

# ***Far North Coast Bromeliad Study Group N.S.W.***

Study Group meets the third Thursday of each month  
Next meeting 17th May 2012 at 11 a.m.

Venue: PineGrove Bromeliad Nursery  
114 Pine Street Wardell 2477  
Phone (02) 6683 4188

Discussion: April 2012

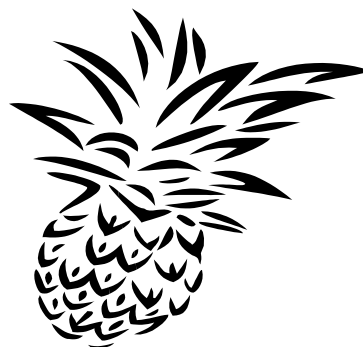
General show & tell

Editorial Team:

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## **Meeting 15th March 2012**

The meeting was opened at 11:23am by Ron. A total of 32 members attended the meeting. Apologies were given for seven members. Ron mentioned that Rosemary Dalton had had a second operation and was on the mend. Laurie Mountford had also recovered.

## **General Business**

Ross reminded the meeting that DVD's containing Newsletters from various Groups and Societies from around Australia were available from the library. The disks are updated monthly. Also, with the author's permission, member's articles and photos used in our Newsletters and/or for presentations, would be retained by the library. Both Trish's and Debbie's originals have been filed. A copy of Derek Butcher's (Uncle Derek) latest Tillandsia disk is now in the library.

The issue of labelling sales and raffle broms was mentioned again (see p3, FNCBSG(NSW) Newsletter, March 2012). A much repeated discussion on labelling followed. Ross pointed out that the whole idea of labelling is to make ones life easier, especially when you want to replace lost plants or plants you wish to obtain. You are not expected to remember all the names just retain the tags.

In regard to library books, please ensure that the borrowing cards are filled out correctly when borrowing, and that your name is crossed out when the book is returned. Please note that the librarian is Caroline Lewis-Hughes.

Members wanting copies of the Newsletter for friends that are non-members that don't attend or members that rarely attend, should photo-copy their Newsletter and give it to them. Alternatively these 'outsiders' should pay \$2.00 a copy. Regulars requiring back issues will have to pay \$1.00 a copy. Keep in mind that the only support for the Newsletter is the good will of the editors and the raffle proceeds for the printing.

Ross announced a new Tillandsia book by Jan Maruska of Czechoslovakia. He has four copies, one being for the library.

A large white-board is now available for anyone's use during demonstrations and presentations courtesy of Rena and Don Beard.

The raffle raised \$140. Thank you to all involved.

## **Member's Show and Tell**

Leslie passed around excellent photographs of various broms, including shots taken at Ron's open garden day on 26th February. She also displayed some framed panels of copies of old coloured lithographs (some 150+ years old) of bromeliads. These framed panels are spectacular and a credit to her 'rainy day' hobby. She intends to do more, hopefully we'll see these in the future. (photo p8)

Trish spoke about her article ('A Novice's Perspective on Growing Cryptanthus' by Trish Kelly, FNCBSG(NSW) newsletter March 2012). In addition to the article she gave more detail on her designer potting mix which consists of one third Tabulam coarse sand, one third composted pine fines and one third composted mulched She Oak, with a little charcoal i.e. more organic than for *Vrieseas* and *Neoregelias*. She also passed around photographs of some of her *Cryptanthus*.

Ron had a tip for all local growers, which had arisen out of his selling broms in the Lismore Opp. Shop. Most broms are epiphytic and require good drainage. People purchase broms for planting in the garden or for use as landscape plants, and often plant them directly into the red clay soil seen in abundance in this area. They are better off planting them 'on' the ground i.e. place rocks and logs on the ground, back fill with something like a pine bark, then plant the broms in this back-fill. The plants will handle the red clay but they will do twice as well if managed in this manner for better drainage.

It was pointed out to Dawn that her last month's third placing *Vriesea* was actually *Vr.*'Komet' rather than *Vr. acuminata*. Derek Butcher believes there are no true *Vr. acuminata* in Australia.

