

VOLUME XLIX

Fourth Quarter 2015



Committee Details

PRESIDENT VICE PRESIDENT TREASURER SECRETARY COMMITTEE

MEMBERSHIP SECRETARY LIBRARIAN SHOW CONVENOR **BROMELIACEAE EDITORS BSQ WEBMASTER** ASSISTANT WEBMASTER FIELD DAY COORDINATORS SEED BANK COORDINATOR SUPPER STEWARDS PLANT SALES **ASSISTANT SALES** COMPETITION STEWARDS NEWSLETTER COORDINATOR ASSISTANT SHOW CONVENER HALL COORDINATOR **RAFFLE COORDINATOR EXHIBITION COORDINATOR**

The Bromeliad Society of Queensland Inc.

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MONTHLY MEETINGS OF THE Society are held on the 3rd Thursday of each month except for December, at the Uniting Hall, 52 Merthyr Road, New Farm, Brisbane, commencing 7:30 pm. **ANNUAL GENERAL MEETING** is held immediately before the February General Meeting

Front Cover: Tillandsia streptophylla	By: Lesley Bayliss
Rear Cover: Aechmea nudicaulis	By: Sharon Born

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CALENDAR OF EVENTS 2016

Monthly Meetings 7:30 PM at	Uniting Church, Merthyr Road, New Farm
January Meeting	21 January
February Meeting (AGM)	18 February
March Meeting	17 March
April Meeting	21 April
May Meeting	19 May – Major Show Event
June Meeting	18 June
July Meeting	16 July
August Meeting	20 August

Shows and Exhibitions

Autumn Show	12 th -13 th March, Les Hughes Sporting Complex. Baker St (off
	Francis Rd), Bray Park.
Tillandsia Day	April 10 th tentative
Exhibition	7 th – 16 th August



2015 Spring Show Results

-	ion (Olwyn Ferris Cup) Jelia 'Snake Charmer'	Grown by M & I	M Cameron		
Reserv	e Champion (Arnold James C	up)			
Vriesed	r delicatula	Grown by Marga	aret Kraa		
Best Pi	tcairnioideae (Bob Paulson N	lemorial)			
Tied	<i>Dyckia</i> delicata	Grown by Barba	ara McCune		
	Deuterocohnia	Grown by Maxir	n Wilson		
Best Sp	pecies				
Tillandsia streptophylla		Grown by Ron Jell			
Best Cr	yptanthus				
	nthus warasii	Grown by Barba	ra McCune		
Best Br	omelioideae (Len Butt Troph	v)			
	<i>elia</i> Skotak Hybrid	Grown by M & N	M Cameron		
Best Ti	llandsioideae (Rolley Riley Tr	ophy)			
Vriesed	r Casablanca	Grown by M & N	VI Cameron		
Most S	ovice Grower (Marie Gracelli uccessful non Commercial uccessful Commercial	Trophy)	Jenny Ittensohn Barry Kable Nigel Thomson		
Dh a ta a	Opposite clashuing from T		Diant Manageria		

Photos Opposite clockwise from Top Left: Champion Plant *Neoregelia* 'Snake Charmer', Cr Matthew Burke presents Olwyn Ferris Cup to Michelle and Mal Cameron, *Vriesea delicatula* (M.Kraa) Reserve Champion, *Tillandsia streptophylla*(R Jell), *Dyckia delicata* (B McCune), *Deuteracohnia sp* (M Wilson)

FOREST DRIVE NURSERY	BRISBANE BROMELIAD CENTRE
Specialising in species and varieties mostly	HUGE SELECTION of
from imported stock.	Aechmeas, Vrieseas, Guzmanias,
Tillandsias to Titillate even the most discerning fanciers. Beautiful Vrieseas (incl Silver species), Guzmanias, Aechmeas, Neoregelias, etc. Visitors welcome- Please phone first 02 66554130 or send SAE to Peter Tristram, PO Box 2, Bonville, NSW	Neoregelias Nidularium & Tillandsias together with rarer species and hybrids BARBARA and LORRAINE Phone (07) 5433 0303 VISITORS by APPOINTMENT

New Registrations on BCR

by Geoff Lawn

(Geoff Lawn is the Registrar for the Bromeliad Cultivar Register accessible on bsi.org website)

Featured here is another handful of recent registrations from the BSI's Bromeliad Cultivar Register at http://registry.bsi.org. Four of these beauties are Australian-bred and two are overseas imports. Enjoy !

1. <u>Neoregelia</u> 'Twisted Sister'. [(*N. carolinae* variegated x *N.* 'Hannibal Lecter') x *N.* 'Norman Bates'] x 'Joao Marcio'. Bred in 2005 by Chester Skotak in Costa Rica. Large, open rosette to 70cm diameter x 40cm high. Broad, green spiny leaves with central cream variegation, sometimes in medio-picta pattern, with punctated red cross-banding. Depending on culture, some centre leaves can be slightly twisted, hence so-named by Eloise Beach, who supplied this photo.

2. <u>x Hohenmea</u> 'Shintaro Shadow'. (*Aechmea* 'Shogun' x Hohenbergia leopoldo-horstii). Bred in 2007 by Ross Draper and named by Val Honeywood. An upright, stocky rosette to 40cm diameter x 70cm high. In strong light, the broad, spiny, bronze purple leaves have wide, silver cross-banding. The erect, branched, slim inflorescence to 1.2 metres tall has rose pink bracts and creamy yellow sepals. Photo by Val Honeywood.

3. <u>Cryptanthus 'Grace Goode'</u>. ('Coral Bates' x 'Elaine'). Bred in 2011 by Queenslander Doug Cross, who supplied this photo. Large, rounded star-like rosette up to 45cm diameter. The undulating compact leaves are toned light brown, pink and maroon. Silvery scurfed cross-banding of various widths are concentrated more at the down-turned leaf tips. Named in honour of the Aussie pioneer of Cryptanthus breeding.

