

The Florida East Coast Bromeliad Society

Next meeting Sunday, October 9th, 1:30p.m.
Colony in the Wood – club house
4000 S. Clyde Morris Blvd., Port Orange 32129

October, 2011

Autumn Has Arrived!

President – Bradley Rauch – 386/767-8937
Vice President – Rick Ryals – 386/679-8700
Secretary – Eretta Morris – 386/677-9557
Treasurer – Eve Krauth – 386/763-2084

and before you realize it...

...we'll begin getting warnings of cold weather. Put away your hurricane preparedness plans and dust off your freeze protection plans – you may need them sooner than you expect!

Last month's meeting

...we discussed Tillandsias and a lot of very interesting Tillandsias were brought in for Show and Tell. Before we leave this topic, I thought that it would be worthwhile to share the following article with you from the October issue of Bromeliana, the newsletter of the New York Bromeliad Society. As you might imagine, growing bromeliads in New York poses some unique challenges and Herb Plever, the society's newsletter editor has over 4 decades of experience in growing bromeliads indoors. This month's article by Herb addresses some of his observations concerning the successful growing of Tillandsias that I think we all can benefit from:

TILLY TALK

by Herb Plever

When a few of us started to grow tillandsias about 45 years ago, we didn't have a clue about how to grow them. We had seen them growing

epiphytically in greenhouses mounted on cork bark, but how would we provide them with moisture and water in our drier apartments? Very few tillandsia species were then available in nurseries, but we bought a lot of them. We started to experiment, killed lots of plants and learned how to grow them. First, we secured them to the cork with ordinary glue, or tied them on with coated telephone wire. We sprayed them but found that most of the water evaporated before it could be absorbed by the leaves. Then we hit upon the idea of soaking the plants. This worked fine except that the plants came loose because the glue dissolved in the water, or the wire stretched and loosened so that it needed constant tightening. Then we found that "Shoe-Goo" cement was waterproof, so we used it to mount the plants and tied them with telephone wire for additional security until the plants rooted. Once we found we could grow tillandsias we started to order rarer species from Jujuy in Argentina, from Quito, Ecuador and from Sud Pflanzen Import, a company in Frankfurt, Germany. We experimented with soaking time and frequency and with fertilizer. In a few years, big tillandsia nurseries opened and we could more easily buy plants from Birdrock Tropicals, Rainforest Flora and Tropiflora. And that is how I became an obsessive tillandsia freak. I have never seen one that I

didn't love. From our imports and the big tillandsia nurseries, I acquired a large collection of popular species, and also hard to find species such as *Tillandsia brachyphylla*, *T. graziellii*, *T. heubergergi*, *T. humilis*, *T. kautzkyi*, *T. macbrideana*, *T. macdougallii*, *T. matudae*, *T. mauryana*, *T. oaxacana*, *T. pedicellata*, *T. peiranoi*, *T. reclinata* (it had to be grown upside down to keep it alive), *T. roseiflora* and *T. sprengliana*. Regrettably, these beautiful species are not available from any of the nurseries - and when, rarely, one is listed, the price is off the wall. *T. atroviridipetala* used to be easy to buy, but it, too, is no longer available. Here is a brief account of the cultural regimen my tillandsias presently receive. My current collection covers two bedroom windows, 8 stories up, unobstructed and facing east-south-east. They get lots of morning sun and strong horizon light, and they constitute only about one third of what I used to grow. I soak them every 7 to 14 days - mostly every 8 to 10 days, depending on my time and schedules. Half the collection on one window fully fills my bathtub and gets soaked for about an hour or more, then I shake out the logs to remove the water in the leaf axils and hang them up on the inside racks of the shower door, a drop-down clothes dryer over the bathtub and in the bathroom sink. Then the second half of the collection gets soaked and dried the same way. (My original collection required six full bathtub soakings and 7 to 8 hours of time - a gross imposition on a married couple's many other activities and life style. Ergo, the sharp reduction in the size of the collection in recent years.) I start with a little hot water only, into which I drop 5 tablespoons of fertilizer, or 4 tbsp. in the late fall to early spring (none during occasional dark winter freezes). I also dissolve 1 rounded tsp. of epsom salts (magnesium sulphate) in a cup and add it to the water. Then I fill the tub with cold water to get the overall temperature to tepid or luke-cool. My bathtub holds 28 gallons of water up to the overflow valve, so the strength of the fertilizer is a little more than ½ teaspoon per gallon -

