S.F.V.B.S.

SAN FERNANDO VALLEY BROMELIAD SOCIETY

JULY 2013 NEWSLETTER

OFFICERS

Pres: Mike Wisnev V.P. & News: Mary K. Carroll Secretary: Kathleen Misko Treasurer: Mary Chan Membership: Nancy P.-Hapke Health & Wellness: Georgia Roiz Web Page: Kim Thorpe Directors: Steve Ball, Bryan Chan, Richard Kaz - fp, Dave Bassani-fp

Saturday July 6, 2013 @ 10:00 am

Sepulveda Garden Center 16633 Magnolia Blvd. Encino, California 91316

AGENDA 9:30 -SET UP & SOCIALIZE

10:00 - *Door Prize* – for members who arrive before 10:00 / Please Sign In

10:05 -Welcome Visitors and New Members. Make announcements and Introduce Speaker

10:15 - Speaker: Nels Christianson "2012 Travels In Argentina"

The travelogue will feature a variety of plants, mostly Bromeliads, landscapes and towns people.

Nels loves photography and really knows his subject matter. He



Nels Christianson 6-11-11

loves plants and has a collection of more than 500 Bromeliads, cacti and succulents staged and growing in his own pottery. Traveling to Latin America more than 20 times he has become fluent in Spanish and Portuguese as well as English and a little French.

continued next column...

Nels continued

At home in the USA he studied Political Sci., Hispanic Civilization, and Latin American Studies but studied Brazilian literature at a university in Brazil. In his spare time he also judges poetry and several of his poems about nature have been published. <>

11:00 - Refreshment Break:

Will the following members please provide refreshments this month. Steve Nelson, Shawn Newmann, Stacey Phelps, Chris Rogers, Geogia **Roiz, Steve Rudolph** and anyone else who has a snack they would like to share

Questions about refreshments? Call Mary K. 818-705-4728, leave a message, she will call back.

Feed The Kitty

If you don't contribute to the refreshment table, please make a small donation to the (feed the kitty jar) on the table; this helps fund the coffee breaks.

11:15 – Business

11:30 - Show and Tell – Each member Please **bring one plant**. You may not have a pristine plant but you certainly have one that needs a name or is sick and you have a question.

11:45 – Mini Auction: members contribute

12:00 - Raffle: We need each member to donate 12:30 – Pick Up around your area /

Meeting is over—Drive safely <>



President's Message

Well, it will be tough to top June for the Club. We started off with a wonderful afternoon at Bryan and Mary Chan's home with a great pot luck Bar-B-Q. There was lots of good food, and better company. But best for me was seeing their great and unique collection of Bromeliads. Bryan put together a really cool structure to hang his Bromeliads, and they are just beautiful. For those that missed it, you really need to make sure you make the next opportunity, as you aren't likely to see a nicer collection!

A couple weeks ago, we participated in the LA Cactus and Succulent Plant Festival. We had a good sale for the Club, and the Bromeliad displays were lovely. Richard Kaz deserves a round of applause for taking the time and effort to put together the great outdoor display of Terrestrial Bromeliads; plants contributed by Steve Ball, Bryan Chan, Chris Rogers and Richard. The display contained some great Dyckias and Hechtias. Inside both Bryan and Steve also brought stunning plants. And of course Mary brought many unusual plants and created a wonderful Tillandsia display around Kim's waterfall. Thanks to all the members who contributed plants for the club's exhibit; I think we had about a dozen folks bring in Bromeliads to exhibit.

I also wanted to thank Larry and Natalia of Live Art Plants for their participation. They sold plants, along with Bryan and Richard, and the club shares in the sales proceeds.

I am writing this on what might be our first day to top 100 in the Valley. So remember to keep your plants hydrated (and yourself!). Tillandsias can especially suffer in the heat - I think Mary reported she watered hers twice daily in summer. She said she uses the water hose to give them a quick spray, just enough moisture to create a heavy dew-like effect. However some Tillandsias like crocata, duratii and tectorum should be moved away from the others because they actually prefer hotter drier conditions. Make sure your cup type bromeliads have water in them to help them look their best.

Hope to see you all next week at our July meeting. <>

Mike Wisnev

TAKING A LOOK BACK at our last Meeting

The last couple of months have been unusual for us. In May we were invited to meet at Sylmar High School with Steve List and his horticulture students. Roger Cohen showed his short video of last year's Plant Festival and we had refreshments. I thought it was a nice event; the students enjoyed showing us the fruits of their labors. I was impressed with the size of the growing area and the variety of plants being grown. We have been invited back again next year.