4. <u>Billbergia 'Jezabel'</u>. ('Golden Joy Purple' x 'Afterglow'). Bred in 2007 by Stuart Beasley who took this photo. Vase-shaped rosette to 30cm diameter x 35cm high with broad mahogany / maroon leaves spotted cream. The leaning inflorescence has scarlet scape bracts, pale green ridged ovaries, creamy pink sepals tipped blue, and navy blue flowers.

5. <u>Vriesea 'Federal Beauty'</u>. ('White Bands' x 'Megan'). Bred in Federal, New South Wales by Robert and Melissa Dilling in 2007. A hand-picked seedling was raised to maturity by Jack Koning. Large, open rosette to 60cm diameter x 36cm high. Broad, arching, pure white leaves are heavily cross-banded with fine, filagree-like slate grey / brown glyphs and with reddish leaf tips on new growth. The erect, simple spike reaches 1.2 metres tall. Photo by Tamera Ison.

6. <u>Neoregelia</u> 'Fantabulous'. [(carolinae variegated x 'Hannibal Lecter') x 'Tiger Cub'] x ('Punctate Red' x 'Joao Marcio'). Bred in 2005 by Chester Skotak in Costa Rica. Large "mini" to 18cm diameter x 15cm high. Bronze green leaves are marginated creamy pink and with punctated, hot pink cross-banding. Named and photographed by Eloise Beach.



Above: 1 <u>Neoregelia</u> 'Twisted Sister'. [(*N. carolinae* variegated x *N.* 'Hannibal Lecter') x *N.* 'Norman Bates'] x *N* 'Joao Marcio'

Right: **2** <u>x Hohenmea 'Shintaro Shadow'</u>. (Aechmea 'Shogun' x Hohenbergia leopoldohorstii).

Below: **3** <u>Cryptanthus</u> 'Grace Goode'. ('Coral Bates' x 'Elaine').







Above Left: 4 <u>Billbergia</u> 'Jezabel'. ('Golden Joy Purple' x 'Afterglow')

Above Right: 6 <u>Neoregelia</u> 'Fantabulous'. [(carolinae variegated x 'Hannibal Lecter') x 'Tiger Cub'] x ('Punctate Red' x 'Joao Marcio')

Below: 5 Vriesea 'Federal Beauty'. ('White Bands' x 'Megan').



Popular Vote Aggregate 2015

Advanced	Feb	Mar	May	Jun	Aug	Sep	Nov	Total
Barry & Ann Kable	9			5	4			18
Peter Paroz				5	5		5	15
Bruce Dunstan		8						8
Mal & Michelle Cameron						5		5

Intermediate	Feb	Mar	May	Jun	Aug	Sep	Nov	Total
Ron Jell		3	5	7	7	3	5	30
Barbara McCune		5	3	5	4	5	3	25
Pat Barlow	6	1	7	1	4	1	1	21
Maxim Wilson	4	2	1			7	2	16
Pam Butler		1	2	1	3	2	3	12
John Olsen		6		3		3		12
Margaret Kraa		1					5	6
Greg Aizlewood				2			2	4
Fred Thomson					2	1		3
Greg & Narelle Aizlewood						3		3
Narelle Aizlewood							2	2
David Vine		1						1
David Rees				1				1
Evelyn Rees							1	1

Novice	Feb	Mar	May	Jun	Aug	Sep	Nov	Total
Dorothy Andreasen		8	7.5		7	-	6	28.5
Livia Doidge	1			5	4	6	3	19
Rick Cairns	8	3				5		16
Jenny Ittensohn	2	1	2.5		2	2	3	12.5
Charmaine Rooney					3		3	6
Sharon Born		2	1.5			2		5.5
Jenny Brittain						3	2	5
Kayleen Courtney		1	3.5					4.5
John Hodgkinson				3	1			4
Steve Molnar						3		3
Selga Boothby						1	1	2
Denice McLean						2		2
Rose Levanti-Niblock					1		1	2
Kelvi Herrod							1	1
Denise Ball					1			1

Decorative	Feb	Mar	Мау	Jun	Aug	Sep	Nov	Total
Denice McLean			3		5	5		13
Sharon Born					3		5	8
Jenny Brittain & Steve Molnar			5					5
Brian Wallis			1					1

Tillandsia 'Hal's Nidus' in Oz and 'Coquette' in the USA by D Butcher

First, let us look at *Tillandsia nidus* described by Rauh in 1983 as a species found somewhere in Mexico some years before. We even had a wrong photo in Journ. Bot. Soc. 31(5): 218-9, 1981 and it was finally decided by Harry Luther that it was a natural hybrid between *T. fasciculata* x *ionantha*. Note that we still did not know where it could be found in the wild! We do know that by 1997 Bird Rock Tropicals nursery, California had it in their catalogue but no location. Renate Ehlers collected the plant in 2006 near Coatepec in the State of Vera Cruz, Mexico. We do know that with natural hybrids, back crossing occurs making it difficult to know what range this hybrid might have.

Now to Australia, where this plant became a Tillandsia Discussion Group relay when Mark Supple of Newcastle showed a photo of a flowering plant of his so-called *T. fasciculata* Minor. At the same time there had been in circulation a quite different plant going for some time under the name *T. fasciculata* Minor. Here we had the same name used for at least two different looking plants with the more common one having a single spike. This second plant was eventually added to the BCR in May 2015 as *Tillandsia* 'Minor'. As you all know, I shudder at the use of such adjectives when linked to a species name because it means there are differences between this plant and the species, but nobody has bothered to define these differences.

