern electronics, in the on-line version of this issue I have included the handout provided at the Workshop. If you were unable to get one at the meeting, contact someone who has a computer and they can print you a copy for future reference.

The Bromeliaceae is broken down into 3 large subfamilies

A. Bromelioideae
B. Tillandsioideae
C. Pitcairnioideae

Today we talk about the Tillandsioideae subfamily which consists of 9 genera: *Alcantarea* (plants moved from *Vr)*, *Catopsis, Guzmania,Vriesea, Mezobromelia, Glomeropitcairnia Werauhia* (plants moved from *Vr*), *Tillandsia, Racinae*a (plants moved from *Tillandsia.*)

There are over 400 species of Tillandsia, over 250 of Vriesea.
The main characteristics are all of them have entire leaves, in other words, NO SPINES! They have capsular fruits with plumed seeds that are fuzzy and sail like kites in the breeze for seed dispersal Most of them are epiphytes, meaning "air" plants, a plant growing on another plant or object as a means of support only. It gets its needed moisture and nutriments from the air and IS NOT a parasite.

Mezobromelia **-** A rare genus described by L.B. Smith in 1935 in honor of Carl Mez. There are guzmania like epiphytes and few are in cultivation. Indigenous to Ecuador and Columbia; indigenous, meaning native to a certain country; not imported.

Glomeropitcairnia - A West Indian genus, mostly epiphytic but of tremendous size, it was so named by Carl Mez in 1905 because its clustered flowers resemble those of a *Pitcairnia*.

Guzmania — A popular genus, epiphytic in the rain forest of parts of Central America and the Andean highlands of Colombia and Ecuador. Named by Ruiz and Pavon for Mr. Guzman, 18th century Spanish naturalist in 1802. You are probably most familiar with *Guzmania lingulata*, *Guz. monostachia* (Florida native), *musaica, wittmackii, sanguinea.*There are over 250 species and many hybrids. Guzmanias are found growing from sea level up to 10,000 feet. In their natural habitat they thrive on high humidity and warm temperatures, filtered light and good air movement. Most are epiphytic although a few have acquired terrestrial habits. They come in small, medium and large sizes and they come in many colors of green, maroon, bicolor & variegated and some with bars and zigzag patterns. Almost all have very long lasting inflorescences. And of course the smooth-edged, glossy leaves. Because so many of them have plain green leaves, to identify each species correctly, they must be in bloom. Most Guzmanias have thin lines or longitudinal stripes low on the leaves near the axil or base of plant, lingulata means "tongue-shaped"; musaica means "with mottling resembling a mosaic"; sanguinea means "blood-red, or bloody"; monostachia means "having one spike".

Catopsis - Around 20 species in this genus, many of which are dioecious, meaning male and female flowers on different, individual plants. Both male and female plants have to bloom at the same time for pollination. An epiphytic genus named by Grisebachin 1864

from the Greek meaning "view", it is found from Florida to northern South America. Easily identifiable by its waxy green leaves. There are only 3 species of bromeliads that are carnivorous and 1 is *Catopsis berteroniana*. The March-April 2007 BSI Journal tells the story. *C. berteroniana* is a native to Florida as well as Central and South America. *Catopsis nutans*, meaning nodding, generally referring to the inflorescence. There are several species of *Catopsis* native to Florida.

Vriesea - an epiphytic genus of widespread distribution named in 1843 by Lindley in honor of W. de Vriese, a Dutch botanist. There are over 225 species, which the most familiar are *Vr. racinae, espinosae, splendens, fosteriana* (Red Chestnut) and *glutinosa.* The *imperalis* and other very large growers have been put in the genus *Alcantarea*. Many Vrieseas and Tillandsias resemble eachother in many respects. There are small Vrieseas which closely resemble dry-growing Tillandsias and some Tillandsias that very much look like soft-leaved Vrieseas. If the plant is not in bloom identification may be tentative. The greatest concentration of Vriesea species are found in Brazil and Costa Rica, but also found in Mexico, West Indies and other countries in South America. Their leaves can be plain green, banded or mottled and red or variegated forms. The bloom spikes are usually erect, but can be slanted, pendant, or reflexed, and are long lasting. *Alcantarea imperalis*, means "regal, imperial; *Vr. racinae* is named for Racine Foster; *Vr. fosteriana* is named for Mulford Foster; *Vr. glutinosa* means "sticky, glutinous";

