BROMELIAD SOCIETY OF SAN FRANCISCO

March 2010

NEWSLETTER

Our next meeting will be held on **Thursday, March 18, 2010** at 7:30 PM
Recreation Room, San Francisco County Fair Building, 9th Avenue at Lincoln Way, Golden Gate Park, San Francisco

March Program

Bromeliads of Ecuador

Some of us know **Guillermo Rivera** because he has been the guide on many of the trips some of our members have taken to South America 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.

Guillermo Rivera is a native of Cordoba, Argentina and is an avid plant lover and birdwatcher. Guillermo will present a talk on the bromeliads and some of the cacti of Ecuador. Guillermo is scheduling a trip to Ecuador in 2011.

What is **Guillermo** looking at? Come to our meeting to find out.

March Refreshments

Kaye Rosso, Michelle Derviss, and **Liam O'Flaherty** signed up for refreshments this month**.**

Dues are Due

A new year has begun and dues are due: $15 for a single membership and $20 for a family. Pay Harold at the meeting or mail check to Harold. See back page for details. **If you do not pay your dues for 2010 this month, you will no longer receive the newsletter**.

February Meeting

Last month **Paul Isley,** proprietor of Rainforest Flora Nursery in southern California treated us to a slide show on the printing of his new book on Tillandsias. Since the book was printed in China, we able to visit China as well as learn about the printing process. Paul brought a few of his books to the meeting and they were all sold. Paul graciously donated one of the books to our library.

We had a huge turnout for the meeting and a massive group of beautiful show-and-tell plants. Paul also brought some tillandsias for sale. Considering the time devoted to plant selling, business, describing the show-and-tell plants, and Paul's show we barely got out of the room before closing time.

Orthophytums

This article by Karen Andreas is reprinted from the June 2004 newsletter of the Bromeliad Society of Central Florida.

Bromeliads in the genus Orthophytum grow as terrestrials. Within this genus there are 33 species and 18 cultivars [this number has probably increased as there have been many new Orthophytums described in the last few years – Ed] Its native habitat is the eastern seaboard of Brazil where it grows in clumps and in mats under high light conditions and on rocks, often by riverbeds and waterfalls where it has access to humidity and water. Although found growing among, around, and on rocks, Orthophytum roots reach between cracks and fissures to get to the moisture and nutrition they need.

There are three types of growth habits among the genus: those with erect inflorescences, such as *O. gurkenii*, creeping varieties such as *O. vagans*, and those with inflorescences that appear nestled among the rosette of the leaves such as *O. navioides*.

This photo of *Orthophytum gurkenii* by Dorothy Berg is courtesy of the Florida Council of Bromeliad Societies.

They are tolerant of our temperature ranges here in central Florida. While temperature highs and lowsl do not pose problems for this bromeliad, bright sunny light is critical. Although Orthophytums seem to go almost dormant during the winter months, Carol Johnson [Carol ran a nursery in Florida for many years – Ed.] wrote that she often saw her Orthophytums "rejuvenate" during a wet November. It makes sense, considering their native habitat: high light, rough and dry growing conditions but with access to water at the roots.

So grow them in bright sunny light. Plant your Orthophytums in a soil mix that drains well and let it dry out slightly between watering. Orthophytums also grow well in rock gardens along with succulent plants. Remember that even if they do grow well over and between rocks, their roots must have contact with some soil or source of water.

Here are some of the more popular species.

O. gurkenii. This Orthophytum has wide leaves that are banded and appear succulent. Its inflorescence is upright and leaves grow along the inflorescence. Where the inflorescence bends to touch the ground under the weight of the leave along its length, new bromeliads will grow.

O. navioides. This Orthophytum is found growing on perpendicular rocks above streams. Its leaves are narrow and glossy green, up to a foot or longer in length, and turning orange to red at maturity with a rosette inflorescence. [The white flowers are fragrant and smell like ivory soap – Ed.] This Orthophytum propagates by long stoloniferous stem like growth with a new bromeliad at the end.

