

BROMELIAD SOCIETY OF SAN FRANCISCO



May 2012

NEWSLETTER

Our next meeting will be held on **Thursday, May 17, 2012** at 7:30 PM
Recreation Room, San Francisco County Fair Building, 9th Avenue at Lincoln Way, Golden Gate Park, San Francisco

May Program

Bromeliads of Brazil

Some of us know **Guillermo Rivera** because he has been the guide on many of the trips some of our members have taken to various South American countries over the last few years. Guillermo has a PhD in botany and has learned how many of us are also interested in Bromeliads and he now schedules trips with an emphasis on bromeliads as well as cacti.

This month, Guillermo has put together a show on some of the plants that you can see in the Brazilian states of Bahia and Minas Gerais.



Here is **Guillermo** checking out the area for bromeliads. Photo is courtesy of Joe Quijada.

May Refreshments

Michelle Dervis signed up for refreshments this month. Can someone else help her out?

Trip to Peru

Guillermo will be leading a tour to Peru in early August. This trip will include a guided visit to Machu Pichu ruins. Some members of our society will be going on this trip, but there is still room for one more. For additional information, please visit www.cactusexpeditions.com.ar

April Meeting

Last month we had a large turnout at **Flora Grubb Gardens**. They graciously welcomed us after closing so we had the nursery to ourselves. It is always a treat to visit this nursery for the wonderful plant material and new ideas. **Zenaida Sengo**, who coordinates the interior displays and has been expanding the use of tillandsias as art pieces for home and business, gave us demonstrations on using tillandsias for tabletop displays and vertical garden terrariums.

The nursery has many bromeliads for sale and among them were some new spineless *Aechmea fasciata* clones and a colorful large bromeliad identified as *Aechmea* Dean. This plant is really a bigeneric hybrid with *Aechmea* and *Androlepis* parentage.

Our refreshment table was overflowing. Thanks to all who contributed.

There were 2 seedlings on the plant raffle table identified as *Dyckia fosteriana*. They should have been tagged *Puya mirabilis*, so if you got one change the tag.

June Plant Sale

Our combined plant sale with the San Francisco Succulent and Cactus Society (SFSCS) will be on **June 9th** and **10th** this year at the County Fair Building. Setup will be on Friday, **June 8th** from 2 PM to 8 PM. **We must be out of the building at 8 PM on Friday evening.** Sale schedule is

- Saturday - Setup: 8 AM to 9 AM, Sale: 9 AM to 5 PM
- Sunday - Setup: 8 AM to 9 AM, Sale: 9 AM to 4:30 PM, Clean-up: 4:30 PM to 6:30 PM

This is our **main annual event that brings in money to support** the society. Start setting aside your plants for the sale and save these dates to help on the sale.

Since this is such an important event for our society, we really need as much support as you can provide. You can help in three ways:

- Entering some of your premium plants in our Bromeliad display area
- Selling your own plants
- Working at the show/sale.

Remember, if you plan to sell your plants, **25%** of the sales will be kept by the club.

If you are selling plants at this sale **Roger Lane** will be the collector of your bar code requests. There will be a form to request your price codes at this month's meeting. If you can not provide you request at this month's meeting you have until **Saturday May 26th** to mail them to **Roger Lane** (address is on bar code order form). **No bar code requests will be accepted after this date.** The bar code sheets have 80 bar code items per sheet and they are more impervious to water than our old tags. You **can not** mix prices per sheet (all 80 items per sheet must be same price). **There is a \$2.00 charge per sheet and \$5.00 to mail them to your home.** If you can not make our May meeting and need the bar code form, call Roger Lane at 650-949-4831 or e-mail Roger at rdodger@pacbell.net.

One of the conditions of selling your plants is helping out at the sale for a minimum of 4 hours during Saturday or Sunday. Let's try not to have everyone sign up only for the last 4 hours on Sunday.

We always have a three-table display of show-quality plants from our personal collections. Since this is the 25th anniversary for the SFSCS, there is an interest in bringing in some plants that have silver leaves, but we also want to show the diversity of the bromeliad plant family, so bring in any of your special goodies. There will be a signup sheet for display plants at this month's meeting. We are usually short of tillandsias for the background screen.

