

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

Study Group meets the third Thursday of each month
Next meeting 18th September 2014 at 11 a.m.

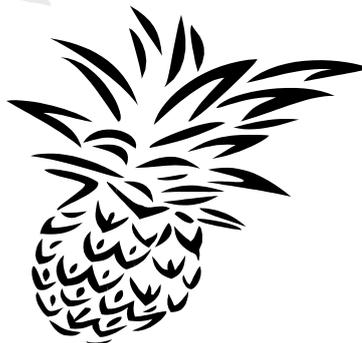
Venue: PineGrove Bromeliad Nursery
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Discussion: August 2014
General Discussion

Editorial Team:

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Meeting 17th July 2014

The meeting was opened at approximately 11.00 am
The 24 members and one visitor present were welcomed.
A total of five apologies were received.

General Business

Thank you to Joy and Kerry from Windsor (Sydney) for the monetary donation and box of pups for our raffle. These donations help support our Newsletter.

Library - make sure your books are ticked on and off when borrowing as we thought we had lost one when Helen did a mid year check. All books borrowed are to be checked out by and returned to the Librarian for checking off.

Ross wanted to know if anyone had a *Vriesea bituminosa* (???) in flower for him to study as there appears to be some changes afoot. What we thought were some different clones of *Vr. bituminosa* in our collections may not be, they may be newly described species.

A recently asked question: "Did you think you were growing *Vr. bituminosa*" ?
After studying this rather lengthy paper of several newly described species of *Vriesea* with comparisons to *Vr. bituminosa* we now have doubts about the identity of some plants in our collection. There are several plants in our garden that were thought to be *Vr. bituminosa* (red form) as they have a discolour leaf, maybe not so anymore, still we need to Wait Till it Flowers (WTiF) to be sure. Plants we have grown from 'wild collected seed' need to be studied and identity confirmed when they flower. Lots of interesting changes to look forward to. When your *Vr. bituminosa* flowers let us know and take lots of photos please.

Several members went to the Queensland Garden Expo at Nambour and gave brief reports on their experience:

Kay and Trish drove the 374 klm north to Nambour, approximately a 4 hour drive expecting to go for 1 or 2 days only, however they ended up attending for 3 full days as there was so much to see and do. There were over 350 exhibitors and besides bromeliads there were many other plants for sale and display including orchids, carnivorous plants, rare plants, tropical and subtropical exotics and natives. Speakers such as Costa Georgiadis and Jerry Coleby-Williams from the ABC Gardening Australia program were worth listening to as were speakers on such diverse topics as native bees, creating a frog habitat and growing our food future. Most of the other members enjoyed the experience but felt they were not there long enough, three to four hours, to see everything. Marie attended as a single day bus trip with her local Garden Club, she agreed not enough time.

Show and Tell

Ross showed a nice specimen of *Quesnelia edmundoi* var. *rubrobracteata*, with its striking red floral bracts of the inflorescence always a sight to see. This species is endemic to the south east portion of the Atlantic Pluvial Forest, Brazil. It occurs as an epiphyte, on forest slopes, flooded areas and also in the hillside forests, at altitudes ca. 650 m/s.m.

There are three varieties of *Ques. edmundoi* :

- 1) var. *edmundoi*; floral bracts yellow/green, petals cream or yellow.
- 2) var. *intermedia*; floral bracts red, petals yellowish.
- 3) var. *rubrobracteata*; floral bracts red, petals lilac. (photo p.9)

Quesnelia indecora was another striking species showing its flat topped inflorescence of bright red floral bracts. Its growth habit is epiphytic and saxicolous, to 2000 m alt, Minas Gerais, Brazil. Clumps well for basket growing. (photo p.9)

Several different varieties/forms of *Aechmea weilbachii* which are flowering at the moment were on display, always a great sight to see in the winter months with their stunning colours:

Ae. weilbachii var. *weilbachii* forma *leodiensis*

Ae. weilbachii var. *weilbachii* forma *pendula*

Ae. weilbachii var. *weilbachii* forma *viridisepala*

Key to the identification of varieties and forms of *Ae. weilbachii*:

- 1- Sepals green or lilac towards the apex, petals obtuse, purple var. ***weilbachii***
 - 2- Leaves green
 - 3- Inflorescence erect
 - 4- Sepals lilac, petals pale purple var. ***weilbachii*** forma ***weilbachii***
 - 4- Sepals green, petals dark purple var. ***weilbachii*** forma ***viridisepala***
 - 3- Inflorescence pendent var. ***weilbachii*** forma ***pendula***
 - 2- Leaves purple var. ***weilbachii*** forma ***leodiensis***
-
- 1- Sepals white towards the apex, apex with a tiny dark purple spot, petals widely acute and apiculate, entirely white except for a dark purple tip
var. ***albipetala***

Typical of the Brazilian Atlantic forest, the *Aechmea weilbachii* Didrichsen may be found in the states of Rio de Janeiro and Espirito Santo. As an epiphyte in places protected from direct sunlight, it inhabits the middle height of the trunks of the trees which form the vegetation of the mountainside at altitudes up to approximately 1,000 meters. In the State of Rio de Janeiro, it can be seen frequently in the Tijuca National Park (where the type of the species was collected), and in the National Park of Serra dos Orgaos.

A pot of *Vriesea simplex* with its pendulous inflorescences was shown, this species is very similar to and is often confused with *Vriesea scalaris*, the difference is in the shape of the floral bracts. For *Vr. simplex* the floral bracts wrap around and overlap, in *Vr. scalaris* they do not overlap, or barely even touch leaving a gap exposing the sepals. There are also differences in flower length, but the above is the easiest way to tell them apart.

Aechmea racinae var. *tubiformis*, differs to the often seen var. *racinae* being that it is a taller more slender form with the leaf sheaths forming a cylindrical tank. The inflorescence is pendulous showing off its bright yellow orange ovaries that can be seen from a reasonable distance among the trees growing as an epiphyte.

Helen passed around various *Billbergias* that were in flower. (photos p.11) *Bill. nutans*, *Bill.* 'Pink Patches', *Bill.* 'Curly Top', *Bill. amoena* var. *amoena*, *Bill.* 'Pria' x *Bill. distachia* var. *maculata*, *Bill.* 'Robert Saunders', *Bill. amoena* var. *amoena* (red leaf form), *Bill.* 'Jean Black' x 'Bobtail' called 'Blacktail' (unreg), *Bill.* 'Perriams Pride' or is it 'Louise' (article p.10). *Billbergia sanderiana* another very showy species when in flower was shown which the birds seem to be very attracted to. The large pink bracts of the pendulous inflorescence last for several weeks which seems to be longer than most *Billbergias* flower for. (photo p.11)

Ross showed a *Billnelia* and commented that if growing a plant from seed, grow it to maturity and check the flower to make sure it is the right plant. (article p.10)

Laurie showed *Tillandsia punctulata* (red) which was a very nicely grown plant, he also displayed a nice clump of *Till. tenuifolia* with four inflorescences. Laurie discussed the growing conditions, potting medium and water requirements he has found most suits these *Tillandsias* in his environment.

Helen showed an array of *Tillandsias* she has flowering at the moment making a lovely colourful show of pinks, blues and yellows. One that was flowering for the first time for Helen with bright yellow petals was clearly not *Till. meridionalis* as tagged, it was identified as *Tillandsia jucunda*. Also shown were *Till. neglecta*, 'Cotton Candy', 'Houston', *tenuifolia*, *toropiensis*, 'Carmen' and *dura*.

Laurie mentioned his *Till. dura* is a lot smaller than the one Helen showed, he has had it for many years which he brought with him from Sydney, he finds it is a very slow growing species. He also discussed his *Till.* 'Cotton Candy' which he has been growing for 4-5 years now with no flowers, where as he noticed the plants at PineGrove seem to flower each year and wanted to know why.