We owe Kim and Artie a special thanks for making it possible for us to participate in the June Drought Tolerant Plant Festival. Thanks to Mary Chan, Dave Bassani, Teresa Campbell and Nancy Hapke for helping with the Kids day. Bob Friedman spent hours telling visitors about our Bromeliad plants on display. Georgia Roiz, Jeanette Bond and Leni Koska talked to visitors about our club activities. Barry Landau played a short video about Bromeliads and photographed the event. We had a very nice display of Bromeliads inside with more member participation than usual. I'll apologize now if I omit someone; next time I will try to have a sign in sheet. Exhibitors inside were Bryan, Kim, Nancy, Leni, Steve, Mary K., Chris, Richard, David, Mohamed El-Tawansy, Bob Friedman, Natalia, Kaz Benadom and Mike Wisnev. I don't want to forget Ana, she brought some of her homemade bread for the dinner. Our membership has improved in the last few years and gradually we are getting more participation which is greatly appreciated; every little bit helps. While Mike is learning about Bromeliads he is also taking the time to teach us by writing his great Taxonomic Tidbit.

Thank You, Thank You, Thank you <>

Taxonomic Tidbit By: Mike Wisnev

Can you tell a Tillandsia from a Vriesea?



Well, that seems like an easy one! Here is a picture of Vriesea fenestralis with Tillandsia vernicosa. It probably isn't too hard to tell which is which!

Vriesea are tube shaped, with soft often marked leaves, and great inflorescences. Most that you see are hybrids, though there are some lovely species around, like V gigantea and fosteriana. Tillandsias are usually grey or whitish, with hard leaves, and much smaller than Vriesea. Some have inflorescences like Vriesea, but others are quite different.

Well, that may be true as a generalization (and then again, that might not even be correct), but there are many exceptions. Lots of Tillandsias are tube shaped, soft

leaved, and have stunning inflorescences. They look like Vriesea, though often the foliage is not as pretty. Perhaps that is due to the fact we see so many Vriesea hybrids, and there aren't so many Tillandsia hybrids, at least the soft leaved variety.

In fact, when you look at the Bromeliad literature, there isn't much to separate the two genera – seed, fruit, foliage etc all are the same, or overlap considerably.

So, now that you know all this, here is a picture of another Tillandsia and Vriesea, rather similar to the two above.

This is T. krukoffiana with V. espinosae on top of it. That's right, the Vriesea is the one on top with hard white grey leaves that looks just like a Tillandsia! And the Tillandsia looks like a Vriesea!

So – what exactly is the difference? According to Werner Rauh, in The Bromeliad Lexicon (page 47): "*Petala ligulata* and *petala eligulata* are the features which distinguish the genera Vriesea and Tillandsia; the petals of Vriesea are ligulate..., those of Tillandsia, are eligulate."

So now you know the difference!

Okay, I agree, that last sentence was close to indecipherable, at least without a botanical dictionary. What this means is that the flower petals on Vriesea have a small tongue shaped scale, or ligule, at the bottom, and Tillandsias don't.



(Over for page 4)

Page 4Taxonomic Tidbit By: Mike Wisnev continued.....

I have only one Vriesea in flower now (a John Arden hybrid), and luckily there is one flower left – it has been blooming over a month. So, at great personal danger, I pulled it off and pulled it apart and took this picture of a petal.



At the far right you see the "ligule" sticking upright. There are actually two of them – the other is harder to see laying flat against the petal above and underneath the other one. I pulled the first one upright so you could see it better.

So, that really is the only difference, at least as far as I know. I suspect the failure to combine

the two genera is due the uproar it would cause in the Bromeliad world. Interestingly, Rauh notes that many Tillandsias have been reclassified as Vriesea since the old dried specimen did not show a ligule. When recollected and examined, some of these Tillandsias did in fact have ligulate petals, making them Vriesea. So, next time you say, O, that is a Tillandsia, it just might be a Vriesea!

Novice Corner By: Mary K. Carroll

It's time again to warn about **Mosquitoes.** When temperatures remain at 70 degrees or above, mosquito development in pools of standing water soars. They are vectors of important human and pet diseases. Remove all trash, jars, cans, bottles, tires and all other items that can collect water and provide a breeding site. Keep rain gutters free of trash and standing water. Keeping grass and weeds mowed. Do not allow water to stand in potted plant saucers, pet bowls, wading pools or other containers <u>for more than three days</u>. (see pages 5-7 for more information) **Flush Bromeliads frequently by pointing the nozzle of your hose directly into the tubes.** <>

Announcement

At the next meeting, one of our board members will be asking you for your birthday; we have a lot to celebrate in July.