about the same strength I use for my potted plants. I have used different fertilizer formulas in the past such as 20-10-20, 20-10-30 and, currently, 12-9-24. I think my tillandsias grew faster with an equal ratio of nitrogen to potassium, but they seem to be crisper and stronger with the latter formula in which the potassium is double the amount of nitrogen. Some experts believe that tillandsias can't be grown indoors unless soaked for 24 hours, but our tillandsias are very adaptable. Over many years, my tillandsias have grown well with a soaking of about an hour every 7 to 14 days, but I have found they will survive without damage without water for 23 days. When we take a long trip I drop down the Venetian blinds and tilt the slats so that light but no sun hits the plants. I think they will root better on the cork bark they are mounted on with some extra minutes of soaking which is what they usually receive. While they are soaking I'm always involved in doing something else and frequently forget about them so they may soak an extra 15 to 30 minutes until I suddenly remember them - or Sylvia reminds me. The cold air during our northern winter holds little moisture, and the relative humidity will be even lower in apartments if you use a lot of heat to keep warm. We never run the blower motors of our heating convectors, and I run four cold water humidifiers that I have to fill every morning during the cold weather. I manage to keep the relative humidity to between 50-55% and 40-45% when temperatures outside are below freezing. To mount a tillandsia onto a cork log, I find or make a hole into which the base can rest, and I also open the hole all the way through the cork with a screw driver so that water will run through and not collect in the hole when the log is soaked. Then I apply waterproof E6000 glue around the upper part of the hole. When it becomes tacky after a few minutes I push the plant into the hole, but avoid getting glue on its base from which I expect roots to emerge. I keep the log horizontal until the next day when the glue has fully set and can hold the plant even when the log is hung upright. However, when I

acquire a relatively large, stemless plant such as the 6" tall *Tillandsia seleriana* pictured above, I find I have to secure it to the cork with plastic coated wire in addition to glueing it around the base. It is too heavy just to be held by the glue when it is hung, especially when I shake out the excess water after soaking. After many months, enough roots will form and attach themselves into and all the way through the cork to hold the plant firmly; then the plastic wire can be removed. I used to say that most tillandsias are stingy puppers, and that no doubt is generally true about indoor grown plants which don't have the benefit of fresh, moving air and high relative humidity. Early on, I did not use high strength fertilizer, and was using such no-nos as Miracle Grow (15-30-15). With high strength, fertilizer, my tillandsias have become prolific puppers.

For instance, *Tillandsia kegeliana* is considered to be a finicky grower and infrequent bloomer, and when it flowered I used to be happy with one healthy pup. Now, however, I get lots of pups on *T. kegeliana*. After my robust *Tillandsia ionantha* var. *vanhyningii* bloomed it exploded with pups popping out from every axil. So far I count 11 pups, but I think several more are about to emerge from the very upper axils. Over many months *Tillandsia* 'Dick Rutan', an Isley hybrid of *T. ionantha* x *T. aeranthos*, has also very slowly put up 8 pups. *Tillandsias* adapt very well to indoor epiphytic culture. *T. cyanea*, which is usually grown in pots because it does not have a good coating of trichomes, can also be grown mounted on cork bark.

Thanks Herb, for a very interesting article!
JCT

This month's meeting - This month we are staying within the *Tillandsioideae* sub-family and will be looking at the Genus *Vriesea* - probably my favorite group of plants. "Why?" you may ask and the answer is simple: *Vrieseas* include a wide variety of species that produce blooms every bit as beautiful as any of the other Genera, many of which also have

decoratively colored and/or patterned leaves, and, as a bonus, they're thornless! What's not to like about these plants?

The name "*Vriesea*" was coined in 1824 in honor of a Dutch professor of botany - a **Willem Hendik de Vriese**. *Vrieseas* have been in hobbyists' collections for quite a long time starting with the introduction of *V. psittacina* in 1827 followed closely by *V. splendens* in 1840. In fact, by the late 1800's virtually all of the 250 species plants noted in the Padilla books of the '70s were already known to horticulturists - chiefly in Europe.