The advantage of a Tillandsia Discussion Group is that we are often terrible poker players and love to show our hand so others can get involved. This was no exception where it appears the other plant running under the name *T. fasciculata* Minor started its Australian life in the 1980s when Hal Ellis from Victoria was importing plants with Garry Thompson. As is usual, offsets get exchanged and Chris Larson was not happy with the name 'minor' and started investigating. He even cornered Renate Ehlers at the Adelaide Conference in 1995. It was felt that the plant could be Rauh's *T. nidus* which was still a somewhat unknown quantity at that time. Nothing further was done other than Chris and Maurice Kellett changing their name to *Tillandsia nidus*.

This then is what we know about the plant in the wild but can we link a plant imported in the 1980's to *Till. nidus* or *Till. xnidus*? The safer option was to give this clone the name of *Till.* 'Hal's Nidus'. This name was registered in 2009 with Mark Supple's photo being used as an example. The reason why I picked the name is that if your plant can be traced to Hal Ellis or has a suspect name like 'nidus' you can at least follow the threads. There are certainly other plants that look similar to this plant and have doubtful pedigree which could be linked to 'Hal's Nidus' but that is the decision of the owners.

As for the future where someone is trying to identify a plant at least we have photos of what we consider typical *Till. fasciculata, Till. nidus* and *Till.* 'Hal's Nidus'.







Photos clockwise from Top left: T x Nidus; T Hal's Nidus(Photo M Supple); T Coquette; T Coquette; T Minor (Photo Ron Jell) Now to phase 2: In May 2015 Ross Little reported that the Pinegrove Nursery ledger revealed *Tillandsia fasciculata* hybrid – Guatemala BBK #2662, 5/86 Gleeson AND he was still growing the plant under this name. It looked like 'Hal's Nidus'. May 1986 is a long while ago and what happened to the offsets that escaped from Pinegrove? Were they grown on as *Till. fasciculata* hybrid? I suggest very little happened but with growers trying to guess the father, for example *Till. nidus* and *Till. velutina. Tillandsia velutina* is an interesting one because it was not described until 1994 and *Till. fasciculata* x *velutina* has recently gained notoriety with a Gardening Guru on the television. As you also know I dislike formulas because you never know who coined the formula unless you ask questions. Because nobody has reported importing other than these two references, all these lookalikes should be linked to 'Hal's Nidus'.

Now to phase 3: In August 2011 Dennis Cathcart registered a *Tillandsia* 'Coquette' for an alleged natural hybrid found in Guatemala which Harry Luther had decided was probably (*rotundata* x *capitata*). We do not know who may have imported this to Australia but we do know that Pamela Koide Hyatt was selling TX137 at the World Conference in Cairns in 2008. TX137 became *T*. 'Coquette' too. John Olsen tells me that there seemed to be few for sale but he bought one which still has TX137 on the label.

Are you interested in having an almost correct name on your plant and I don't mean formula? Nobody has dissected a (*rotundata x capitata*) or even a (*fasciculata x* query) to show they are the same even though they look it. If you can trace your plant to its origins you will know what name to use. If you cannot, then put the problem at the door of those who change labels without recording their actions and just call it Tillandsia hybrid.

Acknowledgements: Thanks to Ross Little and Geoff Lawn for their valued input.

WILDFIRE GARDEN	THE OLIVE
BROMELIAD NURSERY	BRANCH
	Len and Olive Trevor
ALCANTAREAS FOLIAGE	232 Canvey Road, Ferny Grove Q,
VRIESEAS	4053
NEOREGELIAS & OTHER GENERA	Specialising in hybrid Vrieseas,
	Aechmeas, Variegated
VISITORS WELCOME	Neoregelias
BY APPOINTMENT	Skotak Hybrids, Aussie Dream and
Cheryl Basic	varieties, and other quality
1560 Yandina-Coolum Road	Bromeliads
Yandina, 4561	
Ph: 07 5472 8827	Phone (07) 3351 1203
Mob: 0403 193 069	VISITORS WELCOME BY
wildfiregarden@westnet.com.au	APPOINTMENT
	Please Phone First

Billbergia

The genus Billbergia belongs to the subfamily Bromelioideae, and is subdivided into two subgenera, *Billbergia* and *Helicodea*. Most of the cultivated species belong to the subgenus *Billbergia*. The flowers are the best way to tell the subgenera apart. *Helicodeas* are called the "watch spring" billbergias because their flower petals coil up like a spring, while the flowers of the subgenus *Billbergia* recurve when open, but do not coil on themselves.

Billbergias are characterised by a tall vase form, often with brilliantly coloured flowers, and with relatively few leaves. Their vase or cup shaped funnels are formed from 4 to 10 leaves which, while narrow, forms a water reservoir big enough to supply the plant over a long period of time. Being narrow, evaporative loss is reduced making billbergias quite drought tolerant.

The family name Bromelioideae means "like a Bromelia" which are among the "prickliest" of bromeliads often used as impenetrable hedging. As members of the Bromelioideae subfamily, they are well-armed with spines on the leaf margins. Bromelioideae is in evolutionary terms the youngest of the subfamilies arriving well after the Pitcairnioideae and Tillandsioideae subfamilies. They are genetically less stable and much more variable than the other subfamilies. Most produce berries which are spread by birds and small animals.

Billbergias often have colourful flowers in a variety of colours such as purple, blue, yellow, green or white, some so large as to be pendulous. However they are short lived, so in cultivation plants are grown for their colourful and interestingly patterned foliage. The foliage can be mottled, banded, variegated, or just plain green.

Billbergias are largely epiphytic in habitat growing in large clumps in good light in wooded areas and forests at elevations up to about 1700m. While epiphytes, plants which fall to the ground can readily survive terrestrially. Many are grown in soil in gardens. Billbergias are found from southern Mexico through the Caribbean and Central America and south into Brazil and northern Argentina. Many species are endemic to Brazil. The plants range in size from around 20cm tall to some quite large plants with leaves exceeding a metre.