Please start saving your boxes and paper bags. We never seem to have enough on the second day of the sale.

Some Bromeliad History

This article by Dennis Cathcart is reprinted from the latest VIPP report found on the Tropiflora web site. Wes Schilling was in Florida to attend a high school reunion and also visited Tropiflora Nursery.

This week I experienced a couple of things that set my mind in motion. Though unrelated, they seemed to provoke thoughts on how much things have changed in the bromeliad world over the

past forty years. We had a visitor from San Francisco this week, **Wes Schilling**, who is more than just a nice pleasant guy, but truly a living link to bromeliad history. Speaking with him about his days working for Mulford Foster and his frequent visits with Julian Nally, made me realize that the very roots, the beginnings of the bromeliad society and the interest in bromeliads in the U.S. was still within living memory of some of our fellow bromeliophiles. He spoke of having put on the very first ever bromeliad show in the U.S. as a member of the Florida West Coast Bromeliad Society, the nation's oldest. Even though I had the great good fortune to meet Mulford Foster on a few occasions and knew also Julian Nally, these names and the times they represent seem truly long ago. Interesting that it's all a matter of perspective.

Nonetheless, times have changed and the bromeliad world, for good or bad, is much different now. I can remember when bromeliads first piqued my interest in the early '70s. I found that acquiring new bromeliads for my collection was a great challenge. There did not seem to be any sources around and they were rarely seen for sale in nurseries. Again, a matter of perspective. Eventually, I discovered the Florida West Coast Bromeliad Society which met in the Saint Petersburg-Clearwater area, a considerable drive in those days, but well worth it! For the first time, I realized that I was not alone in my newfound bromeliad interest and that there was in fact a large group of enthusiastic bromeliophiles that met every month to talk and swap plants. Oh my gosh, I could not believe my luck! In the first few meetings my meager collection more than doubled and grew exponentially thereafter. I would haunt the sales table and purchase anything that I didn't already have, and I bought budget breaking numbers of raffle tickets for the chance to win even more. In those days, compared to now, there was almost nothing available to buy. We would all be snatching up offsets of plants such as *Aechmea fasciata*, *luddemania*, *weilbachii*, 'Foster's Favorite', *Neoregelia meendorffii*, *tricolor*, and *carolinae*. The occasional *Nidularium innocentii* would always cause a stir of excitement and any *Vriesea* aside from *polemannii* was a rare find. The flashy *Guzmanias* that we all see everywhere today had not yet been invented and our selections were pretty much limited to basic *lingulata* and rarely, really rarely, species such as *wittmackii* or *sanguinea*. Some of the senior members, Dr. Morris Dexter, for example, would bring in their newest acquisitions brought from afar and those would be plants like *Vriesea splendens* and 'Red

Chestnut' and the group would go all green with envy!

Garden Fair in Golden Gate Park

We have the chance to participate in this years Garden Fair in Golden Gate Park. It is the standard Kitty Fischer event, **Saturday August 4, 9 - 3**. The price has gone up to \$50. Does anyone want to take this on? I will in Peru that day. It can be windy, but I've always had fun talking with the public, visiting with other clubs, and socializing with our own society's members. We always have a few plants left from our June sale to show off, and someone always brings a few choice plants to wow the public!

Carl Carter

Bromeliads and Mosquitoes

This article by R. Smythe, MSc. is extracted from the Bromeliad Society of Queensland, Inc. (Australia) bulletin, March-April 1997. When moving plants from the greenhouse to the side yard, your editor discovered some mosquito larvae, so it can happen in our part of the world also.

When I seriously commenced collecting bromeliads about three years ago, I started to hear about bromeliads and mosquitoes. I live right next to the commons, which is a tidal mud flat, and when mosquitoes breed they all gather at my oasis in the desert before moving out to invade the town. I remember swarms moving off the ground as I walked. I knew these mosquitoes were not coming from my few bromeliads. All the year round, visitors complained about the mosquitoes in my garden. Things have changed as my bromeliad collection has increased, my mosquito problem has decreased. Other than the swarming period of the year, the garden is a great place to be.

