BROMELIANA

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MANAGING AND MAINTAINING MY PLANT COLLECTION by Cynthia Percarpio

I love plants - particularly bromeliads. The challenge is that my time is very limited; I have two little kids, some pets and a full-time job. Balancing everything in life can be tricky. I find, as I assume

many of you share, that plants are a wonderful escape - watching these specimens grow and thrive brings amazement and joy as well as a sense of satisfaction.

There are a few tricks that I have utilized most recently in order to improve the success rate and increase the overall vibrancy of my bromeliads. Included in this article are maintaining a watering schedule, water quality, fertilization, potting, winter storage and record keeping. All of these techniques help me take care of the plants better, feel more organized and improve my overall enjoyment of the collection. I will Passiflora anastasia in vintage McCoy pot go into greater detail how I manage to do this in this article.

Watering Schedule

Especially during our frosty winter months in the New York area. I often find it difficult to remember when the plants were last watered. The house becomes very dry from churning up the heat in the house. It is disheartening to find that a plant has



Neoregelia 'Aurora', N. smithii and

dried out or died due to the lack of a simple watering schedule. So I came up with a working system which helps keep my plants alive during the cooler months.

The plants in my garden window are on

humidity trays which help alleviate the dryness. Most importantly, I keep a colorful post-it note on the trim of the window indicating the date that the plants were last watered. I use the same post-it to write on for many weeks. Surprisingly (or not) I've realized that I have no clue as to when I last watered the plants unless I write it down! So, this list is essential.

I also write down what part of the collection has been watered. For instance, I keep a few tougher varieties in my chilly basement near a sunny window. Specific notes are very helpful. Since the basement is much cooler, the plants are watered

less frequently, or not at all if it gets in the 30's. This year it was so cold in the basement that I had to move them closer to the furnace and utilize artificial lighting. The only place that I failed to keep this watering schedule was my workplace- and the results were not good.

Water Quality and Fertilizer

We have very hard chlorinated water in my

NEXT MEETING - Tuesday, October 6th, 2015 at 7:00 P.M. <u>sharp</u> at the Ripley-Grier Studios 520 8th Ave. (between 36th & 37th St) Room 16M

CRYPTANTHUS - A video of Cypts in habitat, many species and cultivars and a discussion on potting, water, light, fertilizer - plus a demonstration of how to remove and pot up an offset. Please bring in plants for sale and for Show and Tell. town, not the best for bromeliads. I bottle some of the water and leave it in the basement for a minimum of 24 hours in order to eliminate the chlorine issue. This year I watered most of the plants with used water from my aquatic newts. Newts are amphibians that look like small colorful lizards. I change 20% of their water from a 20 gallon tank every week. The newts are very easy to care for, lovely to look at (for me at least) and are fun to watch. The plants really thrived on this naturally fertilized water and many of the bromeliads, passionflowers and succulents in my collection bloomed. I highly recommend this regimen. More info on newts can be found on caudata.org

Containers

During the winter months, small narrow containers work best for windowsills. I noticed that this is how Herb Plever maintains much of his collection. I often place several varieties in a decorative pot along with a passionflower vine in order to save precious space. I manage to fit most of the plants in my large garden window which protects them from my kids and the cat! Tougher plants go in the sunny basement such as larger aechmeas and a few go to my workplace.

During the summer the plants are put outside into decorative containers. The plants are put under my deck for a week prior to being repotted so that they do not get a sunburn. I make beautiful arrangements each year and it is fun to see the broms color up to their full glory. I mix my bromeliads, with annuals and passion flowers and other houseplants. This brings me great joy. I have a collection of unique plants and equally decorative pots and finding the perfect arrangement is so much fun. Using my own plants is also economical since I do not need to purchase many annuals to fill the pots.

Record Keeping

Having the names and dates on each cultivar is important in order to develop an understanding of which plants are the best for my growing conditions. Luckily I kept all the old plant order forms so it was easier to replace the tags that had gotten lost by comparing pictures for species that I found on the Florida Bromeliad Society data base with the plants that I had purchased - for cultivars I use the Bromeliad Cultivar Register (BCR). I ask Herb Plever for any help identifying other mystery bromeliads.

You need to use a pencil on a sturdy plastic tag along with the date of purchase. I got this trick of writing the dates from my friend Betsy who has maintained a very large plant collection for many years. An additional technique is to write down the names, date of acquisition, place of purchase, and the fate of the plant in the back of a book or notebook. I use this technique for my passifloras because they are trickier to replace.

So, if you are busy and forgetful like me, you need the correct regimen to maintain and appreciate your collection. You will obtain greater enjoyment, better success, and a lower stress level due to better record keeping and organization. Your plants will be happier and so will you!



Post-it Notes

T. cyanea, A. 'Primera' and succulents Ques. 'Tim Plowman' and succulents

TV COMPLEX by Herb Plever

No, this article is not about a psychological problem arising from watching television, nor does it deal with a concentration of TV stations. It concerns problems with identification in *Tillandsia* and *Vriesea*, and the relationship between them. I suppose I should write the name with a dash mark in-between, as T-V Complex..