The genus Billbergia was named for Gustaf Johan Billberg (1772 - 1844). The plant genus Billbergia was named for him by Carl Peter Thunberg. Billberg was a Swedish botanist, zoologist and anatomist, although professionally and by training he was a lawyer and used science and biology as a hobby. He was elected member of the Royal Swedish Academy of Sciences in 1817. Carl Peter Thunberg (1743- 1828) studied medicine and natural philosophy as a student of Carl Linne, at the University of Uppsala and continued his studies in Paris, Amsterdam, and Leiden. On concluding his studies, Johannes Burmann, on the recommendation of Carl Linne, offered Thunberg the chance to visit the Dutch colonies and Japan. He spent the period from 1772 to 1778 in the Far East collecting plants and working as a surgeon. He visited London before finally returning to his homeland. There he made the acquaintance of Joseph Banks. Arriving in Sweden in 1779, Carl Peter Thunberg learned of the death of his teacher Carl Linne. He was soon named lecturer for botany and was appointed professor for medicine and natural philosophy at his home university in Uppsala in 1784. Thunberg held this position until his death in 1828, in Thunberg. Interestingly he appears not to have spent time in South America but named the genus Billbergia in 1821 – presumably based on collections of others.

Billbergia pyramidalis was first introduced into cultivation in 1815, but it took over 80 more years before the first hybrid, 'Herbaultii,' a cross between *B. amoena* and *B. leopoldii* (now named *B. brasiliensis*), was made in France in 1897. Billbergias were among the first bromeliads to be hybridised. They flower readily and the flower parts are easily seen facilitating pollen transfer.

Billbergias on the Gold Coast

by Greg Aizlewood

[Ed: Following the pattern used in prior issues I invited Greg Aizlewood to respond to a set of topics to provide his experience with billbergias.]

What Drew you to this Genus?

I guess I was approached by an old grower and asked if I liked the plants and would carry the flag for a while.

Best Appearance

Appearance is a matter of personal choice. Some like to grow the plants under shady conditions while others prefer to grow them in bright light – some grow them in the ground while others prefer pots –some prefer to grow the plants without the addition of nutrition while others prefer to add nutrition during the pot up and foliar feed during the growing season. I like to see my plants healthy while exhibiting tight distinctive tubular shape and vibrant contrasting colour. If this is your aim then it is a matter of experimenting with light, nutrition, and water to achieve the desired result under your conditions.

Potting Media

Once again what are we trying to achieve? My plants are stressed out to produce colour therefore I do not want a mix that is going to provide massive amounts of nutrition. I use a mix that has been used to grow plants in the previous twelve months or 25mm raw pine bark to which I add approximately ¼ of a teaspoon of 12 month slow release fertilizer and a little lime to sweeten the mix.

<u>Fertilizer</u>

After the initial ¼ teaspoon on pot up, I foliar fertilize with Horticultural Solutions Bromeliad fertilizer at half the recommended rate on a fortnightly basis.

<u>Water</u>

I water once a week in winter and two to three times a week during summer. All water is dispensed through an automatic system which comes on at four o' clock in the morning. On hot dry windy days I may apply water in the late afternoon.

<u>Pests</u>

If the plants are healthy, pests should not be an issue. However on occasions, scale can become evident if ants are let roam the growing area. A preventative program carried out in September using systemic insecticides can be beneficial against ants and scale.

Best colour

Bright vibrant colour is, in my humble opinion the result of, a fine balance between the light intensity, warmth, nutrition and water. Good colour is achieved by experimenting with these factors under your conditions. Under good light and warmth with not enough water and food the plants will probably expire while too much water will also kill plants. Put excess food into the equation and you will end up with big green cabbages. I find slight adjustments to these factors more successful.

Tissue Culture Process

by Lynn Hudson 2015

Tissue culturing plants is part of our plant supply system and is being used on many plants. I have heard of Societies who have ruled that there will be no tissue cultured plants in their Group. Fact is we would not know what is tissue cultured. If you see a bench of plants all uniform you can usually safely assume they are cloned by tissue culture. It is not new but it is more widespread. Here is how I understand the process. The eye is taken from the stem of the plant and placed in a liquid mixture or 'agar'. This mixture is very important. The contents are usually a secret as it is the food for the eye to grow new plants. Cleanliness is very important, everything must be utterly sterile, as a germ can wipe out the whole batch. The eye produces small plants, these are removed and placed in agar and they proceed to produce more plants. This can go on and on infinitum but obviously there is a point where the plants will not carry the original genes. They could be completely different and could be weaker. The small plants arrive at the nurseries, usually in a peat mixture, and are separated and grown on. Some plants embark on a fast journey in a controlled environment - fed to maturity then treated to bring them into flower. Feeding and initiating flowering provides flowering plants all year round plus flowering at specific required times.

Guzmanias and Vrieseas seem to cope more successfully than Aechmeas and Neoregelias. Aechmeas usually grow true through the first generation and produce many pups but this next generation exhibits problems. Some take years to flower, others grow perfectly to halfway through a normal cycle then proceed to distort in the centre. Some revert to central distorted heads but will not produce an inflorescence. It is common to see 'coxcombing' – the flower bracts i.e. over in a row, leaving a long v-shaped space - in most cases the flowers bloom. The main advantage to nurseries and finally to the general public is access to many plants that otherwise would not be available to us.. Tissue culture provides immediate worldwide access to new varieties, especially hybrids. It causes variegations in plants - most of us love variegations! Like it or not, the process is here to stay.