Ross continued with the discussion on Jeanette's *Vriesea* 'Michaela' from last month. He pointed out that the plant was similar to *Vriesea rodigasiana* but its correct name is *Vriesea michaelii*. (article page 11)

A similar but different plant shown and discussed which was caught up in this naming mix-up as *Vr.* 'Michaela' but is clearly not, is a plant with discoloured leaves, the spike indicating a possible hybrid with *Vr. michaelii* as one parent, we suggest this plant be registered as *Vriesea* 'Mickie'. (photo p.8)

During the month Reg had shown Ross a plant he thought he had identified as *Vriesea bituminosa* from an Andrew Steen's book. The photo did look like Reg's plant, which in fact was a *Vriesea philippo-coburgii*. Again this exemplifies the difficulty and the need for care when identifying bromeliads from photographs. For comparison Ross showed a *Vr. bituminosa* from the garden and a *Vr. philippo-coburgii*. The *Vr. bituminosa* was a typical blue-grey colour, with little brown tipping of the leaves, dark underneath, plenty of scurf, with brown/purple flowers. The species can be variable, and so it is important to wait until flowering in order to gain certainty in identification. (photo p.9)

Ross led a discussion regarding the instability of variegates. The variety of variegates on the way to becoming desirable was demonstrated using a *Neoregelia* 'Skotak' hybrid and *Neoregelia* 'Lilac Prince'. The aim of the grower is to develop the most desirable variegate and to ensure its stability (sometimes a very difficult task). However, growers should keep only the very best variegates and have them procreate. With a number of generations of this sort of selection, a desirable look with stability will hopefully result. For many of us (simple gardeners) it is difficult to throw out attractive 'novars'. However, reiterating last month's article, it is essential that responsible hybridizers / nurserymen pass on / sell only

those hybrids with well established attractive variegations (generally after two or three cycles). (*Neo*. 'Lilac Prince' photo p.9)

In regard to the registration of variegates; a number of generations which have each flowered and produced the attractive stable variegate should be developed prior to registration. This will produce a number of the desired plants, will help ensure the survival of the new registration (don't register one offs), and will help eliminate the plethora of registered names given to very similar plants.

Also discussed was the ultimate responsibility of the elimination or rejection of hybrids strikingly similar to those already registered or not up to a high standard. The majority thought the Cultivar Registrar should have this power.

Additionally, it was thought that if the volume of work was overwhelming for one individual, as this work is voluntary, then perhaps:

- (a) a committee of knowledgeable individuals could be formed to share the load
- (b) co-registrars be appointed for different parts of the planet (total of approximately five individuals), all to be in close contact with each other.

Meg showed some copies of bromeliad lithographs from the U.S.A. They were beautifully printed on a special paper.

Dave commented on his pupping successes after reading "It Really Worked" by Andy Spearry (see p.3 FNCBSG (NSW) Newsletter, December 2011). The article was regarding bromeliads which generally only throw one pup, and how to improve on this number. Dave followed the directions to split the leaves at the pup site, remove the pup and leave as many leaves as possible, split or not. He did this on three *Guzmania sanguinea* (keeping a fourth plant....just in case). Each of the three has supplied three pups since. A stunning success. (photo p.9)

Ron asked that each member be prepared to present a small talk and/or to think up questions prior to each meeting.



## **Helen's Heuristic Hunt # 2**

Unscramble the letters to find the word - clue - genus.

OUTPYTMOHRH	_____
TAPHSRCTNUY	_____
LNEUIESQA	_____
KYACDI	_____
GREIELAONE	_____
MCEAEHA	_____
NASNAA	_____
DUANMIRLIU	_____
LDSATNILAI	_____
AIGRELLIB	_____

Answers will be published next month.

**Aechmea 'Macfoster'** by Ross Little  
*Aechmea macrochlamys* / *Portea fosteriana*

Plants grown in Australia with either of the two above names are quite often sold as *Ae. macrochlamys*. A plant imported into Australia from California in 1982 as *Ae. 'Purple Globe'* which closely resembles 'Macfoster' was dealt with by Derek Butcher, Harry Luther and Elton Leme was considered to be an abnormal form of *Ae. macrochlamys*. The plant we are now referring to as 'Macfoster' came to Pinegrove in 1984 via Forest Drive Nursery as *Streptocalyx poeppigii*, this plant had its name changed to *Ae. macrochlamys* by person unknown. In circa 1990 Peter Franklin received a plant from Pinegrove as *Str. poeppigii*. Peter could see something was amiss with the description in Smith & Downs Monograph and his plant, however he was never comfortable at all with it being *Ae. macrochlamys* but thought it worth a look at *Ae. beeriana*, (was *Str. poeppigii*) no not a match there either. In 1993 Elton Leme published his book "Bromeliads in the Brazilian Wilderness", even though Peter retained the name of *Str. poeppigii* for ages, he saw a photo of *Port. fosteriana* on page 48 of Leme's book and felt this was his plant, then changed his label accordingly. Did others do the same ?