Vrieseas are found in the wild most often in eastern Brazil. However, they can be found growing in habitat ranging from sea level to over 10,000ft of elevation and from Mexico, Central America and the West Indies to Peru, Bolivia, Paraguay and Northern Argentina - which makes this about the widest range of any of the Genera except *Tillandsias*, which have extended their range as far north as Virginia.. Surprisingly, there are no Florida native *Vrieseas* - a fact that seems curious since we have over a dozen varieties of *Tillandsia* plus some *Catopsis* and a *Guzmania* - all members of the same sub-family *Tillandsioideae*...and all generally acknowledged as having moved into Florida thousands of years ago from Central or even South America. What happened to the *Vrieseas*?

Vriesea inflorescences (blooms) tend to be "**distichous**" meaning that they can be divided into two rows or mirror image halves. The inflorescences of *Vrieseas* are often very long-lasting and may keep their color for many months in some species - from the "flaming sword" shape of *Vriesea splendens* to the inflated "goldfish" of *Vriesea heterostachys*. People are often amazed when you tell them that an inflorescence may last for months - of course they don't understand that these colors are generally in the floral bracts and not the flowers. The actual flowers are usually yellow or white, tubular in form and are tucked between the colorful bracts

that most people mistakenly believe to be flowers.

Vrieseas come in all sizes from small to huge (although a couple of the 'huge' plants have been reclassified into the genus *Alcantarea*). Leaf color range from gray to green to exotically patterned and colored . . . but most texts divide this group into the soft-leaved Vrieseas and those that have thin, gray recurved leaves that are heavily coated in silvery scales like *Tillandsias*. In fact, all Vrieseas are very closely related to the *Tillandsias* - in some cases differing by only slight botanical details. A good example of this is *V. espinosae*. It looks like a *Tillandsia*, you take care of it like a *Tillandsia*, and it even blooms like a *Tillandsia*, but it has the slight botanical difference of possessing **petal scales** – and that is the primary feature differentiating these two groups! I tend to divide Vrieseas into 2 groups: the very attractive foliage plants with unattractive blooms and the unassuming green-leaved Vrieseas with beautiful blooms. Only rarely does a plant have both! The **foliage plants** like *V. fenestralis* or *V. gigantea* 'Green Nova' may have an attractive pattern of lines known as "tesselations" but the blooms in these plants are often disappointing - frequently appearing as a thick tall spike w/large bell-shaped flowers that open at night - sometimes releasing a sulfury odor. Clearly, the foliage is the desirable feature of these plants.

In contrast, the **green leaved Vrieseas** are often difficult if not impossible to identify before the plant begins its bloom. The rosette of green leaves may be anywhere from several inches to several feet across but the inflorescence is often very brightly colored in reds, yellows, oranges, and purples. As you might expect, hybridizers try to combine the nice foliage features with colorful inflorescences. The Europeans started hybridizing programs in the 1800's that produced many beautiful cultivars still enjoyed today. A prime example is *V. 'Mariae'* a cross made from *V. barilletii* x *V. psittacina* var. *brachystachys* by Albert

Truffaut first reported in 1889. This is often called the 'Painted Feather' bromeliad and was named by Edward Andre in remembrance of Albert's wife - Marie. The European infatuation with hybrids suffered a setback during the war years (WWI, WWII) when many greenhouses and associated hybridizing records were lost forever, but it wasn't long before newer and even better hybrids were developed in brighter colors, with branched blooms and in marketable sizes. Today you can find some outstanding hybrids developed by growers in Australia, New Zealand, Hawaii and even right here in Florida.

Upcoming Events:

October 8th

Quarterly meeting of the Florida Council of Bromeliad Societies – 1pm Hosted by the Bromeliad Society of Central Florida

October 8th, 9th

USF Botanical Gardens Fall Plant Sale
University of South Florida, Tampa, FL
(cas.usf.edu/garden)

November 4th, 5th, 2011

Bromeliad Extravaganza "The Art of Bromeliads" hosted by FECBS! The Plaza hotel in Daytona Beach.

December 2nd, 3rd and 4th, 2011

Caloosahatchee Show and Sale

Terry Park, Fort Myers

For information, contact Dr. Larry Giroux at
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