Photos above clockwise from Top Left: *Billbergia* Hybrid unreg, *B.* 'The Well', *B.* 'Limestone', *B.* Hybrid unreg. Photos opposite clockwise from Top Left: *B.* "Appie Anniversary', *B.* 'Talbot Eve' unreg, *B.* 'Talbot Dust' unreg, *B.* 'Midnight', *B.* 'George Dubicas', *B.* 'Ormeau'



'The WOW Factor'

by Peter Tristram

(This is a presentation by Peter Tristram to the 2015 Bromsmatta Conference)

As a teenager, I had read both volumes of *Across Unknown South America* by A. Henry Savage-Landor. This was quite an adventure, adding considerable fuel to an already emerging fascination with that continent. I had no idea, at the time, that my life would polarise so incredibly about one particular plant family from the Americas that barely rated a mention in the book - BROMELIADS. I had, however, unbeknown at the time, grown up with broms, with such treasures as *Billbergia nutans*, *B. pyramidalis*, *Neoregelia spectabilis* and *Aechmea fasciata* growing under the 'forest' of mostly native trees and shrubs that my father and mother had planted on our half acre block in Hurstville, Sydney.

When my bromeliad collecting obsession began in earnest in the late '70s, my wife, Bev and I were living in the lower Blue Mountains, west of Sydney. We had taken up teaching appointments down on the plains. We used to head to the 'wow factor' Blue Mountains world heritage sites on weekends and we (more specifically, I) also used to seek out nurseries to search for interesting 'wow factor' plants to decorate our rental, as a sideline. On one such trip, near Springwood, I chanced upon a veritable treasure-trove of the most fascinating plants. I have forgotten the name of the nursery but the images of these amazing bromeliads are firmly etched in my memory banks. I saw my first large Neo, an impressive, purple-lined, water-filled tank of *Neo. concentrica*- WOW!.. My first Vrieseas in bloom sporting names like *heterostachys*, Nigra and Belgian Hybrid - WOWSERS!.. And my first glyph Vriesea, *Vriesea hieroglyphica* - MANY WOWS! Despite being broke, a couple of the cheaper broms were acquired.

Not long after this, I was told of a nursery that might sell the ultimate WOW plant to me at the time, *Vriesea fosteriana*. I had seen what I described to Bev as the 'most amazing Persian carpet plant'! Off I went to Spry's and a couple were purchased - I was ecstatic. On the trip home, however, some leaves were burnt as the hot summer sun blasted through the window - a lesson that many of us have learned! It was a while, though, before I could afford AND locate a *Vr. hieroglyphica* - at Peterkin's Nursery near Macksville, of all paces! Before long, Bev realised the weekly picnics inevitably involved a nursery adventure component! I had located every nursery within 'cooee' selling broms and had met many equally-obsessed folk. I joined the Bromeliad Society of Australia and the Bromeliad Society Incorporated (now International) and my fate was sealed!

Books were also purchased: Wilson's *Bromeliads in Cultivation* and *Bromeliads for Modern Living*; Seabourn's *Bromeliads, Tropical Air Plants*; Padilla's *The Colorful Bromeliads, Their Infinite Variety*; Rauh's *Bromeliads for Home, Garden and Greenhouse* and many more. To satisfy my scientific enquiries, the three volumes of *Flora Neotropica* were a must as well. Information was being absorbed, names memorised, the science studied, collections raided, importing initiated. The blast-off had begun! The bookshelf needed more room and so did the new greenhouse. Aussie and Kiwi Societies and individuals were publishing articles and books too, providing local information and showing off locally produced plants. How many broms eliciting the wide-eyed, wide-mouthed WOW could there be? We all know the answer to that!

I guess my path to Bromania is similar to just about everyone else's! Compared to today, what was available, in the days before the guarantine restrictions were relaxed in the '80s, was quite limited. Importing was a pretty simple affair but still fraught with risk. Many of the available plants had been grown from imported seed and some turned out to be garden hybrids. Imported plants were still gassed and a quota of 6 per species per person, forever, applied. 'Nursery stock' meant just that and hybrids didn't figure in the paperwork at all. It can be admitted to now that some little errors in naming sometimes occurred so 12 T. tectorum might have accidentally arrived under 2 names, or more over successive imports. Interesting letters were sometimes mailed by the Plant Quarantine Export and Import branch of the NSW Department of Agriculture and, no doubt, by the equivalent in other States (Federally controlled AQIS came later). Eventually the system was abandoned as it was unpolicable and the increasing commercial value of bromeliads was leading to pressure from bigger importers. Around about this time nurseries like Dos Pueblos and Amazon in Sydney, were accessing commercial quantities of seed of highly prized species, like Tillandsia cyanea, Guzmania remyi, Aechmea chantinii, Vriesea fosteriana and Vr. splendens. The availability of very showy broms increased rapidly and hasn't slowed down much since!

The Bromeliad Society of Queensland Inc.

Notice of Annual General Meeting 18th February 2016

The AGM of The Bromeliad Society of Queensland Inc. is to be held at 7.30 pm on Thursday 18th February 2015 at the Uniting Church Hall, 52 Merthyr Rd, New Farm.

AGENDA

Welcome Minutes of Previous AGM President's Report Treasurer's Report / Financial Audit Election of Officers and Management Committee General Business Approval of Auditor for 2015

Membership Renewal

Members are reminded that their membership fees are now due and should be paid prior to the AGM. Annual membership runs from January to December.

Overseas, propagation and development of new cultivars of species and new hybrids gained pace. We, in Australia and New Zealand, would see the articles and ads primarily in the BSI Journal and lots of very coveted plants in the new books being published periodically - so much to add to our collections! In Australia pioneer breeders like Bill Morris and Grace Goode were churning out Billbergias, Cryptanthus and Neos, in particular, helping satisfy the demand for new looks, using the limited range of stock already in cultivation here.

One thing built on another and, with so many new species and hybrids being imported, new looks were becoming easier to produce locally and the number of talented breeders was growing, some of whom are, likely, here at the conference. There was still a long way to go, though, to catch up to the variety being produced by the Americans and Europeans and some Latin countries were also featuring well. By the end of the '80s, lots of great new 'good-lookers' were entering the market and the variety of genera and bigenerics and their species, hybrids and cultivars was rapidly increasing. Good times for us Brom Freaks and even better times ahead!