Over the years many discussions have been had regarding the taxonomic discrepancies in S&D of *Ae. macrochlamys* and *Port. fosteriana* as our 'Macfoster' just doesn't fit comfortably within either description. To my mind there appears to be an overlap in the two descriptions to the plant we now refer to as 'Macfoster'. *Ae. macrochlamys* and *Port. fosteriana*, both collected in July 1939 by Mulford and Racine Foster in approximately the same area only 12 days apart. Foster's herbarium of *Port. fosteriana* is also tagged *Port. silveirae* Mez and does appear close to *Port. silveirae*, photos of this plant on FCBS separate it from 'Macfoster'. When one asks what separates *Aechmea* from *Portea* the general answer is that "Portea has pedicels a minimum of 5-6 mm long". The plant we had tagged as *Ae. macrochlamys* now 'Macfoster' pedicels are 80 - 90% NIL with few to 5 mm (mostly sessile), this indicates a closer affinity to *Aechmea* than *Portea*.

A few differences we noted with 'Macfoster' to *Port. fosteriana* in S&D are:

'Macfoster's scape is 17 mm not 10 mm thick.

Inflorescence not tripinnate.

Upper primary bracts half the length of the branch -- not: barely exceeds the base of the branch.

Floral bracts minute, almost absent -- not: shorter than the pedicel (5 - 6 mm)

Branches spreading, flowers mostly sessile -- not 5 - 6 mm pedicel.

In Darwin 2011, I discussed an anomaly we noted within the floral structure of 'Macfoster' with Harry Luther, I noticed an absence of nectar scales at the base of the petals, the nectar scales in flowers Don was checking were quite visible, we checked more flowers to find this wasn't just an irregularity to the one flower. Harry had observed this irregularity also, but could offer no definitive answer.

There are too many discrepancies, too many people agree that this particular plant doesn't fit the descriptions, therefore we feel it is best resolved by giving it this cultivar name by joining the two together as *Ae. 'Macfoster'*. (photo's p.9)

Thanks to: Don Beard, Derek Butcher and Peter Franklin for their assistance.

## Photosynthesis 1 by Don Beard

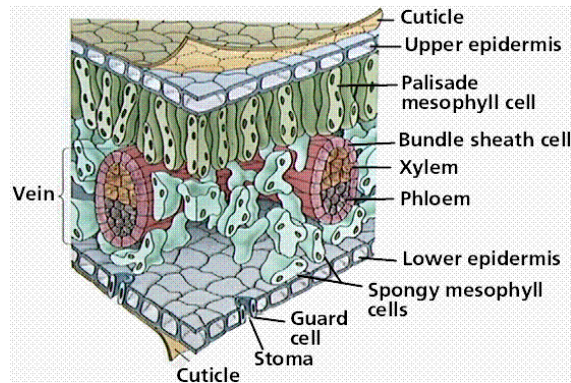
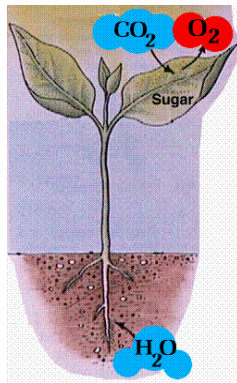
The following presentation was given to FNCBSG(NSW) members as a precursor to an introduction to C4 and CAM plants. It is believed that a basic knowledge of photosynthesis in vascular plants will be a good beginning. The initial discussion of very basic chemistry will be foregone herein.

Photosynthesis means the putting together with light or the making or manufacturing with light. It converts light energy into chemical energy and stores it as sugar. It occurs in green plants and requires the green pigment chlorophyll. It is the source of energy for nearly all life, the exception being bacteria and archaea living in extremely hostile environments (chemoautotrophs). This very important but simplified process can be written chemically as:



i.e. green plants in the presence of light combine carbon dioxide and water to make sugar and oxygen. In other words green plants make their own food. This most important equation is the ultimate source of all carbon in the atmosphere.