N.B. Ross asked if people entering the competition could note if the plant is an unregistered hybrid by adding (unreg) after the plant name on the entry form. If not sure, go to the BCR to check, if it's not there then it's not registered. There was some confusion with numbers for competition entries last month. If you move your plant once it has an entry number, move the number with it.

An encounter with *Dyckia argentea*
(or should that be *Dyckia mezii*?)

by Doug Binns 2014

Dyckia argentea had long been on my list of species I wished to see, ever since I read its description in Smith and Downs' Flora Neotropica. Recently I was intrigued by a comment in an internet blog that described *Dyckia argentea* as a species that didn't exist. I wasn't sure what that meant – did it mean that it was extinct? This seemed possible, since the only specimens recorded in Smith and Downs in 1974 were those collected prior to 1894. If it was extinct in nature, what about the plants with this name reported as being in cultivation? Were they the real thing or impostors? After a little investigating, I realized that what the author probably meant was simply that there were doubts about the name.

Dyckia argentea as it had been published by Mez in 1894 and as used by botanists and bromeliad enthusiasts ever since, was considered, by at least one author (F. Krapp in 2013), as an illegitimate name, based on the rules of international botanical nomenclature. This was because the same name previously had been used, in 1885, by another author (Nicholson) for a different plant.

Nicholson's *Dyckia argentea* has generally been considered a synonym of *Hechtia argentea*, but there seems to be some doubt over this and in any case it does not refute Krapp's reason for claiming that the name is illegitimate. Krapp published the name *Dyckia mezii* to replace *Dyckia argentea* Mez.

However, I'm not sure whether this has been widely accepted and *Dyckia argentea*, not *D. mezii* is the name used in the Bromeliad Data-



base. Even though Krapp's reasoning seems logical to me, for now I will defer to common usage and continue to call this plant *Dyckia argentea*, though it seems likely that the correct name is now *Dyckia mezii*.

Regardless of the correct name, I still wanted to see the plant itself. Towards the end of a trip to Brazil last year, while waiting in the enormous bus terminal (almost a suburb on its own) in the city of Belo Horizonte, I made an impromptu decision to try to find this *Dyckia* growing in the wild. At the time this was a somewhat rash decision, as I had not initially planned to visit the area in which it occurs, so had not done any research on its exact location and knew only that it occurred vaguely 'near São João del Rey', a city about four hours bus ride south

of Belo Horizonte. From the bus, most of the area in the vicinity of São João del Rey appeared to have been very extensively cleared and didn't look very promising for any bromeliads. However, I noticed not far away, close to the neighbouring town of Tiradentes, a very prominent range of hills covered in natural vegetation and looking far more promising. Unfortunately I was in the area on a weekend, when the quaint little town of Tiradentes is full of wealthy Brazilian tourists enjoying their weekend getaway from Belo Horizonte. All reasonably priced accommodation was booked out so I had to stay in São João del Rey after all, a much larger and more industrial city. So it was with great anticipation that I caught the first commuter bus to Tiradentes the next morning and found a track into the hills. This turned out to be a very interesting and exciting area comprising rocky hills, cliffs, grassy flats and rainforest gullies, with lots of different plants including massed flowering of lily-like vellozias and barbacenias and of course, a variety of bromeliads. After wandering around for a few hours, I had seen aechmeas, billbergias, tillandsias and plenty of plants of the delightful *Cryptanthus tiradentesensis*. The latter is one of the species of subgenus *Hoplocryptanthus* so looks more like a miniature orthophytum than a cryptanthus. I had also seen a few scattered plants of a dyckia, unfortunately without flowers. I didn't know which species this was, but based on its vegetative characteristics it clearly was not *D. argentea*. I was beginning to think I was in the wrong place when I stumbled across a large colony of *D. argentea*, with many hundreds of plants, on a rocky slope. It is a very attractive species and the large colony was a truly stunning sight!



Encountering it in that manner was a memorable occasion and counts as one of the botanical highlights of my life.

