## SEMBS

SOUTHEAST MICHIGAN BROMELIAD SOCIETY AFFILIATE OF BROMELIAD SOCIETY INTERNATIONAL

**JANUARY / FEBRUARY 2017** 



Tillandsia cacticola (=cactus dweller) L.B. Smith, 1954, epiphytic on cactus and acacia trees in north Peru.

## **President's Message- Paul Wingert**

Happy New Year! The Roman god Janus was credited to preside over transitions, of endings and beginnings. He is depicted with two faces—one looking forward and the other looking back. As I write this (4<sup>th</sup> week of January), we are in one of those transitional periods-- approaching the end of our "winter doldrums". We've experienced two months of short days, and very little precious sunshine. Lots of the bromeliads that had intense color during the summer have faded and are currently looking a bit drab. As I frequently tell people, if you really want to enjoy your plants at this time of year, take photos during the summer and then look at the pictures now! It will remind you of better things to come in just a few short months! On the other hand, the short days have initiated bloom spikes on several Aechmeas, Tillandsias, and Vrieseas, offering the promise of a colorful spring! In just a matter of weeks, the sun will be making more regular appearances, plants will begin to regain some color, and it will be time to consider covering the greenhouse with shade cloth!

Looking back on the past year, I would like to offer some personal reflections. I added a number of new bromeliads to my collection. Several were acquired during last spring's (very popular!) society plant order. Then in June, I attended the World Bromeliad Conference in Houston, and returned home with lots of irresistible new specimens! Nearly all are now well established, and enjoy coveted positions in the greenhouse near the glass, or under the artificial lights. Most have maintained pretty decent color, and should really become outstanding specimens this summer. Our annual show and sale at Matthaei Botanical gardens exceeded all expectations! Any previous attendance records were smashed, thanks in large part to a social media campaign on Facebook by our partners in the Michigan Cactus & Succulent Society. We enjoyed two society meetings at Pat and Lynne Echlin's home, celebrating our many friendships, and getting to enjoy Lynne's diverse presentations of both her extensive bromeliad collections and her beautiful gardens. In October, we visited Drew and Mallorie at their new home in Chelsea and witnessed the explosive growth of their tropical collection! At the August meeting, we held officer elections. The new slate of officers is as follows: Paul Wingert- President, Drew Okla- Vice-President and Assistant Newsletter Editor, Lynne Echlin- Treasurer, Pen Goff-Newsletter Editor. We are still looking for a volunteer to serve as Librarian.

Looking forward at some plans for the upcoming year-

Sunday, February 12 we will join with the Michigan Cactus & Succulent Society and have our monthly meeting at Matthaei Botanical Gardens, Room 125. The Cactus society will hold their business meeting at 1 PM. At 2 PM, Paul Wingert will present a program on "The extensive and overlapping habitats of the Cactus and Bromeliad families". Weather permitting, members of both societies are requested to bring appropriate plants (succulent leaved bromeliads and xerophytic Tillandsias) for exhibit.

Saturday, March 25, 2 PM, the program will focus on miniature Neoregelias and other small growing bromeliads. These plants are most popular with our members, as it is possible to have a relatively large collection of diverse plants in a small space! The

meeting will take place at Telly's Greenhouse in Troy. We will also discuss our Spring Plant Order and determine from which commercial nurseries we will order.

Friday, March 31-Sunday, April 2—we will have a booth at the Novi Home & Garden Expo, as we have done for the past few years. Our society has received lots of beneficial publicity due to our participation at this annual event! Details to be discussed at the March meeting. We are provided with a limited number of tickets to attend the show. Anyone who would like to donate a couple of hours to help host our booth will receive a ticket to see the rest of the show. Call Paul if you can't attend the March meeting, but are interested to help out at the Novi Show.

Saturday, April 22, 2 PM, we will have a presentation on rare and unusual species and hybrids of Tillandsias, and follow up with a discussion of strategies for growing them successfully in our climate. The meeting will take place at the home of Paul and Karen Wingert, 27276 Edgemoor, Farmington Hills, MI 48334. You may email your plant requests to Paul at <a href="mailto:pcwingert@gmail.com">pcwingert@gmail.com</a>. The deadline to place your orders by email for the society spring plant order will be April 29.

Saturday, May 20, 2 PM, we will meet again at Paul and Karen Wingert's home. The main focus of the meeting will be to distribute the spring plant order.

Even during our winter doldrums, there are many bromeliads in various stages of bloom!