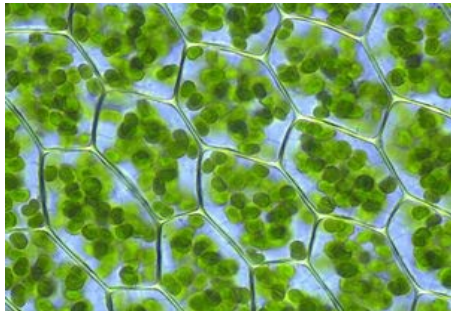
For this process green plants capture approximately 100 terawatts of energy in any one year. This is approximately six times the entire human power usage in one year. But where in the plant does this all take place? The answer is in the leaves so we better look more closely at a typical leaf cross-section (see below).



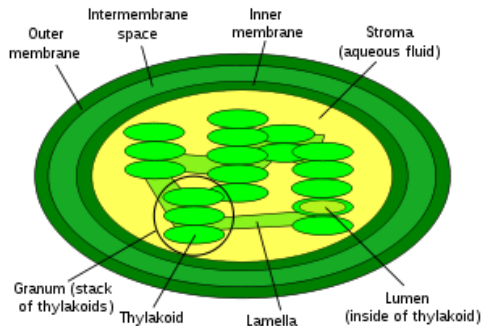
The green colouration occurs in bodies called chloroplasts which in turn occur in the mesophyll of the leaf, not in the surface of the leaf. These chloroplasts contain bodies (thylakoids) which are stacked like pancakes. It is in the margins of these pancakes that the chlorophyll and other pigments occur. It is here that the energy from the sun is absorbed.

Simplified, photosynthesis can be divided into two stages:

**Stage 1:** or the Light dependant stage is where energy is absorbed from sunlight by the chlorophyll in the Thylakoid membranes. Only the red and blue ends of



Plant cells with visible chloroplasts  
(from a moss, *Plagiomnium affine*)



Simplified structure of a chloroplast

the spectrum is absorbed and stored. Green light is not used and is reflected, hence the plants green appearance. At this stage oxygen is released.

**Stage 2:** or the Dark Stage does not require sunlight. This is where the stored energy from the Light Stage is used to convert carbon dioxide and water into an organic compound which has three carbon atoms, a C<sub>3</sub> molecule. This reaction occurs in the aqueous fluid in the chloroplast. After six of these cycles glucose is produced. This is the food and energy for the plant. This is also called the Calvin cycle (after Melvin Calvin) and these sorts of plants are referred to as C<sub>3</sub> plants and this the C<sub>3</sub> pathway. This is a distinctly different pathway to that followed by C<sub>4</sub> and CAM plants.

#### Other Interesting Snippets of Photosynthesis.

The basic process for photosynthesis was understood early in the 18th century. However some stages of photosynthesis are still not fully understood.

If the carbon dioxide level is too low, oxygen will replace it and carbon will be lost from the cycle, sugars drained, toxins produced, and photosynthesis inhibited. The plant will die.

Generally plants sleep at night when their stoma are closed. No carbon dioxide in, no oxygen out.

A typical plant mesophyll cell contains between 10-100 chloroplasts. An area of one square mm of a leaf contains up to 800,000 chloroplasts.

One hectare of corn (which is actually a C<sub>4</sub> plant) will produce enough oxygen in one day in mid summer for 325 people.

This presentation has been gleaned from the following internet pages. For those seeking a more detailed and less simplified explanation / introduction to photosynthesis, these same references can be used.

<http://biology.clc.uc.edu/courses/bio104/photosyn.htm> ; <http://en.wikipedia.org/wiki/Photosynthesis> ; <http://www.emc.maricopa.edu/faculty/farabee/biobk/biobookps.html>



*Vriesea gigantea* var. *seideliana*  
1st Open -- Carol Buckman



*Vriesea platynema* hybrid  
1st Novice -- Trish Kelly



*Neoregelia* 'Enchantment'  
Judges Choice -- Meg Kerr



Lesley's timber framed botanical print sets from her 'rainy day' projects.