- Happy Birthday to: Duke Benadom July 1, Mike Wisnev July 3, Barry Landau July 10, Georgia Roiz – July 11, Gloria Friedman – July 13, Wesley Bartera – July 23, Ana Wisnev – July 30,
- Please sign in on arrival / Table with Red Tablecloth
- *Rewards System* This is a reminder that you will be rewarded for participation. Bring a Show-N- Tell plant, raffle plants or Refreshments and you will be rewarded with one Raffle tickets for **each section** you participate in. We realize not everyone has pristine show plants but each of us certainly has an unidentified plant that can be brought in. Bromeliads are more easily identified when in bloom. Each member, please bring one plant.
- *Late Dues* 8 members have not paid this year....Please pay dues to Nancy P.-Hapke or Mary Chan, at the meeting. Or make checks payable to SFVBS.
- Newsletters by Snail mail are Black & White. Newsletters by e-mail are color.

This is your newsletter! Do you have something to announce or something humorous or educational to add??

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What can you do to help our club?

There are many ways to participate. First and foremost we need **members to plan to attend all meetings**. Our group is small and we need your participation. From time to time emergencies come up and some family events that can't be rescheduled; that's life. What we ask is for members <u>to try not to plan anything</u> <u>else on our meeting day.</u> Please refer to our calendar below before you schedule.

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UPCOMING EVENTS Please Put These Dates on Your Calendar

Saturday, July 6, 2013	SFVBS Regular meeting - Nels Christianson
Saturday, August 3, 2013	SFVBS Regular meeting - STBA
Sat & Sun August 3 & 4	South Bay Bromeliad Show & Sale (Torrance)
Saturday, Sept 7, 2013	SFVBS Regular meeting - STBA
Saturday, Oct 5, 2013	SFVBS Regular meeting - STBA
Saturday, Nov 2, 2013	SFVBS Regular meeting - STBA
Saturday, Dec 7, 2013	Holiday Brunch – Sepulveda Garden Center

<u>STBA</u> = Speaker To Be Announced

Thursday	Los Angeles Cactus & Succulent Society	Free admission and parking
2	6:30 pm – 9:30 pm - Sepulveda Garden Center	Speaker: Ernesto Sandoval,
July 4	Director of UC Davis Botanical Conservatory, "Plant	Hormones and Why They Look The Way They Do"

<<>>> Happy 4th of July, Celebrate Responsibly <><>>

Bromeliads and Mosquitos

Bromeliads have few pests that damage the plant, the most harmful being mealybugs and aphids. However, there is one human pest that can thrive in a bromeliad. While mosquitos do no damage to the bromeliad plant, they can be a nuisance to both the bromeliad grower and their neighbors. There are a few ways to control mosquitos and reduce the number of itchy red welts on your body.

In order to understand how to control mosquitos in bromeliads, you must know a little about how bromeliads work and the life cycles of mosquitos.



Bromeliads Overview and Mosquito Care Mosquito on Vellow Flower

Mosquito on Yellow Flower

Most bromeliads have a feature unique to the family, they do not take up water or nutrients through their roots. Instead, the leaves come together to form a rosette shape. Depending on the species, this rosette shape creates a tank that collects water and other debris from the air. This rosette can be at each axil, where the leaves meet, or one main tank at the center of the plant. Rainwater falls in to these natural cups and sits. The bromeliad then takes it in as needed through a special structures called trichomes. **(Over for page 6)**

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Bromeliads and Mosquitos continued.....

The trichomes give the bromeliad the ability to absorb the water through its leaves. Debris, from the trees in upper parts of the canopy, dust and even insects also fall into these bromeliad tanks. These items break down as they decompose in the water found in the tanks and this is how the plant absorbs the nutrients needed to grow. In most cases, bromeliad roots act only as anchors, holding them in trees, on rocks or in the dirt. Some bromeliads do not form tanks such as the ever-present Spanish Moss and others in the Tillandsia genera.

Bromeliads thrive outdoors usually in lightly shaded and humid areas. They cannot tolerate frost and are therefore found outside in more tropical climates. Many growers in southern states such as Florida enjoy growing bromeliads as part of their landscape. Bromeliads found in these location function very similarly to bromeliads found in the wild, collecting rainwater and thriving under canopies of light shade.

Unfortunately, mosquitos thrive in the same types of environments as bromeliads. They enjoy warm, humid, lightly shaded areas and require sitting water to lay and hatch eggs. Bromeliad tanks provide the perfect environment for mosquito propagation.