The relaxation of the import quotas really opened the door. Aussies (and Kiwis) headed overseas to seek out wonderful new broms, with zeal. World conferences were attended and collections in the US regularly raided. Commercial growers were importing tubed stock and flasked material from approved suppliers such as Corn Bak and DeRoose in Europe and the chainstores started stocking ever-increasing numbers and varieties of mighty showy broms.

MIDHURST BROMELIAD NURSERY	M.J PATERSON
SPECIALIST GROWERS OF	212 Sandy Creek Road
TILLANDSIA SEEDLINGS	Gympie Qld, 4570
Hard grown to suit All Australian conditions	A large range of Bromeliads for sale especially our own hybrid Neoregelias,
Wholesale and Mail Order Only	Tillandsias, Cryptanthus and Vrieseas
Free price list of Tillandsia	
and other genera from	Call in if you are up this way, but
MIDHURST BROMELIAD NURSERY P.O. BOX 612	please phone first Phone/ fax: 07 5482 3308 email: wm_paterson@bigpond.com
HURSTBRIDGE, 3099 PHONE (03) 9718 2887 EMAIL : Midhurst@netspace.net.au	Also available my Bromeliad Books on line at <u>www.bromeliad-hybrids.com</u>

The time of the bromeliad had arrived. Propagation techniques improved too with the science of brom growing studied in depth. Benzing published *The Biology of the Bromeliad* and articles and information regarding bromeliad propagation were in journals, magazines, publications and technical and coffee-table books. Seed and tissue-raising was taking only a fraction of the time it used to.

Over here, modern pioneers dispelled the lingering myth that broms don't need fertilising, by mass-producing Alcantareas, Neos, Vrieseas, Aechmeas and others in amazingly short times, releasing a stream of coveted plants onto the market in large numbers. Rather than flood supply, demand rapidly increased (Who could resist?!) and hundreds, if not thousands, of new converts emerged yearly. You can WOW yourself just about anywhere now and add to the collection of lovelies at chainstores, nurseries, Bromeliad Society meetings and shows, markets, fetes, fairs, collector sales, mail orders, EBay, Facebook and all manner of internet sales avenues.

Naturally the 'WOW-factor' is in the eyes of the beholder too, making keeping up with trends and not missing new releases a very stressful task! Commercial importers and breeders often specialise: showy Guzmanias and Vrieseas for the indoor market; weird and unusual Tillandsias for Tillnutters' outdoor collections; vibrantly coloured Neos for home and garden; Alcantareas and Aechmeas as statement plants; spiny terrestrials for the temperate garden and the weird and wonderful for anyone who graduated past the pretty, mass-produced stuff.

Most, if not all, of those pioneering WOW FACTOR plants have lost none of their appeal! What was once a WOW Factor plant always will be and are often they are still the first ones purchased by newly-crazed brom freaks. Interestingly, some of those magnificent broms that triggered feelings of utter admiration are still very hard to obtain. Many were species, either lost to cultivation, difficult to propagate or simply forgotten. Fortunately there are many collections, private and institutional, that are preserving so many of these wonderful species, many lost to nature unfortunately, which have been the building blocks of the range of absolutely stunning hybrids and cultivars. And some are finally making a mark in popular cultivation.

Once a WOW, always a WOW! Bromeliads ... Enjoy!



Pests of Bromeliads in SE Queensland by Greg Aizlewood

[Ed: Greg makes reference in the article to recipes for making your own treatments. These will feature in the next edition.]

Not many pest attack Bromeliads yet those that do can rapidly reduce the leaves of a plant to ribbons, or cover the foliage with unsightly black or brown spots. Anyone who has been associated with Bromeliads either as an observer or grower will at some time have been exposed to one or all of the above in their own garden or one visited. Over the years all manner of eradication methods have been suggested with varying amounts of success. The success of any pest irradiation method I believe is like all other things directly proportional to the effort you are prepared to make multiplied by the time available to dedicate to the task and in this day and age we don't seem to have enough time for pleasures let alone another task like getting rid of pests. So sadly we have a tendency to favour the quickest and easiest method, which will suffice for now but inevitably, will probably cause a lot of grief further down track.

I would like to think that most people out there practice natural pest control methods but in reality I know different. I can hear people saying "those old methods don't work these days" and "what happened to good old Whodat or Whato". They used to wipe out all those pests but now they have taken them off the market". They were taken off the market because we were told that among other things that they were bad for the environment and not very good for us either. In addition some of the chemicals would also wipe out all the good insects, which in fact made it easier for the baddies to take up residence among our plants. In spite of all our efforts the pests continue to plague our gardens. What are we to do? First, let's sit down and consider the pests to which our plants are exposed and the possible controls that may be available at this time. Then, once we have the pests under control, why not look at some possible ways or practices to prevent or deter reinfestation

PESTS

Grasshoppers

Mainly active in the warmer months and slowdown in winter. Grasshoppers can vary in colour (green to dark brown) and size (1"to3"). In plague proportions they can decimate a collection overnight and will attack the leaf on all forms of Bromeliad as evident by visual physical damage to the leaves and droppings which resemble that of mice around the damaged area

Controls: They can be caught by hand and stood on or as our own Grace Goode does, simply pluck them from their perch and rip their heads off in the blink of an eye while in mid-sentence. The commercially or home prepared Pyrethrum spray is also effective in controlling infestations If you choose to use chemicals a spray of Rogor, Malathion, Confidor, or Resolver will not kill them instantly but they will be severely affected.

Spring Show 2015



Photos clockwise from top: Champions Table, *Cryptanthus warasii* (B McCune), Photo Competition winner Lesley Bayliss, *Neoregelia* Skotak Hybrid (Cameron), *Vriesea* 'Casablanca' (Cameron).