*Vriesea* 'Mickie'



*Vriesea rodigasiana*



*Vriesea michaelii*





*Vriesea bituminosa*



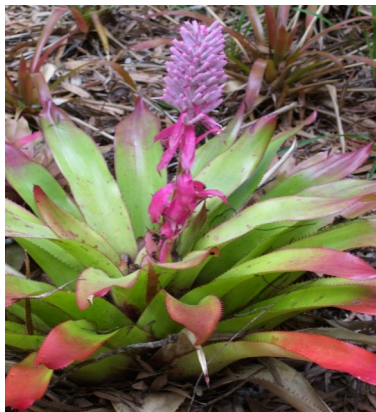
*Neoregelia* 'Lilac Prince'



*Guz. sanguinea* - "It Really Worked"



*Guz. sanguinea* var. *brevipedicellata*



*Aechmea* 'Macfoster'



*Tillandsia cyanea*

Photo's supplied by: Ross Little, Lesley Baylis, David Lewis-Hughes and Derek Butcher

**Tillandsia cyanea** by Geoff Lawn

Spiking in early winter is the old favourite *Tillandsia cyanea*. Native to the forests of Ecuador, this attractive species grows epiphytically in direct or filtered sun from sea level to a 1000 mtrs altitude. Named by Linden in 1867, the term *cyanea* means dark blue, referring to the petal colour. A small, grass like rosette to 40 cm diameter, *Till. cyanea* has 40 - 60 thin green tapered recurving leaves with red striations towards the rosette base. The short inflorescence is a fan or paddle shaped head of bright rose bracts and large violet-blue flowers which emerge singularly or in pairs over a six week period.

The present recognised varieties are:

*Till. cyanea* -- has a short scape mostly hidden by the leaves; the inflorescence is elliptic, with petals deep violet. (photo p.9)

*Till. cyanea* var. *tricolor* (Andre) L.B. Smith 1951 -- has a short scape also, but the spike is broadly oblong and many flowered; petals are blue with a white eye at the base.

*Till. cyanea* has several notable hybrids:

*Till.* 'Emilie' (*lindenii* x *cyanea*) and *Till.* 'Hans Gulz' (very similar to the species and sometimes listed as an improved form of same). As this species is very popular, a number of different cultivars or selected forms have been bred. The species is similar in appearance, when not flowering, to the closely related *Till. anceps* and *Till. lindenii*, which it was once called. *Till. cyanea* is a soft leafed type so does better potted rather than mounted. Pups emerge high in the leaf axils and maybe left on the parent stock, carefully peeling away any dead leaves. Alternatively, separation of the few pups produced is best left until they are nearly mature. For the nursery trade, this graceful species is grown in thousands by seed, a process which may take five years to obtain flowering size. By offsets, maturity is reached in two to three years. *Tillandsia cyanea* is hardy under shelter, in bright light and constant humidity.

Reprinted from Newslink, the Newsletter of the Bromeliad Society of W.A Inc. Some updates were made to this article to keep it current.

Some other hybrids and cultivars of *Till. cyanea* worth keeping an eye out for: *Till.* 'Creation', 'Feather Belle', 'Anita', 'Paradise', 'Pinkie' and a variegated *cyanea*.

Some other similar species worth keeping an eye out for:

*Till. anceps*, *lindenii*, *pretiosa* and *umbellata*.

**Vriesea michaelii** by Ross Little

For many years now we have had this plant in our collections under various names e.g.: *Vr. michaelii*, *Vr. 'Michaela'* and even as *Vr. rodigasiana*.

It was the name 'Michaela' that we first queried, the way this name was written indicated hybrid, however with further investigation it was agreed that this was most likely a simple spelling error or somebody decided this name just simply rolled off the tongue nicer than *michaelii*.

The plants in hand matched available records of *Vr. michaelii* however the other problem we had was that these plants were also mixed in with *Vr. rodigasiana* a very similar looking species which had been described some 100 years earlier by E. Morren. These two species being so very similar had us looking to see what the difference was. Fortunately we have E. Morren's and Mee's paintings to refer to when checking against the written descriptions and also herbariums.

When we were comparing the descriptions to the paintings a few discrepancies were noticed e.g.: *Vr. rodigasiana* has scape bracts equalling or shorter than the internodes, in one painting they appear longer than the internodes, this is more consistent with *Vr. michaelii*. We noticed the floral bracts depicted at different lengths compared to sepals in paintings and drawings, some are indicated at approximately half the length, others at one third the length. The description we have for *Vr. rodigasiana* indicates: floral bracts approximately two thirds the length of the sepal whilst for *Vr. Michaelii* almost equal, therefore these don't match the depictions / paintings.