The Life Cycle of the Mosquito - We are used to seeing mosquitos buzzing around our ears and biting our ankles. However, mosquitos do not start out as flying insects. Mosquito eggs are either laid in water, or in moist places, waiting for water to flood the area. Mosquito eggs must have standing water to hatch. The larvae are also aquatic and feed off of nutrients and debris found in the standing water. The next stage is the pupa, during which the mosquito does not feed. The mosquito finally emerges as a flying adult once the pupa stage is complete. Depending on the species of mosquito and the temperature of water the whole process, egg to flying adult can take anywhere from four days to a month.

Temperature Preferences - Mosquitos cannot function in the winter. Depending on the species, they either die before a frost, or hibernate when the temperature becomes too cold. They function best at around 80 degrees and cannot function at all when the temperature drops below 50 degrees. This makes the same tropical environments that are ideal for the outdoor growth of bromeliads, similarly ideal for year round mosquito production.

The Reason Behind the Itch - As adults, only the female mosquitos bite. The female mosquitos extract blood from warm blooded creatures. This blood provides the needed protein for egg production. Male mosquitos do not need blood to reproduce, and therefore do not bite. So, for each population of mosquitos that is hatched, roughly half will bite people and animals. The bite becomes itchy, red and swollen because of the saliva from the mosquito that is injected into the skin at the time of the bite.

More Serious than the Itch - In some cases mosquitos cause damage beyond the pain and irritation of a bite. Mosquitos can transfer diseases that are caused by protozoa, nematodes and viruses to people and animals. Only certain species carry certain diseases, this is why some mosquito born diseases are problems only in specific areas. For example, malaria has been eradicated in the United States, but is a prevalent problem in Africa and South America. Other mosquito borne diseases included, **dengue**, **yellow fever**, **west nile virus**, **various forms of encephalitis and, in animals, heart worms**.

Two Specialists - There are 3000 species of mosquitos in existence and currently only two are known to specialize in reproduction in bromeliad tanks. The *Wyeomyia vanduzeei* and *Wyeomyia mitchellii*, are keenly adapted to life in bromeliads. Fortunately, these two species are currently not known to transmit diseases. They are simply a nuisance. Unfortunately, the Culex and Aedes genera, which can transmit disease, do have some species that will occasionally grow in bromeliad tanks. It is a very small percentage of the overall mosquito population, but precautions can prevent them from reproducing in landscapes that include bromeliads.

Page 7 Bromeliads and Mosquitos continued.....

Methods for Control - (Blossoming Bromeliad Plant) With the understanding of how both mosquitos reproduce, and how bromeliads gather nutrients and grow, you can begin to develop a method for controlling mosquitos. The University of Florida Entomology Department does not recommend the use of chemical insecticides. The *Wyeomyia* are most active during the daytime and are not susceptible to night time fogging. Fogging is the typical community wide mosquito management method. Chemicals can be applied directly to the bromeliad plant. However, the chemical insecticides will kill all populations of insects found in the bromeliad tanks. The chemicals will lose their potency and the larvae will feed on the nutrients in the tank without any competition. This will result in adults that are capable of laying more eggs and any damage done to the mosquito population will be easily replaced in a short period. The only way for chemicals to work is to use constantly repeated application, which eventually will not be cost effective.

Bacillus is a bacteria that can be introduced that may significantly reduce *Wyeomyia* populations for a period of time. Unfortunately, the Bacillus does not negatively affect other genera of mosquitos such as the Culex.

Washing the bromeliads with a garden hose very regularly can also reduce mosquito populations. The pressure will force the eggs out onto the ground, where they cannot survive. It will also remove the debris, which contributes the nutrients necessary for the larvae to grow into a mature adult. If you use this method, you must replace the lost nutrients with fertilizers specialized for bromeliads.

With diligence and care, you can avoid aiding the rapid production of mosquitos in your back yard. If you have only a small collection of bromeliads, they are not likely to contribute significant mosquito populations to the neighborhood. But, if you are a bromeliad enthusiast and your landscape is made up of many tank forming bromeliads, you may want to consider whether or not mosquitos are a pest problem for you and your neighbors. If they are, find a management approach that will reduce the population of the mosquitos to a manageable level. If possible, avoid using chemicals so that the ecosystem in your yard will stay healthier in the long run.

Sources

Frank, J.H. Bromeliad-inhabiting mosquitoes in Florida. http://BromeliadBiota.ifas.ufl.edu/mosbrom.htm

FAQ's on Moquitos. Rutgers Center for Vector Biology. http://www-rci.rutgers.edu/~insects/mosfaq.htm

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http://www.pinellascounty.org/PublicWorks/mosquito/pdf/bromeliads-and-mosquito-control.pdf