Selection of Spring Show Auction Plants with Grower names: Clockwise from Top Left: *Neoregelia* 'Scarface'(Cameron), *Vriesea* 'Dark Shadow'(Stamatis), *Neoregelia* 'Julia'(LC Waite), *Tillandsia* 'Golden Torch'(Stamatis), *Aechmea egleriana*(Tristram), *Hohenbergia* 'Double Hyphen' (Trevor), *xHohenmea* 'Psycho' (Cameron).

Pests of Bromeliads in SE Queensland_ (cont)

Caterpillars/Grubs

Activity period is primarily summer however the larvae of some moths become active in winter and spring and can do a lot of damage. Droppings resemble fowl manure pellets in shape and are conspicuous around the damaged area. They target the leaves mostly, but on Tillandsias they seem to prefer the growth centre. One grub does prefer the old dead leaves at the back of the plant and the cork mountings.

Controls: They can be removed by hand. Look for the eggs of future generations under the leaves. They can also be removed by hand or by a strong jet of water. A spray of Dipel or Thuricide will control feeding caterpillars (spray both sides of the leaf). Pyrethrum is also effective in controlling caterpillars and Carbaryl will provide chemical control. Garlic spray, Milk spray and the General purpose spray are also recommended (see recipes).

Mealy Bug

This pest thrives in warm moist conditions and will attach itself to all forms of Succulent, Bromeliad, and Cacti – more likely to be found in the roots of the plant but also around the leaf axils. Their pale pink, yellow, or grey bodies are covered with a white powdery waterproof wax. Infestations tend to be worse in shade houses and in homes. Plant foliage lacking in vigour or tip die back can be indicators of an infestation.

Controls: The most effective friendly spray for this bug is the Soapy Water spray while the General Purpose spray is reputed to provide some control. Diatomaceous earth (food grade) is an effective control agent applied in the mix when potting up or on the bugs when discovered. Crown a systemic insecticide is particularly effective in controlling Mealy Bug. **Cockroaches**

A summer pest cockroaches are attracted to the pollen bearing parts of the flowers hence can be responsible for pollination in some larger plants, but can be the culprit of considerable damage to the inflorescence on the smaller tillandsias.

Controls: Isolate the plant by placing it in an area known to be roach proof if possible. Cockroach baits from the local supermarket are an effective chemical control measure and safer than the aerosol sprays because the hydrocarbon propellant in aerosols is oil based and can have a smothering effect on Bromeliads foliage.

Slugs and Snails

Active at night and on rainy days they eat holes in any green leaves and hide down in the leaf axils during the day. They love young pups and seedlings and are usually introduced to your garden in the foliage of other plants or sometimes in garden mulch from council tips. **Controls:** Visit the garden at night with a torch and collect the offenders. Salt on slugs upsets them. Frogs and lizards love snails so set safe snail traps and slug baits (see recipes) Diatomaceous earth a fine white powder (food grade) when sprinkled around the garden will kill slug ,snails , mealy bug and generally deter ants from your garden. Last resort is the commercial slug and snail baits but watches your pets as the baits can kill them.

<u>Scales</u>

Two types prevail:

-Fly Speck scale is the size of a pinhead – black in colour and sometimes referred to as Aechmea scale – and can appear on all tank Bromeliads irrespective of size or shape. It is hard to remove. -Soft Pineapple scale -tank Bromeliads most susceptible – appears on the foliage as small grey to tan lumps – easily seen and easy to remove with a finger nail.

Tillandsias are also vulnerable but more difficult to locate. Close inspection of leaves with brown spots usually indicates a presence. All scale is easy to kill but fly speck is difficult to remove from the foliage. Remember ants farm scale to provide food for their young, so deter ants and your scale problem may disappear.

Controls: Scale spreads quickly. Plants infested with scale are best quarantined though sometimes better to treat, wait for clean pups and, then discard the old mother. Treat infested plants with friendly General Purpose or Pyrethrum spray – however these seem to have only moderate success. Malathion is a contact chemical which seems to be effective when used with a wetting agent which assists in keeping the chemical in contact with the pest. Soapy water made from grated bar soap or laundry soap flakes (not detergent) is a good wetting agent. Clensel mixed with Malathion is also said to be effective. Systemic chemicals ,such as Rogor, Confidor, Resolver which enter the tissue of the plant from the roots to the leaf tips provide a far better coverage and also remain effective for a longer period so they act as a deterrent as well as a weapon. Rogor, Confidor, and Resolver are applied as a spray or like Malathion + Clensel or ECO oil can be used as dip. ECO oil + Malathion can be applied as a spray late in the afternoon and washed off early the next morning to avoid sun damage. Remember to be effective all controls must be followed up with repeat treatments two weeks later to eradicate the escapees.

The above list of pests and controls is not exhaustive yet it does give us something with which to begin. Maybe this will prompt more people to come forward with their recipes for natural or other forms of pest control. Well known nurserymen maintain a reasonable amount of success using vegetable oil based products as smothering agents against all forms of sucking type insects

Now that we have finished the eradication program and rid the garden of the majority of the nasties, what are we going to do about preventing a repeat episode? Unfortunately most humans tend to be reactive rather than proactive in that we are inclined to wait until something happens then run around madly trying to find a solution. I am aware we could probably argue that because of the life styles we have today there is not enough time to introduce a preventative plan. But if we know which pests are likely to attack our plants would it not make good sense to put in place a plan that will prevent or minimize the chances of infestation. Let us consider a few strategies if a preventative plan is warranted.

First, the easiest way to avoid damage to your plants from flying insects and caterpillars would be to grow your plants inside a shade house or bush house with sealed entrances. Then all you have to contend with is the scale, mealybug, and cockroaches. A weekly spray program using safe sprays or perhaps a chemical when scale and or mealy bugs appear. Supporters will debate the pros and cons of both programs but the non-chemical way is preferred. If you choose to grow your plants out in the garden without any protective barrier then the situation becomes a little more hazardous in that the plants are not only exposed to the climatic elements but all the associated insects, bugs and, animals. This presents a very challenging situation but you can manage to achieve a desirable result using similar programmes to those mentioned above bearing in mind that you now have to contend with the flying insects and caterpillars.