Tillandsia - this genus has the greatest number of species, over 400, and the greatest range of any of the genera in this subfamily. They range from the southern tip of Virginia to 500 miles south of Buenos Aires. They range in size from less than *1A* inch to over 14 feet. The have hard, fuzzy leaves to soft, smooth leaves. Many Tillandsias do not form a cup to hold water, instead they're completely covered with tiny peltate scales which not only absorb water and nutrients from the air, but also help to conserve moisture within the plant. The flower and bract colors range from blue, pink, white, yellow, brown and orange.Tillandsias, as a rule, require little care, but they must have plenty of air movement. Most are grown on a mount, but can be potted if the medium is very well drained.There are 15 species native to Florida, plus 2 natural hybrids from the species.

The *aceae* ending added to stem of name or synonym of type genus to form name of family. Ex: *Bromeliaceae*

The *ioides* ending is a Greek suffix meaning "resembling or like". Ex: *Tillandsioideae*, subfamily

Genera is plural of genus.

EVENTS CALENDER

August 18 & 19, 2007- Seminole Bromeliad and Tropical Plant Society and the Florida East Coast Bromeliad Society Judged Plant Show A standard judged plant show to include bromeliads and other tropical plants. Sanford Garden Club Building, 200 Fairmont Drive, Sanford, FL . 9 AM - 4 PM both days. There will be plant sales and plant displays. Admission is free, and is open to the general public. If you have questions, please call 321-363-7351.

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.

33rd Annual Southwest Bromeliad Guild Show & 10th International Cryptanthus Show

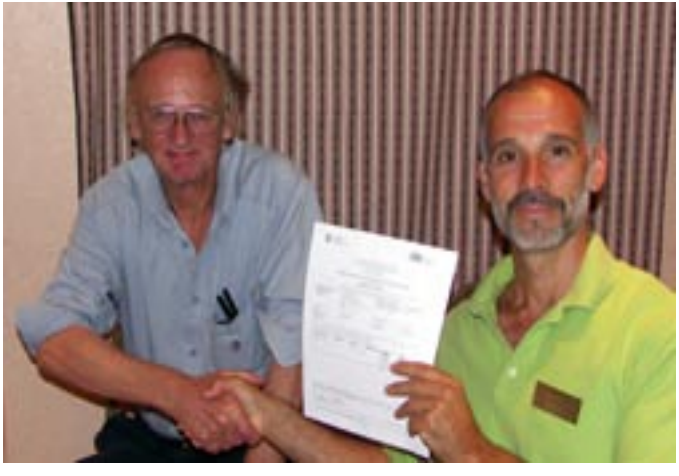
MCM Elegante Hotel

2355 IH 10 S, Beaumont, Texas 77705 (409) 842-3600

September 7th, 8th , 9th, 2007.

For registration form and schedule of events, e-mail Larry Giroux at DrLarry@comcast.net or call Cynthia Johnson at (409) 753-3652.

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



Dr. Howard Frank (L), head researcher of the Weevil Eradication Project and Dennis Giardina (R), Park Manager of the Fakahatchee Strand, holding the letter authorizing the initial releases of a parasitic fly, which has potential to kill the Mexican Weevil larvae within infected bromeliads. Announcement was made at the May meeting of the CBS, following Mr. Giardina's program on the hunt for the weevil in Guatemala.

This is a dual issue. The information for the *June and July* meetings is in this issue! You will not receive a July mailing!