## The Extensive and Broadly Overlapping Habitats of the Cactus and Bromeliad Families- by Paul Wingert

The Cactus family-- with more than 10,000 species, and Bromeliad family-- with approximately 3,500 species, are two of the largest New World plant families which are almost entirely endemic to the American continents. The cactus family has a more extensive range due to the great number of species which have adapted to winter cold. In the American tropical and subtropical regions, the two plant families share an incredible range of habitats, and are frequently to be found growing side by side (*Fig. 1-3. below*)

Fig. 1-, Dyckia hebdingii and cactus sp., Brazil



Fig.2- Till tenuifolia/ Aporocactus sp. growing on a granite inselberg Pernambuco, Brazil (Photo by Andy Siekkinen)



Fig. 3- Tillandsia hammeri (grassy tufts),

Neobuxbaumia nizandensis (columnar cactus), Mammillaria nizandensis (small white cactus), Hechtia isthmusiana (pinkish-apricot colors). Southern Oaxaca AS292 dry season (trees deciduous and Hechtias have color). (Photo by Andy Siekkinen)

Best known to most cactus and succulent growers are the succulent leaved bromeliads. These include Agave species (undescribed).



the genus Hechtia-- a Mexican and Guatemalan endemic consisting of app. 50 species; the genera Dyckia (164 spp.), Encholirium (28 spp.), Deuterocohnia (18 spp.), and Orthophytum (65 spp., up significantly from the 2 known species in 1939!)-- which range from Brazil and Bolivia, Paraguay, Uruguay, and northern Argentina. Many are quite hardy, and survive in habitats that experience winter temperatures as low as 20 F. and even occasional accumulating snow! Most of them experience seasonal rains, as well as extended dry seasons. There is a great diversity of these plants found in sunny niches throughout a number of ecosystems-- they are found from southern Texas through Mexico and Guatemala in North America, and in the Caatinga, Pampa, Restinga, and more often Campos Rupestres ("rocky fields") and Cerrado vegetation of South America. In southwest-central Brazil (primarily Mato Grosso and Minas Gerais), the rocky outcroppings of the Cerrado biome shelter numerous species of Dyckias and Encholiriums.





Fig. 4- Dyckia delicata is a recently described species. species from southern Brazil. Photo credit-Constantine Gastaldo.

*Fig. 5- MG, Brazil, undescribed Encholirium species. Photo credit-Eddie Esteves* 

Another common plant association is that of Cacti and numerous species of the genus Tillandsia (a recent count shows 627 spp.). Many varieties of Tillandsias can be found growing epiphytically upon cacti. Each family has evolved to take advantage of the limited water resources, and while rain may be in short supply, many of the ecosystems are visited by periodic fog. It is well known that most cacti have abandoned the typical leaves as a means of water conservation. The spines (areoles/modified leaves) have developed not only as a means of protection, but also can act as "condensers" of the fog, directing tiny rivulets of precious moisture to the base of the plant. Tillandsias have taken a significantly different approach. Foliar trichomes have evolved to become very efficient atmospheric "sponges". They also serve to protect the leaf surfaces from intense solar radiation. All cacti, and most Tillandsias, share the strategy of Crassulacean Acid Metabolism (CAM). This is a strategy adapted by many arid dwelling plant species, where the leaf stomata are closed during the day in order to reduce moisture loss from transpiration, and then open during the night-time hours (basically the reverse of what students learn about plants in elementary school biology classes).

Fig.6—T. circinnatoides x concolor (natural hybrid) on Pachycereus weberi. Oaxaca, Mexico (photo courtesy of Andy Siekkinen).





Fig. 7— Look closely at the center of the photo to see the Mammillaria sp. growing epiphytically on a clump of Till. ionantha! (photo courtesy of Andy Siekkinen)



Fig. 8 – Garden planting of Hechtias, Aloe, and Astrophytum – near San Diego, CA (photo courtesy of Andy Siekkinen).



Fig. 9 --Planting of Dyckia 'Cherry Coke' and Echinocactus grusonii at Huntington Botanical Gardens. Dyckia clumps can get huge! (Photo credit- Louis Raymond)

Many more examples will be displayed during the upcoming meeting on Sunday, February 12, at Matthaei Botanical Gardens. There will also be further discussion of the various adaptive strategies of arid dwelling plants.

Weather permitting, kindly bring appropriate plants for display and discussion!

## **2017 DUES ARE NOW DUE**

\$12 for individual memberships,

\$15 for two or more memberships at one address

\$5 for associate membership (75 mi. from Detroit).

Dues can be paid at the meeting or sent to the treasurer.

Make the check out to SEMBS and mail to:

SEMBS, PO Box 80472, Rochester, MI 48308



The 2018 World Bromeliad Conference takes place May 29 - June 3, 2018 in San Diego, California. For details see bsi.org, Conference Corner. Registration \$350.00 if postmarked by Feb. 28, 2017.

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