

BROMELIAD SOCIETY OF SAN FRANCISCO

October 2013



Meeting Specifics

When: October 17th
Time: 7:30 PM
Recreation Room
Where: San Francisco County Fair Building
9th Avenue at Lincoln Way
San Francisco

If you wish to be kept informed about our future trips, please send email to Guillermo at rivera@intecar.com.ar or info@cactusexpeditions.com or visit website: www.southamericanaturetours.com



Bromeliads from Columbia: Central Valleys and Eastern Cordillera

This month **Guillermo Rivera** will be visiting us again. He is owner of a tour company devoted to nature tours that focus on plants and birding. Although most of his tours have covered South America, he is continually branching out to additional countries. His show for us covers a trip to the Andean region of Colombia, exploring its 3 ranges: Cordillera Oriental, east of Bogota, Cordillera Central, on the other side of Magdalena Valley, and Cordillera Occidental, west of the Cauca Valley, and before the Pacific region. Because of difference in elevation, many habitats serve as a home for Bromeliads to grow. We will discover subtropical and tropical habitats not only rich in Bromeliads such as Guzmania, Tillandsia, Vriesea and Pitcairnia, but also rich in butterflies and birds.

October Refreshments

Marilyn Moyer and Peder Samuelsen signed up for refreshments this month. Anyone else should feel free to also volunteer!

Navia igneosicola, tepui terrain, *Lindmania holstii*



September Meeting

Bruce Holst showed us the results of his 2011 and 2012 trips to the Roraima tepui

Last month we expected that Bruce Holst, Director of Botany at Selby Botanical Gardens, would be giving us the results of his recent inventory of the bromeliads of Costa Rica. At dinner before the meeting he said his talk to the Sacramento Society the night before was very popular, so we decided to have him repeat it for us.

This show covered Bruce's trips in 2011 and 2012 to the Roraima tepui. Tepuis are table-topped mountains in southeastern Venezuela and in Guyana. They range in altitude from 2500 feet to 9500 feet. Roraima is one of the highest at 9219 feet and its surface covers about 270 square miles. These tabletop mountains are considered

some of the oldest geological formations on Earth, dating back to some two billion years.

Sir Walter Raleigh first described Roraima in 1596, but the first ascent was not until 1884 by Everard F. im Thurn. The tepuis have held a special significance for the natives and are the source for

The Roraima tepui was source for Arthur Conan Doyle's novel. "The Lost World"

speculation about dinosaurs living on top.

Bruce showed us slides of many plants endemic to this tepui; each tepui has its unique flora. Plants represented many different families. He showed us how the botanists

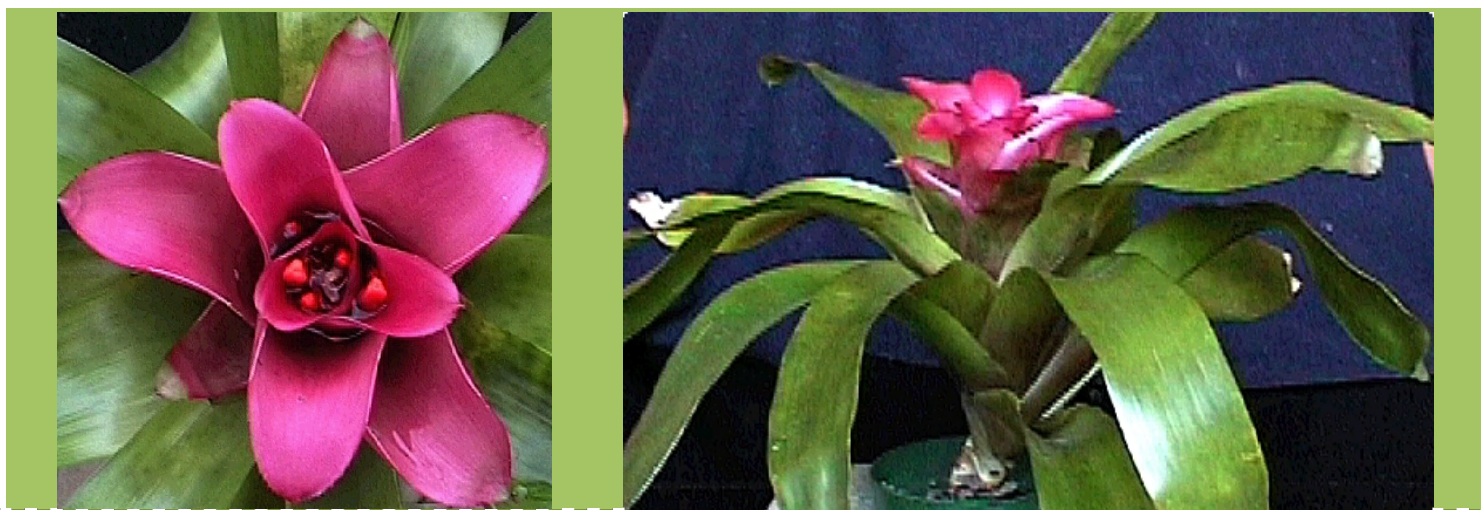
document the plants by individually counting each plant in a specified area. Unfortunately, this tepui has several backpackers visiting each year and they are destroying or damaging some of the plant material – both from walking on the plants