I have been off work for three months due to ill health. This left me with plenty of time to study my bromeliads for mosquito breeding. I have 700 vases (funnels) to inspect; most evenings I can be found with a torch peering down inside plants. The larger vase type is studied during the day using a battery acid tester. The tester is great for drawing water and anything else that might be in the vase. If mosquito larvae are found, the contents are tipped into a white container for further inspection, and then placed in another container to be hatched and identified.

The Townsville City Council advertised bromeliads as the main source of breeding the

mosquito *Aedes aegypti*. *Aedes aegypti* is the dengue fever mosquito. This stirred me to action; I immediately wrote to the head of the World Health Organization, Dengue program in Geneva. Dr. Knudsen informed me that bromeliads were of no concern as this mosquito had been found twice in the world. These recordings were from somewhere in the Caribbean.

I started looking for the *Aedes aegypti* in bromeliads, and now, nearly two years on, I have not found one of these mosquitoes in my bromeliads. When mosquitoes have been found, they have almost always been *Aedes notoscriptus*. This fellow has the football socks (banded) legs like that of *Aedes aegypti*, but has different markings on its back. Probably confusion between the two species has caused the bad publicity. I have passed my knowledge to the Health Officials in our Council. The Council (Health Department) is saying bromeliads are bad in the tropics, while I say, we in the dry tropics, like Hawaii, have the best growing and coloring up conditions in the world. Bromeliads should be promoted as a tourist attraction here in the tropics. The Townsville Parks and Gardens section of the Council supported my research and I thank them. They are helping me resolve the dichotomy of opinions by supplying me with some of their *Neoregelias* to add to my study, so that I have a larger range of genera and species than I had in my pilot study.

While I have been waiting for new growth (pest free plants) and waiting for the vases to become large enough to possibly attract mosquitoes, I have made a strange observation. The Council supplied plants were attracting mosquitoes in some of their plants, while mine were not. How can this be? My garden has been pesticide free for many years while the Council's plants would have been sprayed. I ask that question: could the Council have killed a predator with their spraying?



Neoregelia carcharadon

Shown by Eloise Beach
2003 Mothers Day Show, BSCF

Neoregelia carcharadon is one of the larger *Neoregelias* that is not seen as often today as the collectors gravitate towards the smaller hybrids. Photo is courtesy of the Florida Council of Bromeliad Societies.

My son, Dr. Mark Smythe, working at the University of Queensland, read and forwarded to me an article found in their Newsletter. It stated Dr. Michael Brown working at the Queensland Institute of Medical Research had found a predator of mosquitoes called 'Mesocyclops'. I had proposed some time ago that I believed there could be a chemical inhibitor to mosquitoes released by bromeliads. My wild unspoiled bromeliads, up in the trees, never had a mosquito problem, so my hypothesis sounded reasonable, but why were the Council bromeliads different? I needed a sample of the predator *Mesocyclops* for identification. While waiting for a sample, I went to my bromeliad collection and tipped their contents into a white container and subsequently filled several vessels with this water that contained organisms. Thanks to the Council supplied *Neoregelia carcharadon* I had a supply of *Aedes notoscriptus* wigglers (not the dengue mosquito).

I tried to separate the different types of organisms captured in the vessels and then fed wigglers to them. Two organisms regularly caused the larvae to disappear. I then removed the organisms from the water and again placed wigglers in the water alone; wigglers continued developing. My hypothesis on a chemical inhibitor released by bromeliads was incorrect, in this case. I am a chemist and a botanist, not a zoologist, so I cannot give the scientific names for both organisms that gave some biological control of the larvae. In describing these two organisms, one is a filamentous green stuff found in stagnant ponds. The other is a two to three centimeter

filamentous aquatic worm, when touched by a wriggler it virtually convulses into a knot.