Orthophytum navioides is one of the most beautiful Orthophytums and difficult to grow. Photo is by Michael Andreas is courtesy of the Florida Council of Bromeliad Societies.

O. saxicola. This bromeliad is found on dry, hot table rock, growing in dense mats. It is a small bromeliad, growing about 5 inches wide in habitat. In cultivation, with more generous growing conditions (ample soil and water), it may grow to 14 inches. Its leaves may be bronze or a dusty bronze as in variety *saxicola* or green as in variety *viridis*.

O. vagans. Padilla described this as a "trailing plant, [whose] elongated stems rambles over and around rocks, forming large mats." The flower bract is formed at the top of the leaves and sits down inside, never rising to any height. The color of the leaves ranges from green to orange and red at maturity.

This is *Orthophytum saxicola*. Photo is by Dutch Vanderoot is courtesy of the Florida Council of Bromeliad Societies.

***O.* Blaze**. This is a cross between *O. vagans* and *O. navioides*, showing the colorful and shiny leaves common to both species, as well as the rosette inflorescence.

***O.* Copper Penny**. This is a cross between *O. saxicola* and *O. vagans*. It also has shiny red leaves and from the saxicola side, a clumping growth habit as opposed to the trailing growth of its other parent.

This is *Orthophytum* Copper Penny. Photo is by Michael Andreas is courtesy of the Florida Council of Bromeliad Societies.

An Orthophytum is a good bromeliad to grow in our area. Their diverse shapes and inflorescences make them an interesting addition to any bromeliad collection. [They do well in our area

but they need to be kept dry and protected in the winter months – Ed.]

Why Do Blue Jays Remove Our Plant Tags?

This article by Lynne Fieber is reprinted from the October 1999 newsletter of the Bromeliad Society of South Florida.

I have chatted about the problem of blue jays (*Cyanocitta cristata*) taking our plant tags with avian behavioral ecology expert Dr. Glen Woolfenden, Distinguished Research Professor at The Archbold Biological Station, Lake Placid, which is in central Florida. The Archbold Biological Station is an independent non-profit research facility, devoted to long-term ecological research and conservation. At the Station, Dr. Woolfenden studies the population structure and social structure of the scrub jay (*Aphelocoma coerulescens*), a Florida endemic, especially regarding its cooperative breeding behavior, habitat requirements, and foraging ecology.

I put the following question to Dr. Woolfenden. Why do jays remove white plastic tags sticking out of plant pots and scatter them around?

Dr. Woolfenden replies, "I don't mind guessing regarding your blue jay observations. As corvids (jays, crows, magpies), blue jays are among the most curious, investigative and adaptive of all birds. For example, blue jays very often weave tissue paper or six-pack rings into the outer basket of their nests. No function has been proposed. And of course, as typifies corvids, blue jays caches many items, and especially nuts. My guess is in searching for food among the potted plants they are attracted to the tags which when they 'handle' (really mumble) them are of no use so they discard them. Perhaps a habit has been formed."

It is interesting to think that by continuing to plant conspicuous tags in places the jays have learned to forage, we are "training" the jays to notice, remove and handle the tags, instead of ignoring them. If only we could train the birds in removing plant offsets when they are mature enough and other horticultural tasks! But seriously, this suggests that if the plant tags were less conspicuous, the jays might be inclined to ignore them. So consider pushing the tags below the soil line or using a darker-colored tag to begin with, and please report the results of your experiments to our editor!

What Does F_1 Mean in Hybrids?

This article by Stan Oleson is reprinted from the February 1987 newsletter of the South Bay Bromeliad Associates..

Seed-grown plants designated as F_1 hybrids can be reliably expected to have a certain set of uniform qualities. Such as in a petunia it may be doublings, ruffles, or color in the flower. It may be a plant of a certain growth habit. In a bromeliad it may be size, quality, shape, spines or lack of on the leaf edges, color, or size of flowers.