I returned to the hills the next day for more exploring and saw more of the unknown *Dyckia* but no more colonies of *D. argentea*, which appears to be a localized species. The hills are quite extensive and I'm sure there are other colonies.



The marked contrast between the two *Dyckia* species in their patterns of distribution is very interesting, especially since they are likely to have very similar seed dispersal characteristics. This suggests that *D. argentea* has very specific habitat or germination requirements, for soil conditions or microclimate or a combination of these or other unknown factors. Some plants of the unknown species grew among the colony of *D. argentea*. There was considerable variation in both species, as would be expected in natural populations, and it is possible that a third species was also present (difficult to be sure with so few plants flowering).

Despite the variation, in general the

D. argentea were distinctly different from the other species, although a few plants were intermediate in character and looked suspiciously like hybrids. After returning home, I did the background research that I should have done before the trip and found that the type locality for *D. argentea* is Serra do Lenheiro, which I think is a smaller and less conspicuous range of hills right on the edge of São João, but on the other side of town. In that sense, I had been looking in the wrong place, but luckily for me the species did not occur only at the type locality. Since the plants I saw were not at the type locality, it is possible that they are not the same species that Mez described as *D. argentea*, but as far as I can tell from the photos that I took, they are a very good match for the description and I'm fairly certain they are the same species. Even though *D. argentea* was described in 1894, it possibly still occurs in the Serra do Lenheiro.

Perhaps a good excuse for another visit to the area!





Neoregelia 'Predator'
Equal 1st Open Marie Essery



Vriesea 'Limelight' (unreg.)
Equal 1st Open Meg Kerr



Vriesea fosteriana var. *seideliana*
Equal 1st Open Trish Kelly



Vriesea gigantea
1st Novice Flo Danswan



Cryptanthus zonatus f. *viridis*
1st Decorative Trish Kelly



Tillandsia bulbosa
Judges Choice Debbie Smith



grown by John Crawford



Three forms of *Aechmea weilbachii*
pendula, *viridisejala*, *leodiensis*



Quesnelia edmundoi var.
rubrobracteata



Quesnelia indecora
◀ grown by Ross Little ▲



Till. punctulata



Till. tenuifolia

Tillandsias grown by Laurie Mountford



Vriesea simplex
shown by Ross Little

Photo's supplied by: Ross Little and Trish Kelly

Billbergia 'Louise' or is it 'Perriam's Pride'

To most of us one can not tell them apart. They are both variegates, approximately the same colour, size and shape.

So how do we tell them apart?

If you have both the following may help with correct naming as these could easily get mixed up. Also take note of petal colour.

Billbergia 'Louise' sported from *Billbergia distachia* var. *maculata* in the U.S.A. It is noted as having very subtle white pinpoints on the green sections. It is unstable in its variegation with a tendency to give albino and 'novar' (non variegated) pups.

Billbergia 'Perriam's Pride' sported from *Billbergia distachia* var. *straussiana* in Australia. It appears to be a much more stable variegate, giving mostly marginated variegation and reportedly easier to grow.



Is this a Billnelia or just a Hybridisers Wishful Thinking ?



This question has been raised a few times ever since the plant was shown at a FNCBSG NSW meeting several years ago. To date nobody has been able to offer any history about the plant.

Where did it originate and who did the supposed cross ?

The tag indicated it to be a *Billnelia* which is a cross between a *Billbergia* and a *Quesnelia*. I've never been comfortable with this suggestion so I kept asking the question. Where's the proof of cross ?

Having received another plant from a different source indicating *Billnelia* the question was asked yet again. With both plants in flower, comparisons were made with the decision **no** cross was achieved. If you have this plant tagged as *Billnelia* change your label to *Billbergia vittata*.

Billbergia .

This genus was named in 1821 by Thunberg for the Swedish botanist, Gustaf Johan Billberg.

The genus is divided into two subgenera:

Billbergia; petals bend back slightly at the tips.

Helicoidea; petals coil back like a watch spring.