What we don't see in the paintings or drawings or on plants we have in flower at the moment are 3 mm pedicels as per the description for *Vr. rodigasiana*. Also our flowers are 45 mm long as opposed to 30 mm for *Vr. rodigasiana*.

Therefore it was agreed that paintings and drawings are nice to look at but just that, to look at, as there is too much artistic license used in creating them. It is always best to refer to herbarium specimens when checking descriptions.



*Vr. rodigasiana*  
painting by Morren



*Vr. rodigasiana*  
painting by Mee



*Vr. michaelii* -- with bracts  
longer than internodes

Paintings and photo supplied by Derek Butcher and Ross Little

## **Winter Care of Bromeliads** by Peter Peroz

With the arrival of the cooler weather, some adjustments to cultural practice is in order. The following comments apply to S.E. Queensland (and the Far North Coast of NSW). Members can make adjustments for their own micro-climate. Continue regular fertilizer applications but reduce the concentration of foliar fertilizers. Any major change in fertilizer application may result in variation in leaf growth which will show as a change in the taper of the leaf. A give away to an eagle eyed judge.

Remember: All plant growth emanates from sunlight. Good nutrition is the art of balancing plant nutrients to energy intake from sunlight.

Keep potassium up in the nutrition program as this is said to improve cold resistance. This is, as far as I have been able to confirm, an unproven thesis. The rationale is that since all potassium in the plant is located in the sap, this results in the lower freezing point of the sap, hence the improved cold resistance.

The interval between watering can be extended. Water in the early afternoon where possible so the plants - especially the extreme epiphytes - have dried off overnight.

For maximum retention of colour, move plants to a brighter position, and/or longer effective day length. This is not practical for a large collection, but is a possibility for those few special plants selected for competition table.

For plants to be grown in the garden, now is the time to start acclimatising the offsets. Plant out these offsets so that they are exposed to the gradual increase in the day length and sunlight intensity as we move to the summer solstice. It's surprising the species and hybrids that can be naturalised in this manner. I have had a clump of *Tillandsia lindenii* growing in full sun for over ten years. (This is not my 'invention'. I became aware of this when I saw some photos of May Neal's garden in Hawaii some thirty years ago where *Tillandsia lindenii* was growing in full sun).

Reprinted from, *Bromeliaceae*, 2008, 42, 11.

In our FNCBSG (NSW) June 2011 Newsletter Don Beard wrote an article titled: Sun Hardy Bromeliads, refer to this article for a short list of bromeliads suitable for growing in sunny positions. Now is the time to begin planning changes to be made to your garden for next summer. Remember pruning trees allows for greater light penetration to understory plantings, don't forget ladder safety, tie the ladder to the tree. Branches too large for the chipper make good garden edging. Old mother plants I find are best for tying in trees to form flowering clumps quickly, these old mother plants if not going to be used are also good when put through a mulcher/shredder and used to mulch the garden, this also recycles the old potting mix and any unused fertilizer.

## **True Full-Sun Bromeliads** by Moyna Prince

The weather we've had this year has tried our plants in the extreme. While the winter was mild, drought conditions combined with sunny days stressed them. Then came the monsoon rains and the temperature climbed. These conditions tested the survival abilities of our toughest bromeliads, and it's been interesting to assess those that flourished versus those that needed more protection.

In our garden, there is one bromeliad that is a clear winner in the full-sun category: *Hohenbergia castellanosii*. You cannot give this bromeliad too much sun. It's a big, tough plant with upright form, and wide green leaves that turn fiery red from the tips down as it gets more sun.

I went to several of our members for suggestions, and listed below are their recommendations. The experts pointed out that most plants that have gone through this year's weather extremes without sunburn had the advantage of being planted in cooler months, thus giving them time to become acclimated. You can't take a plant from a shady spot and place it in direct sun in July without getting some burn or bleaching. Sudden changes, length of sunny periods and humidity can also cause problems, even for well-established plants.