and leaving their refuse on the mountain. This was an exciting show and Bruce has promised us the Costa Rica show on his next visit

Nidularium regelioides

This name is no longer valid. It is now considered a synonym of *Nidularium rutilans*



Nidulariums, and in particular, *Nidularium regelioides* (like a Regelia – an early name for Neoregelia) are a must for all collectors, beginners as well as the advanced. Now, before too much more, a slight explanation on the differences between neoregelia and nidularium is necessary to avoid confusion between the two. Neoregelias at blooming time will have color in the center of the rosette with the flowers sunk deep in the cup, no exceptions. Nidulariums will color in the center but only on the bracts with the flowers emerging at different levels. Sometimes the bract will rise up and out of the center. That is the distinctive difference.

Nidularium regelioides, like all

Nidulariums, is from eastern Brazil – most being terrestrial and growing at quite high elevations. Being terrestrial also indicates that at high altitudes they would be low light lovers, which is true, and they like it to be humid. However, most can be hardened to take quite a bit of light as long as the humidity is high. *Nidularium regelioides* is a relatively small plant seldom attaining a diameter of 55 cm and a height of approximately 25 cm. The leaves, as with most nidulariums, are quite glossy. The flowers when first open are orange turning with age to a bright rose. *N. regelioides* usually produces two to five offsets and when cared for can bloom annually. My *N. regelioides* are

usually grown under benches and brought into brighter light only at the first indication of blooming so I can obtain brighter coloration. I've had these plants take temperatures down as low as 4 degrees C with no damage and during heat spells take temperatures of 39 degrees C in the shade. So no matter what your location – with proper care there is no reason why you cannot grow this 20-24 leaved plant.

Article by Dale Williams originally appeared in January 1980 issue of Bromeliad Study Group of Northern California.

Who Needs Plastic?

This article by Chet Blackburn is reprinted from the August 1997 newsletter of the Sacramento Bromeliad Society

A few years ago Los Angeles or one of its nearby cities took a lot of flak for considering replacing roadside landscape plantings with artificial palm trees, shrubs, and flowers to save on replacement and maintenance. It is easy to dismiss such tomfoolery with a disdainful chuckle and a remark like, “only in Los Angeles”, but we have to remember that Angelinos have been migrating out of the south in great numbers in recent years and a few of them have even ended up in little towns such as Auburn, my own digs, and bringing their ideas with them. In fact, we now have a small square in Auburn that is covered with Astroturf instead of grass. Guess where the city councilman who suggested that came from originally?

Anyway, when it comes to growing bromeliads outdoors in the Sacramento area, it might seem more practical to go plastic because it sometimes seems that Sacramento just can't win when it comes to climate. For most tropical and subtropical bromeliads, it is too cold and wet to grow them outdoors here in the winter, but just to keep us from taking advantage of those very conditions to grow cool-growing bromeliads (as they can only 90 miles away in San Francisco). The fates have made it too hot and too dry here in the valley during summer. Those that aren't reduced to mush by frost or sogged away during winter rains become compost from heat and low humidity in summer. True...thanks to the marvels of greenhouses, swamp coolers and sun porches...we can move cool growing ones such as *Tillandsia imperialis* outdoors in the winter and then back indoors in front of the swamp cooler during the summer, filling its outdoor spot with a *Tillandsia xerographica*, then being careful to reverse this migration before winter. This is fun for a while but wears thin after a few years. I can understand that at a certain point, even a purist might cast a wistful eye towards polypropylene, but those irrational thoughts quickly pass. Besides, I can think of at least one plant that is even tougher than plastic!