They are native to forest and scrub, up to an altitude of 1,700 m (5,577 ft), in southern Mexico, the West Indies, Central America and South America, with many species endemic to Brazil.

Billbergias mostly grow as epiphytes or among rocks, however they can be grown terrestrially.

A very good free draining potting mix is required.

To attain the best shape and colour desired from Billbergias, fertilise them very little or not at all. Some, like *Bill.* 'Hallelujah' when grown in full sun will achieve the most intense colours and patterns which is what most Billbergias are grown for. Some are grown for their inflorescence, these can be short lived, but very spectacular. Most billbergias look best grown as clumps rather than as a single specimen, they require minimal maintenance.



Some of the flowering *Billbergias* shown by Helen at our July 2014 meeting and *Billbergia sanderiana* photo top right of page.

WHAT SHADE CLOTH TO USE?

Graeme Barclay

At our September meeting in Auckland I gave a talk, based on research I did, to find out which colour and type of shade cloth gives the best results for growing bromeliads. In this article I report on the research findings.

Last year I designed and constructed a new shade house, so I wanted to ensure I used the best cloth to allow me to grow well formed and colourful neoregelias all year round. I found definitive information relating to shade cloth and bromeliads hard to find. I therefore embarked on an 'ask-a-thon', talking to fellow growers and conducting a survey on a bromeliad internet forum. Basically, it comes down to two main things — shade factor and cloth colour. However, common sense says there are also a number of important considerations you need to be aware of when designing your shade house — more on that later.

STEP ONE: COLOUR

You need to select the best colour shade cloth to use for the types of bromeliads you are growing. There are a number of colours available from different sources. Here are the pros and cons from a technical point of view:

Green = Produces low levels of 'PAR' (Photosynthetically Active Radiation), which is the portion of the sun's radiation spectrum that best promotes photosynthesis, thus plant growth. Reflects the green light (which is useless for plants in photosynthesis).

Black = Neutral effect on light transmission. Restricts 'PAR' only by size of holes in mesh, as no light passes through the mesh strands. Absorbs heat and solar radiation but reduces polarised (glary) light off plants.

White = Increases 'PAR' efficiency, and transmits the best balance of light colours. Optimises light diffusion and maximises yield by allowing the most light to reach the plants, for faster and bigger growth. Also reflects the most solar radiation. Can cause polarised light problems (glare) - although knitted types of cloth don't seem to do this as much as woven types.

Red = Promotes good levels of 'PAR'. Reduces the blue, green and yellow light and increases the red and far red light spectrum. Use for accelerated growth, early ripening, greater foliage volume and accelerated photosynthesis. However, can cause some plants to look a 'different colour'.

Blue = Restricts 'PAR' levels. Reduces the red and far red light and increases the spectrum. Slows plant development, giving a more compact plant. Slows photosynthesis, delays ripening. However can cause some plants to look a 'different colour'.

Sandstone / Beige = Allows good light transmission and 'PAR' levels and is best, especially where colour is required (e.g. neoregelias, billbergias etc.) as it enhances the 'reds'. Has a lesser polarised light problem than with white, but

greater than black. So, the best colour cloth for growing colourful broms appears to be Beige / White / Black — probably in that order. Experienced growers I spoke to agreed and almost all use one or more of these colours in their own shade houses.

STEP TWO: SHADE FACTOR

Next, look at what shade factor or 'UV percentage block-out' level is best for your situation. Basically, this comes down to the size of the holes in the shade cloth — a lower percentage means larger holes and more light. My research showed that as a 'rule of thumb' the most commonly used shade factors were 30% or 50% for neoregelias and hardy bromeliads, while 50% or 70% is best for vrieseas and other softer leaf genera.