Here are some of the experts' suggestions for full-sun bromeliads:

### **Large:**

*Aechmea blanchetiana*

*Aechmea eurycorymbus*

*Aechmea mexicana* (also the albomarginated form)

*Aechmea bracteata* (all forms)

*Aechmea mulfordii*

*Aechmea rubens*

*Aechmea* 'Little Harv'

*Aechmea chantinii* (black form)

*Aechmea* 'Samurai'

*Alcantarea vinicolor* (tougher than imperialis)

*Alcantarea imperialis*

*Androlepis skinneri*

*Hohenbergia castellanosii*

*Portea petropolitana* var. *noettigii* and var. *extensa* (the more common one)

### **Medium:**

*Aechmea pectinata*

*Aechmea ornata*

*Ananus bracteatus*

*Ananus comosus*

*Neoregelia cruenta*

*Neoregelia johannis*

*Neoregelia compacta*

*Neoregelia macwilliamsii*

*Neoregelia marmorata*

*Quesnelia testudo*

*Quesnelia arvensis*

*Wittrockia superba*

**Small:**

*Aechmea recurvata* var. *ortgiesii*

*Neoregelia olens*

*Neoregelia* 'Fireball'

*Orthophytum gurkenii*

*Orthophytum navioides*

*Orthophytum burle-marxii*

Most *Dyckias* and *Hechtias* (they'll require more frequent watering).

The genus *Pitcairnia* is usually very sun-tolerant.

The plants in the above list are the most readily available.

More uncommon species, also recommended, are:

*Aechmea callichroma*

*Aechmea mariae-reginae*

*Aechmea vallerandii*

*Aechmea bromeliifolia*

*Aechmea aquilega*

*Aechmea castelnavii*

*Aechmea distichantha*

*Aechmea lingulata*

*Aechmea phanerophlebia*

*Aechmea tocantina*

*Hohenbergia stellata*

*Neoregelia sarmentosa*

*Neoregelia tigrina*

*Neoregelia bahiana*

*xNeotanthus* 'Cardboard'

*Portea leptantha*

*Orthophytum magalhaesii*

*Orthophytum maracasense*

*Orthophytum rubrum*

Steve Correale, who grows and sells *tillandsias*, suggests the following for the full-sun treatment:

*Tillandsia fasciculata*, *capitata*, *chiapensis*, *streptophylla*, *xerographica*, *concolor tricholepis*, *bulbosa*, *caput-medusae*, *ionantha*, (all forms), *stricta*, *vernica*, *disticha*, *didisticha*. Don't forget *Tillandsia usneoides* ! As with other genera, if your *tillandsias* have been growing in the shade, move them to direct sun in the Autumn or Winter.

To sum up: If you can provide your plants with a little shade, even from a nearby palm or your patio screen, they'll thank you. If they're going to be in full sun from sunrise to sunset, get them established in the winter. Otherwise, be prepared for at least a little bleaching.

(Thanks to the following who provided suggestions: Harvey Bullis, Nat DeLeon, Lynne Fieber, Peter Kouchalacos, Sandy Roth and Virginia Schrenker.)

TO ALL MEMBERS: Please keep an eye on your own plants, and let me know in the spring how they have fared for a follow-up article. MP

Reprinted from: September 2002 edition of The BromeliAdvisory, the Newsletter of the Bromeliad Society of South Florida.

## **Guzmania sanguinea** by Vic Przetocki

*Guzmania sanguinea*, pronounced SAN - GUIN'E - A, is native to Columbia, Trinidad, Venezuela, Costa Rica, Ecuador and Tobago. In these areas, this epiphytic bromeliad is found growing on the sides of trees in dense rain forests from sea level to 1100 mtrs. The first specimen of this plant was discovered by Andre in the Western Cordilleras of the Andes of Columbia in 1876.

There are two forms of this species:

*Guz. sanguinea*: grows to a height of approximately 30cm and has leaves which are stiff and plain green in colour. These leaves are downward curving and are about 40 cm long and 2.50 cm wide. This beautiful variety changes remarkably as flowering time approaches; the foliage progressively alters to a red and yellow colour. This colouration varies to the extent that some plants have a red blotching on their leaves whilst others entirely red or purple. The flowers which can either be white or yellow, are hidden deep in the centre of the rosette. These flowers are rather insignificant, but as a foliage plant this bromeliad is well worth possessing.