To create F_1 hybrids, plant breeders (even animal breeders) will cross two or more different pure strains especially chosen to transmit the desired qualities. On the other hand, most of the amateur hybridizers cross only when two or more plants are in bloom at the same time and hope that maybe – something good will come out of them. (sort of Russian roulette).

The serious hybridizer should study his plants looking for the special characteristic he wishes to bring out in the prodigy of the cross. It may be the brightness of the red on the bracts, longer petals, brightness of color of the petals, or whatever results he is looking for.

If the plants for the cross do not bloom at the same time, remove the pollen bearing anthers, place in a sealed container (I use No. 000 gelatin capsules) place name of plant, date, and number on the container and place in the freezer. Always keep a record book with a cross reference to your sealed container. When the next-selected flower blooms, remove one of the anthers from the frozen pollen and brush it across the stigma of the second plant.

When the seed pod forms and becomes ripe, harvest as quickly as possible. Clean and plant while still wet ON (not IN) the selected medium of your choice. (I use sterilized sphagnum moss). Keep covered to retain moisture and place in a bright area – not in direct sun.

The seed should germinate in a few days. When most of the seed has germinated start opening the cover – just a crack at first, then more each day until the cover can be left off completely and the seedlings have hardened. DO NOT OVERWATER. DO NOT LET DRY OUT – the tender shoots will soon die.

After the seedlings have grown to an inch or more transfer to a communal pot (always bury a plant tag with name and date in the pot. The tags above ground tend to get lost or fade – the buried ones will not). This is the time to start weeding out the undersized, weak, and deformed plants. It will be hard to discard any of your babies but you must as there is never enough room for all. Keep the best ones. Many will never show the desired qualities you are looking for.

The F stands for 'FILIAL' meaning son or daughter and the '1' indicates the first generation, F_2 is the second generation.

Tillandsia streptophylla

This article by Kathy Dorr is reprinted from the February 2005 newsletter of the Bromeliad Society of Greater Chicago.

Streptophylla is from the Greek, streptos, which means "twisted," and phyllon, which means "leaf." That pretty much describes it, as it is a mass of twisted leaves.

T. streptophylla grows epiphytically and its range extends from southern Mexico to Honduras. This is one of the few species to have evolved a nickname: the "Shirley Temple" plant. The leaves often twist and recurved in a manner that is Nature's imitation of the coiffeured child of days gone by.

Interestingly, the grower can control the amount of curl in the leaves by the amount of water and humidity the plant receives. In a wetter, more humid environment the leaves grow straighter. With more xeric conditions,

This is *Tillandsia streptophylla*. Photo by Derek Butcher and is courtesy of the BSI website

the leaves tighten into curled ringlets. Enthusiasts can be found who favor either style – it is purely a matter of personal preference as to how one wishes to grow this species.

T. streptophylla is a mymecophytic species, meaning it lives in association with ants which is beneficial to both parties. While this tillandsia supplies a home for the ants, they in turn supply it with nutrients. Whenever my *T. streptophylla* is outdoors, no matter where I place it, an ant colony finds it. I even suspended it by a string thinking they would not be able to get to it, only to watch ants climb on the roof of my lath house and release themselves to drop down on the plant. Oh well, what's the harm of a few ants crawling around your plant room in winter? A bit of wild life!

When T. streptophylla blooms, it is a sight to behold. The compound inflorescence is large and colorful. The scape and primary bracts are normally carmine when given bright light. The tall scape has a number of sub erect to spreading linear spikes that are flattened. The floral bracts are densely covered with small scurfy scales and are citron green. The mauve bloom adds color for weeks. Oh, who cares about a few ants! With a bloom like this, I'll take ants any day!

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

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BROMELIAD SOCIETY
OF
SAN FRANCISCO

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