STEP THREE: ASPECT

The shade house location, aspect to the north-facing and midday sun in both summer and winter; roof shape; wall height; shelter from wind; the proximity to buildings, trees, walls and high fences — are all important factors that you need to take into account when selecting what cloth to use. The 'golden rule' is to ensure the shade house light level is not going to be adversely affected through the whole year by any of the environmental factors mentioned above. For example, if the shade house gets only morning sun and minimal midday and afternoon sun in winter — but, sun nearly all day long in summer, it may be advisable to use two layers of shade cloth in the summer, so you can remove one layer and allow as much light in as possible in winter. This would mean you need to select a lighter gauge cloth (say 30%) for two layers, rather than going for one heavy 50%-70% cloth.

Some other facts and tips:

- Always use knitted cloth, not woven. Knitted cloth won't rip and is very strong. UV stable and lasts for years.
- The higher the cloth is above the plants, the better the light diffusion (spread) and the air flow will be — which is better for growing.
- Two layers of, say 30% cloth does not equal a 60% shade factor — it is more like 40%-50%.
- Use heavy white cloth (80%-90%) to line the inside of shade house walls to reflect extra light onto plants if required, but do not restrict air flow too much (i.e. leave gaps top and bottom).
- Use different coloured and shade factor segments of cloth over different plants if you need to – e.g. seedlings versus mature plants.

Experiment over four seasons to see what works for you and your location. Ensure you design for your conditions and plants.

With acknowledgement to: Bromeliad

Journal of the Bromeliad Society of New Zealand, November 2010, Vol 50, No 11.

Terrestrial plant roots absorb nutrition from the substrate. Combining organic and inorganic nutrients in a potting mix makes good sense. Natural mineral fertilizers can, if required, replace inorganic salt fertilizers.

Granular humic acid: has 8.5% potassium. It increases moisture and nutrient retention. Improves cell permeability and buffers the effects of sodium. Humic acid is a powerful fungi promotant. Toadstools are harmless fruiting bodies of established fungus hyphae (roots). Most fungi are beneficial, "crumb structure" of the soil is created by fungi.

Guano granules: contain phosphate 12% in a form that is both soluble and slow release. It also has potassium 25 - 30% plus trace elements.

Seaweed (Kelp): improves the immune system, contains growth hormones and at least 40 beneficial substances.

Soft-Rock-Phosphate: calcium and phosphate combine to make the insoluble compound Tri-calcium-phosphate. Soft-Rock-Phosphate (mono calcium phosphate) is slowly soluble. The composition of soft rock is Calcium 19%, Phosphate 8-9%, Silicon 15-26% and trace elements. Soft-Rock-Phosphate is unaffected by additional calcium or phosphate. Lime and superphos reduce the quality of soil while Soft-Rock-Phosphate improves fertility.

Animal waste: including manure, blood and bone ('rough' b & b NOT the tan coloured beads) and hoof and horn are a nitrogen source. Cow manure has a low analysis containing about 3kg per tonne of unbalanced plant nutrient. Aged manure from one year old steers is recommended. Horses produce higher quality manure than cows. Sheep manure is high in nitrogen and phosphate furthermore hormones in ram pellets are more potent to those of ewe pellets. Chicken poo has the highest level of nitrogen, phosphate and potassium. All bird manures are harmful when fresh. Heat dried human sewage is used in commercial potting mix. Human sewage has satisfactory nutrients but contains heavy metals and pharmaceutical residues. It also carries possible human disease hence the warning to use gloves, mask and goggles.

Composted plant material: originating from bark, leaves, macadamia nut husk, peanut husk, straw, wood ash are a source of carbon. Spent mushroom compost is a good source of both carbon and nitrogen. Mushroom compost formulation is straw, dried blood, calcium, horse manure and trace elements. Disadvantage of mushroom compost include alkalinity and pesticide residue.

To protect outdoor plants during inclement weather the best mulch is probably Alfalfa (Lucerne) hay. Significant increases in growth occur when plants are in close proximity to Alfalfa (*Medicago sativa*). Research led to the isolation of Triacontanol as the active principal of stimulus. Triacontanol is a ubiquitous long chain alcohol found incorporated in the surface of many plants.