*Guz. sanguinea var. brevipedicellata*: native to Ecuador, is much smaller with leaves that seldom exceed 20 cm in length. As with the larger form, this plant is grown purely for its foliage colouration during the flowering period.

There is another form being grown locally (WA) and I have been assured that it is a variety of *Guz. sanguinea*. This plant has leaves which are approximately 20 cm in length and 2 cm in width. The leaves are green above and red tinged below with longitudinal red striping from the base to about half way up the leaf. As a foliage plant, this form is far more attractive than the other two when they are not in flower. At flowering time the inner leaves of this *guzmania* turn a very attractive colour of red.

Propagation of the species is slow and care must be taken when trying to divide offsets from the parent plants. As a rule, *Guz. sanguinea* only produces one offset whilst *Guz. sanguinea var. brevipedicellata* produces two. The problem of these offsets is that they appear in the centre of the rosette. Some growers take no chances and leave the new offsets on the parent plant to take over eventually as the new flowering plant. To produce this species in large numbers the grower must rely on the slow process of seed raising. Growing these guzmanias is fairly easy. Like most guzmanias they require high humidity and filtered light, about 70% shade.

The potting medium that I use is a very open mix consisting of 6 parts buzzer shavings, 3 parts pine bark, 1 part charcoal, 1 part German sphagnum peat and 1 part vermiculite.

The only pest which can cause problems as far as leaf blemishes are concerned is scale. These can be controlled by spraying with Malathion. Growing these plants in a glass house under high humidity can create conditions which are ideal for fungal infections. To minimize this problem remove any algae, dead insects, debris and spider webs from the leaf axils. If infection has occurred then spray with a fungicide. Leaf perfection is important if the plant is to be shown competitively. When exhibiting *Guzmania sanguinea*, the foliage should have a bright healthy look and the leaves should be evenly distributed around the rosette. When exhibiting with an inflorescence, it should be done in the early stages of bloom, the reason being that as a flowering cycle progresses, there is a gradual loss of colour and brilliance in the foliage.

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Since this article was written we have seen introduced to horticulture a variegated form of *Guz. sanguinea* and the species *Guz. sanguinea var. comosa*.

### **Novice Popular Vote**

1st	Trish Kelly	<i>Vriesea platynema</i> hybrid
2nd	Kay Daniels	<i>Nidularium procerum</i>
3rd	-----	-----

### **Open Popular Vote**

1st	Carol Buckman	<i>Vriesea gigantea</i> var. <i>seideliana</i>
2nd	Laurie Mountford	<i>Tillandsia ehlersiana</i>
3rd	Marie Essery	<i>Aechmea</i> 'Del Mar'
	Caroline Lewis-Hughes	<i>Guzmania</i> hybrid

### **Judge's Choice**

1st	Meg Kerr	<i>Neoregelia</i> Enchantment
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### **Comments from the growers:**

Trish's *Vr. platynema* hybrid was obtained from Marie 12 months ago as a small pup and has grown into a lovely plant. It is possibly *Vr. 'Tachete Gold'* which we will be able to confirm when it puts up a flower spike.

Kay Daniels *Nid. procerum* was pulled straight from the garden and cleaned up for the table show, an oldie but a goodie and this was a nicely grown plant.

Carol Buckman's *Vr. gigantea* var. *seideliana* which she has been growing for 12 months in her fairly well lit entertaining area was looking fantastic, a beautifully grown specimen, however it is not grown in full sun as some asked.

Laurie's *Till. ehlersiana* is one of his favourites, grown in very bright light with good air circulation.

Marie bought her *Ae. 'Del Mar'* as a pup, after potting and adding a small amount of slow release fertilizer she grew it in her shade house covered with 70% mesh. Marie feels it needs a little more light than it has been receiving which is something she intends to experiment with.

Caroline's *Guz.* unknown hybrid which she had obtained from a local church fete receives little attention growing in the garden.

Meg's plant won Champion pot-plant of the show at the Casino Garden Club's Annual Gala Day held on the 3rd of March, Meg grows this plant in her shade house on a high shelf to gain maximum light for best shape and colour.

Note: Carol's *Vr. gigantea* var. *seideliana* which is its correct name, also known as *Vr. 'Nova'* or *Vr. gigantea* 'Nova' which are both incorrect even though they still get used should be disregarded and removed from your labels. Do not confuse this with the term 'novar' used for lost variegation.

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