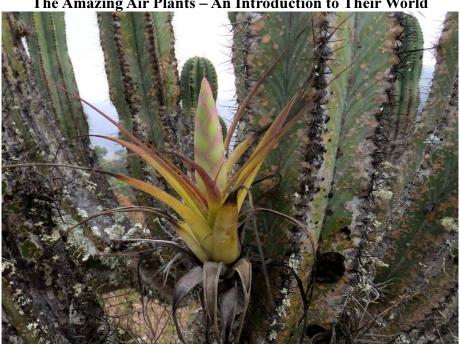


## SOUTHEAST MICHIGAN BROMELIAD SOCIETY AFFILIATE OF BROMELIAD SOCIETY INTERNTIONAL NOVEMBER / DECEMBER 2015



Tillandsia flexuosa, 1788, epiphytic in Florida, West Indies, Panama, Venezuela, Colombia, Guiana, up to 600 m above sea level

## **Next Meeting**



Saturday, November 14, 2 pm at Matthaei Botanical Gardens

The Amazing Air Plants – An Introduction to Their World

Tillandsia achyrostachys on cactus (photo by A. Siekinnen)

A power point survey of this group of plants, the evolutionary extreme development of bromeliads, which derives water and nutrients only through their leaves, using their roots, if they grow any, only to attach to rock, tree bark, power lines. Stunning photos of their habitat provide valuable clues for care.

Members are urged to bring their own favorite specimens for Show and Tell

There will be plants for sale



**Welcome New Members** 

Alan Harnik, Erin Tessens, Kristi Belen, Raymond Grames, Tim Foxworthy, and Tina Meltzer O'Donnell took advantage of our new trial

membership plan. For \$1 they became members for the next year. We hope to turn them into bromeliad fanatics or at any rate to help them discover what a fantastic plant family the bromeliads are.



Billbergia 'Jingle Bells'

## *Christmas Brunch!* A great way to usher in the holiday season

Lynne and Pat Echlin will again host our Christmas potluck at their beautiful home in Rochester Hills on **Saturday**, **December 5 at 1 p.m.** 

Meat and potatoes and a few other side dishes will be provided. We need veggies and desserts to fill in the meal. Please give Lynne a ring at 248-651-9521 or email her at lechlin@sbcglobal.net to let her know how many are coming and what you will contribute.

Guests very welcome!



Growing Concerns: When Bugs Attack! by Paul Wingert (reprinted from SEMBS NovDec2005) Pen challenged me to write about possible problems that face bromeliad growers here in Michigan during the winter months. This issue we'll face the problem of insects. The most obvious danger is always the possibility of an infestation of scale. This especially applies to growers like me who take their plants outside during the summer months. I try to spray with a systemic insecticide before bringing the plants in for the winter, but there's always the chance that an infected plant or two get missed. I regularly groom my plants to remove old and dying leaves (at least every two months). That's always a good timeto be on the look out for signs of scale. While you may see them anywhere on the plant, they seemparticularly fond of hiding in the outer leaf axils. If the manifestation is small, you might be able to eliminate it by rubbing off the offenders with your fingers. Just to be on the safe side, though, I spray suspect plants with an insecticidal soap such as Safer's<sup>TM</sup>. I try to avoid using harsher chemicals in the greenhouse. I know some growers who use rubbing alcohol and either spray it directly on the plant or dipa cotton swab in alcohol and apply it that way. Keep an eye on any treated plants for possible follow up treatment in 10-14 days. There's always the chance that some eggs or young crawlers got missed in the primary treatment. Most of the species of scale we encounter here in Michigan seem to be fairly selective. I rarely find scale running rampant throughout the collection, but I find certain species to be "scale magnets." For instance, I've had Tillandsia deppeana in my collection for thirty years now. I find myself treating it for scale every year or two. Vriesea saundersii is another species I keep a close eye on. Occasionally I find a severe outbreak on a *Dyckia* or two. I'll admit I'm a bit less fastidious in grooming the *Dyckias*, since that can be a pain (literally!). Most of the bromeliads in my collection are rarely, if ever, bothered by any scale. We don't often think of mealy bugs as a bromeliad pest. Some inflorescences produce nectar in the flowers, or sugar in the berries that are an attractive food source for mealy bugs. More rarely I see them crawling on the leaves of a plant. In any case I find them easier to control than scale by using either of the methods described above. The most insidious and aggressive bromeliad scale is the "fly-speck" scale. Plants that are seriously infested will look as though somebody has liberally applied black pepper with a pepper grinder. I have seen collections in Florida where it has run rampant. Fortunately, most commercial growers (and hobbyists) keep a keen eye out for this pest, and treat it quickly and aggressively to eradicate it. I have rarely seen it in Michigan collections.

The last—and by far the most destructive bromeliad pest—is the Mexican bromeliad weevil (*Metamasius callizona*—aka "the evil weevil"). It was accidentally introduced to Florida from Mexico about twenty years ago. It has ravaged wild bromeliad populations throughout the state. It has spread to cultivated plantings as well. I have seen whole beds of cultivated *Dyckias* ravaged in just a few months by a serious infestation. Unfortunately, the first sign of damage usually occurs when a bromeliad collapses and dies, as the plant is eaten from the inside out. Many species and hybrids are at risk of attack from this nasty predator. On the positive side, growers are extremely aware of the problem. Inside shadehouses, greenhouses, lanais—even outdoors—periodic spraying with a chemical such as Sevin<sup>™</sup> seems to give good control. So far I have not heard of any occurrence of this nasty weevil in Michigan.

## An Addendum on Bugs with Illustrations of Things You Cannot Find in Paul Wingert's Greenhouse by the Editor, Who Has His Sources

On the right are brown circles which are young scales. As they grow older the circle rises to form a hump which becomes blackish. These scales can easily be rubbed away with one's finger.



Mealybug egg masses



Above is a well established community of mealy bugs and their cottony egg masses. This infestation is on a billbergia leaf.

An important point to bear in mind: Healthy plants are far less likely to be attacked than plants under stress. A healthy plant can grow beside an infested one and be completely unaffected (but don't bank on that).

A most insidious pest (which Paul doesn't have) is the spider mite. It is spider related (i.e. arachnid) and tinier than a pinhead. Usually black but may also be green or red, they are found on the undersides of plant leaves. They are called spider mites because of the fine webbing with which they cover the leaf surface (their highway system). By the time you notice them scurrying back and forth on the webbing they have already done considerable damage, sucking plant cell contents out of the cells one by one. This causes silver and brown patches on the upper leaf surface because the cells are empty and dead. If you see fine black dots underneath the leaves, dots which can brushed aside with your finger, you have spider mites. Another test is to tap the suspected leaf above a piece of white paper. If black dots fall to the paper, go get the Safer's<sup>TM</sup> Soap. Spider mites flourish at high temperatures and low humidity so especially in winter houseplants are at high risk. I would never grow a rose in the house without a can of spray sitting beside it. Among bromeliads, the plants at risk are all the soft leaved vrieseas, guzmanias, tillandsias (not the "airplants"), and others with soft green leaves. Since many bromeliads grow relatively few leaves, they can ill afford spider mite damage. And of course it makes them unattractive. Bromeliads are relatively pest-free but they do need to be checked regularly.