I followed up my tests when visiting a grower who kept plants in a wilder state than mine. All plants with the filamentous green stuff and colonies of worms were free of mosquito larvae. I am setting up vessels of the other organisms in my yard to see if the organisms attack the mosquito eggs. Some of these organisms which may include the Mesocyclops have been observed visiting the surface especially at night. They just might feed on the mosquito eggs.

Although I have said my hypothesis on an inhibitor released by bromeliads was incorrect in some cases, I do believe some of the common species up here in Townsville actually stop mosquito eggs from hatching, be it inhibitor or digestive process. Rarely a wriggler is found, yet nothing that might eat them can be seen in the water. Bromeliads can be carnivorous and digest things that have fallen into their cups.

The reader may ask, do bromeliads breed mosquitoes and do they increase the mosquito population? Yes, bromeliads can breed mosquitoes and no, they will not increase the mosquito population if they are handled properly. In Rio de Janeiro, in the 50's, the municipal bodies stripped all the forests of bromeliads in order to remove the water that mosquitoes breed in. They only created a plague, as predators in the natural state would have destroyed most of the mosquito eggs. The mosquitoes found other sites where there were no predators, with the problem only becoming exacerbated. I believe if you wash bromeliads out on a regular basis, you must maintain this process; otherwise, you are creating the environment mosquitoes will jump at, and this is fresh clean water, free of predators and any possible inhibitor.

The best advice I can give at this early stage for growers like myself who prefer predators to chemicals, is to keep bromeliad cups full of water. Do not let them dry out; this will cause the organisms to die. With any overhead watering do not overwater and wash out the cups' when this happens your bromeliads become vessels for the enterprising mosquito to investigate.

My research continues; I am anxious to share my findings and will confirm these finds later, after more extensive testing. Before I was retired into disability, I devoted so much time to the mosquito project, my hypothesis, experiments, and

observations will continue to prove or disprove my statements.

My aversion to insecticide in the environment will always encourage me to continue plugging my predator approach in cultivating bromeliads.

On Labels

This tip from Face book is courtesy of Dan Arcos.

Jacob Koning, Australia:

One of the problems with marker pens on NEW labels is that the new labels have a fine film of release agent on them from the molding processes, but if they are soaked or wiped with Methylated spirits (alcohol) then they will last a lot longer, why? Well you are NOT writing on the release agent then are you?

Patrick Murray, Michigan:

If your tags were written with a marker and have faded beyond being readable, you can use a copy machine to read them. Just make a copy. You'll be amazed...

BROMELIAD SOCIETY OF SAN FRANCISCO (BSSF)

The BSSF is a non-profit educational organization promoting the study and cultivation of bromeliads. The BSSF meets monthly on the 3rd Thursday at 7:30 PM in the Recreation room of the San Francisco County Fair Building, 9th Avenue at Lincoln Way, Golden Gate Park, San Francisco. Meetings feature educational lectures and displays of plants. Go to the affiliate section of the BSI webpage for information about our meetings.

The BSSF publishes a monthly newsletter that comes with the membership. Annual dues are single (\$15), dual (\$20). To join the BSSF, mail your name(s), address, telephone number, e-mail address, and check made payable to the BSSF to:

Harold Charms, BSSF Treasurer, 255 States Street, San Francisco, CA 94114-1405.

BSSF 2012 OFFICERS & DIRECTORS

PRESIDENT	Carl Carter	510-661-0568	carl.carter@ekit.com
VICE PRESIDENT	Dan Arcos	415-823-9661	darcos@pacbell.net
SECRETARY			
TREASURER	Harold Charms	415-861-6043	Harold@States-Street.com
DIRECTORS:			
	Roger Lane	650-949-4831	rdodger@pacbell.net
	Marilyn Moyer	650-365-5560	MarilynMoyer@comcast.net
	Peder Samuelson	650-365-5560	Pedersam@comcast.net
	Peter Wan	408-500-2103	peterkwan@earthlink.net

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BROMELIAD SOCIETY
OF
SAN FRANCISCO

Roger Lane
Newsletter Editor
551 Hawthorne Court
Los Altos, CA 94024-3121

This month Guillermo Rivera takes us to Brazil!