Coconut fibre is popular in potting mixes. A pack of Coco peat may have on the label; E.C. = 0.5 ds/m. This reads: Electrical Conductivity = 0.5 deci Siemens per metre when coco peat is in pure water. Coco peat contains Sodium salt. Perhaps coco peat could be soaked in water containing Potassium Chloride. Sodium combines with Chloride to make common salt. Water should then theoretically wash out the saline solution.

Coco peat accumulates nutrients and this can lead to an overload of NPK. All fertilisers should be at a very low percentage to prevent nutrients building up to toxic level. Two or three part mixes or Black and Gold represent types of suitable nutrients.

To use composted pine bark with coco peat is ill-advised. Tannin in bark is made insoluble with Iron Sulphate. There is a possibility that free tannin and free sodium could affect plants. There is also the likelihood that sulphate and sodium could combine to make sodium sulphate — Deadly to plants.

Over time there is a gradual build up of salt within the potting mix. Signs of excess salt, not just sodium salt, include wilting, pathogen attack, plant debility and finally death. All pot plants should be regularly flushed with water to remove accumulating salt residue. Pot plants are maintained at peak condition when the potting mix is annually replaced.

THE END

From Around the Shade House

A recently asked question about fly speck scale:

“Are they actually harmful to bromeliads or just unsightly” ?

Forward your response to the editors at: pinegrovebromeliads@bigpond.com

A hand written note will be just fine for those not on computer.

We may use your responses to assist in answering this question, names will be withheld if preferred. When this question was raised on a forum recently there was no response given, so lets see what your thoughts are.

Thank You in Advance

Novice Popular Vote

1st	Flo Danswan	<i>Vriesea gigantea</i>
2nd	Debbie Smith	<i>Tillandsia bulbosa</i>
3rd	Wendy Buddle	<i>Neoregelia</i> 'Rosy Morn'

Open Popular Vote

1st	Marie Essery	<i>Neoregelia</i> 'Predator'
1st	Trish Kelly	<i>Vriesea fosteriana</i> var. <i>seideliana</i>
1st	Meg Kerr	<i>Vriesea</i> 'Limelight' (unreg.)

Judges Choice

1st	Debbie Smith	<i>Tillandsia bulbosa</i>
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Decorative

1st	Trish Kelly	<i>Cryptanthus zonatus</i> f. <i>viridis</i>
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Comments from the Growers.

Flo bought her *Vriesea gigantea* from Coolum 12 months ago. She keeps it in the shade house under 70% beige shade cloth and fertilises with Seasol.

Debbie acquired a piece of her *Tillandsia bulbosa* 2 years ago from a neighbour. It hangs on her back fence in a sheltered corner and gets watered when it rains and has no fertiliser. A very well-grown plant.

Wendy's *Neoregelia* 'Rosy Morn' was a pup from the raffle. It has dappled light all day under a *Banksia*, no fertiliser and only gets water when it rains.

Marie has had her *Neoregelia* 'Predator' for many years and has had many pups from the original plant. It is growing outside and shows no sign of stress from either sun or the cold. Fertilised when first potted.

Meg bought her *Vriesea* 'Limelight' (unreg.) from John Fitzpatrick at the Atherton Tablelands in 2012. It is in the shade house with the orchids, Meg found her bromeliads were being over-fed and over-watered because they were getting the same treatment as the orchids. She now does the orchids by hand.

Trish's *Vriesea fosteriana* var. *seideliana* is pup number 15 from the original bought at the Maclean markets. It is 2 years old now and kept under 50% black shade cloth.

Trish has had her *Cryptanthus zonatus* f. *viridis* for 3 years. It is on a verandah under cover as it doesn't like to get wet in winter. It is kept in a saucer with moist sand to keep it humid rather than wet.

Kay's *Vriesea vagans* has been growing on a coconut ball for over 12 months in her shade house. No fertilizer, gets regular watering, enjoys good air circulation.

Flo bought her *Neoregelia* 'Tiger Cub' about 6 months ago from Newcastle. It is growing under 70% shade cloth and gets the morning sun.