There is a clump of *Aechmea disticantha* under an oak grove on my property that has endured fifteen years of our climate, including numerous long spells of 100 degree weather and even the “big freeze” of December 1990 with equal nonchalance. Plastic pipes broke during that freeze and I have seen plastic melt or become brittle and disintegrate after only a few summers of our heat, while old *A. disticantha* just sits there spreading farther and father without so much as developing a spot on one of its leaves while plastic objects all around it are slowly going to plastic heaven.

I understand that if most bromeliad growers were to list their top 100 favorite bromeliads...perhaps even their top 1,000 favorite bromeliads, *Aechmea disticantha* would probably not make the cut. It should.



It stands out for toughness and durability even in a family not known for those characteristics. Mine grows in a spot that is seldom watered during the summer; it completely fends for itself when it comes to fertilization and is essentially totally ignored until the long-lasting red inflorescence appears every spring, which it never fails to do.

I am convinced that long after man has finally foolishly altered the environment to which evolution adapted him, to the point that he can no longer survive himself, his extinction will be viewed dispassionately by cockroaches – their antennae wavering from perches on leaf blades in clumps of *Aechmea disticantha*.

Update on Coconut Husk Fibre

Tillandsia xerographica



Tillandsia imperialis

I have previously written about experimentally potting up a number of pups in October and November, using only ¼" pieces of coconut fibre as a potting mix. I received a response from a long time Florida subscriber, Helga Tarver, astutely pointing out that this material might not be sufficiently acidic to use as a sole ingredient. I had the fibre tested for pH... (pH of 7 is considered neutral, ed.)

What I found appears to confirm Helga's point. Coconut husk fibre when soaked with out New York City water has a pH of 6.47, not bad but still only slightly acidic. Bromeliads do better in a more acidic medium of about 5.5 pH. I suspect that genera such as *Aechmea* and *Vriesea* will certainly be happier with a pH of 5.5 in the absence of an acidic mix.

My plants have always done well because my mix contains more than 30% peat moss plus redwood shavings that are acidic. Unfortunately, fibrous peat moss is unavailable, but redwood shavings can be obtained and they are also somewhat water retentive. Sphagnum moss is also acidic and water retentive. This material can be added to the coconut fibre in sufficient proportions to reach an optimum pH. This will be determined by another experiment we'll have to undertake.

An alternative method of lowering the pH would be to add chemicals such as sodium dihydrochlorid phosphate or half-neutralized acetic acid to the watering can. This can readily be done every time you water, but we'll have to experiment to ascertain the amount to be added to reach a pH of 5.5.

The experiment was intended to test how well pups would root in coconut husk fibre. I had been dribbling water on the fibre every two weeks, and I find that below the top ½' layer it was uniformly damp. When I squeezed one of these pieces, water oozed out of it.

I checked on the first two of the pups eight weeks after they had been potted. An offset of *Guzmania* Firecracker had sent out five 2' long roots, each with multiple branches forming, and they were attached to a number of the pieces

of the coconut husk. Likewise, an *Orthophytum navioides*, which was six inches in diameter and was without any roots when I took it off, sent out many ¾" to 1" long heavily branched thick roots which were attached to the damp husks. This is a plant that is so tough to root that experts recommend that you never remove pups from the parent. (Yet another challenge I could not resist).

After I had potted five other pups in coconut fibre in mid-November, I found that eight to nine weeks later, three of them (*Aechmea* Morgana, *Guzmania* Neon and *G. Salsa*) were solidly rooted. But the *G. witmackii* and *G. Hilda* pups had just put out four or five small roots from one point on the base.

The first results show that coconut fibre is indeed water retentive, enough so that you have to be sure that it doesn't get too waterlogged. If it feels too wet you can water it every three weeks instead of two. We have been advised by horticultural experts not to take off pups in the winter when growth slows down. Under such conditions that were adverse to root establishment, the excellent rooting for five of the seven pups made in about eight weeks is a good indication that this medium has the potential to be a successful medium for our plants.

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

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