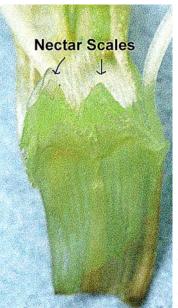
For many years we were confused about the large number of Tillandsia lookalikes that were classified as Vrieseas. We always felt that there was something wrong, because the taxonomy was contradicted by the morphology or physical character of the plants. Heretofore the character used to distinguish Tillandsias and Vrieseas has been the presence (in Vriesea) or absence

(in Tillandsia) of petal appendages we call nectar scales that may be found attached to the inside base of the petals. But in 1989 Dr. Sue Gardner, and in 1992 Brown and Terry, showed that making identifications primarily by using this character is flawed.

Before tackling the T-V problem, it may help the reader if I define where these genera sit in the scheme of the latest taxonomy for the family *Bromeliaceae* (Bromel-ee-ay-see-ee). There are now eight recognized sub-families: *Brochinioideae*, *Bromelioideae*, *Hechtioideae*, *Lindmanioideae*, *Navioideae*, *Pictcairnioideae*, *Puyoideae* and *Tillandsioideae*. There are

8 genera in sub-family T ill a n d s i o i d e a e : Alcantarea, Catopsis, Glomeropitcairnia, Guzmania, Mezobromelia, Racinaea, Tillandsia and Vriesea.

Most of the flower petals of the last three named genera are more or less free and unattached (except at their bases). *Racinaea* was once called



Vriesea petal appendages

sub-genus *Pseudocatopsis*, as a division of *Tillandsia*, but it was subsequently given separate genus status because its species all had strongly asymetric flower sepals in contrast to the other species in the genus.

In August, 1993 Jason R. Grant wrote a critical article in **Phytologia**, in which he proposed moving 26 *Vriesea* species to *Tillandsia*.

This proposal has been widely accepted by the scientific community, including the **New Bromeliad Taxon List** (<u>http://botu07.bio.uu.nl/bcg/taxonList.php</u>) published on line and maintained up-todate almost daily by Derek Butcher and Eric Gouda. This is an important binomial resource. Yet, 20 years later, the bi-annual **Alphabetical List of Bromeliad Binomials** published by Selby Gardens

has still continued as of the 2014 List to treat those Tillandsia look-alikes as Vrieseas. **fcbs.org**, a site often visited by growers to look at species photos, also continues to list these plants as Vrieseas. (Sadly, this site is several years out of date.)

I have written several times before in Bromeliana about this situation and I return to the issue, because it has created confusion among growers who want to have their plants properly labeled. I believe it is worth excerpting here some of Dr. Grant's proposal:

> "The presence or absence petal o f appendages has historically weighted heavily in delineating generic limits in the *Bromeliaceae*. Several genera are circumscribed and distinguished from another on this basis alone. It is in fact the primary character used to distinguish Vriesea from Tillandsia in Smith & Downs (1977)...

"It has been recog-



Tillandsia espinosae

Tillandsia barclayana

Bromeliana



Carthcart/Tropiflora, from fcbs.org

Tillandsia werneriana (Grant) ph by P. Koide. Formerly Vriesea rauhii

nized that the circumscription of genera based on the single character of petal appendages is flawed (Gardner 1989, Brown & Terry 1992)... If the petal appendage character is removed in a taxonomic evaluation of the *Tillandsia*-Vriesea complex, a number of species attributed to Vriesea are morphologically more aligned to Tillandsia

Tillandsia petraea

sub-genus Tillandsia. These twenty-six taxa were placed in Vriesea only due to their possession of petal appendages. They in fact show no affinities to Vriesea...

"With exception to petal appendages, the twenty-six taxa here removed from Vriesea share all the characters for which *Tillandsia sub-genus* Tillandsia was circumscribed in Smith & Downs (1977) and Gardner (1989). These characters especially include stamens and pistil that equal or are exserted from the corolla, petal blades that are narrow, spatulate or ligulate-shaped, and leaves that are often linear-triangular in outline and densely covered with trichomes. Vriesea has leaves that are only broad, ligulate shaped, and with only a few trichomes." Dr. Grant subsequently published several analyses which expanded the list of Vriesea species transferred to *Tillandia* to 44 species (with a few varieties). These species are: Tillandsia andreettae, T. appenii, T. arpocalyx, T. azuayensis, T. barclayana, T. barclayana var. minor, T. boeghii, T. castaneobulbosa, T. cathcartii, T. cereicola, T. chontalensis, T. coina, T. crenulipetala, Т. curvispica, T. didistichoides, T. drewii, *T*.

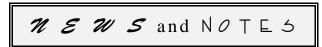


Tillandsia crenulipetala photo by Peter Tristram from BROM-L

engleriana, T. espinosae, T. fragans, T. frank-hasei, T. gruberi, T. harmsiana. *T*. heterandra, T. hitchcockiana, **T**. incurva, T. kentii, **T**. limonensis, T. lutheri, **T**. olmosama. T. olmosana var. pachamamae, T. patula, T. penduliscapa, T. pereziana var. canescens, T. peruviana, T. petraea, T. piepenbringii, T. porphyrocraspeda, T. robusta,

Tillandsia didistichoides

T. strobelii, T. tequendamae, T. tillandsioides, T. walter-tillii, T. werneriana, T. yaconorensis (from V. koideae).



IN MEMORIAM - We regret to report the passing in July of the great hybridizer, John Arden, and Jim Wright, a long-time bromel activist for the San Diego Bromeliad Society. The next issue will catalog many of John Arden's great hybrids.

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