Finally, whatever control measure you choose, be sure to read the labels on the container and follow the instructions, in particular the mixing rates and the safety precautions. Be aware that some chemicals are contact, meaning contact with the offending pest is required to become effective. Those classed as "systemic" poisons affect the entire plant via the tissue. Avoid using sprays when the temperature climbs above 30C as they can burn the foliage, and when the conditions are windy and likely to produce spray drift, which could have an adverse effect on people, pets, other plants or friendly insects.

Deuterocohnia lorentziana now abstrusa by Derek Butcher

Preamble

In 2011 Nicole Schuetz presented a Dissertation on Systematics and Evolution of the genus *Deuterocohnia* to the University of Kassel. Disputation was dated 21-02-2012 and made available to the public in 2013. Nicole decided to publish the following: *Deuterocohnia meziana* Kuntze ex Mez (1896: 465). by Nicole Schuetz in Phytotaxa 162(1): 18-30. 2014 but did nothing about *D. abstrusa*. She decided either that she did not feel it needed formal publication or she had changed her opinion. For the last 2 years I have sent numerous Emails to Nicole asking for her opinion. Alas, there was no reply. I have decided to publish her work on this species so that it at least gets Peer Review.



I have always had problems trying to work out if I was growing *D. brevifolia* or *D. lorentziana* and kept returning to the key in Smith & Downs (1974). Key to the Species of *Abromeitiella*

- 1. Leaves not over 22 mm long; sepals not over 13 mm long. Southern Bolivia, Northwestern Argentina.

 A. brevifolia
- 2. Leaves 50-150 mm long; sepals 16 mm long, N-W Argentina, A. lorentziana

My problem was that I had some plants that did not agree with these measurements and were in between. What species name should I use? Some were distinct and were given cultivar names such as 'Chlorantha' and 'Little Marj' so I was pleased when I received a copy of a dissertation done by Nicole Schuetz in 2011 on the genus Deuterocohnia . She did publish details on *Deuterocohnia meziana* Kuntze ex Mez (1896: 465) by Nicole Schuetz in Phytotaxa 162(1): 18-30. 2014 but refrained from publishing the following:

"Deuterocohnia abstrusa (A. Cast.) N. Schuetz, comb. nov. Schuetz Thesis 2011 *Abromeitiella abstrusa* A. Cast., Anales Mus. Nac. Hist. Nat."Bernardino Rivadavia" 36: 369. Fig. 1, 5.1931. Type: Argentina: Prov. Catamarca: Dept. Andalgala: Cuesta de la Chilca, Cumbre del Pucara, 12 Jul. 1929. Castellanos 29/60 [lectotype: BA! (2 sheets), photo ex BA in B!, K!, NY!, isolectotype: US, WU!].

- Abromeitiella lorentziana sensu Castellanos, Lilloa 10: 459. 1944 p. p.: Castellanos 29/60.
- Abromeitiella lorentziana sensu Smith and Downs (1974), Fl. Neotrop. Monogr. 14(3):
244, 245. 1974. p. p.: Castellanos s.n., Castillon 6458, Castellanos 30/404, Jorgensen 1773, Castellanos 28 / 2296, Castellanos 28 / 2297, Christobal and Turpe 111 [LIL] (Escalante and Agosti 87, Piccardo 30-A, Hunziker and Fulvio 19653 not seen).

Plants growing in dense cushions.

Rosettes 7-14[-20] x 5-12 [-15] cm.

Leaf sheaths 0.5-1.3 x 1.5-2 cm.

Blades 4-8 x 1-1.8 cm, recurved to straight, adaxially concave to plane, spinose- serrate, lepidote, greenish-greyish.

Peduncle absent.

Inflorescence simple, annual, 1-3-flowered.

Floral bracts 9-13 x 3-4 mm, much shorter than the sepals, ovate, acute, mucronate, sparsely lepidote, greenish to brownish.

Flowers 26-32 [-35]mm long, sessile.

Sepals 10-14 x 3-4 mm, ovate to lanceolate, obtuse, mucronulate, sparsely lepidote, greenish. Petals 25-32 [-35] x 4-5 mm, erect during anthesis, after anthesis slighdy spirally twisted, yellow-greenish, with green apex.

Petal appendages 4-5 mm long, with short fringes.

Filaments 20-25 mm long. Anthers 4-5 mm long, erect, concealed, greenish.

Ovary 5-6 mm long. Style 20-30 mm long, stigma exposed.

Fruits 10-12 [-15] mm diam. Seeds 3-4 mm long.

Distribution. BOLIVIA. Dept. Tarija. ARGENTINA. Prov. Jujuy, Salta, Tucuman, Catamarca, La Rioja. 21° 40'-29° 20' S, 64°30'-68°05'W.

Habitat and ecology. Ecoregions: Central Andean puna (156), Andean Yungas (64), Argentina Monte (136). At elevations of 1,500-3200 m a.s.l. Terrestrial, forming cushions on open, rocky slopes, abundant at its localities. Dry scrub vegetation, in association.with barrel cacti. Flowering time from September to February. Pollinated by insects or birds. **Etymology.** The etymology was not explained by Castellanos. It may refer to the concealed inflorescence or the ramification hidden within the cushions. (Latin abstrusus. hidden, concealed).

Affinities. *D. abstrusa* is morphologically closely related to *D. brevifolia*, but is characterized by larger rosettes with a laxer leaf arrangement and usually a denser indument.

Notes and comments. (a) *Abromeitiella abstrusa* has been formerly included in the synonymy of *A. lorentziana*. The *A. abstrusa* element is now re-established as an own species and transfered to *D. abstrusa*, whereas the *A. lorentziana* element is considered synonymous with *D. brevifolia*. (b) IUCN: rare (D. lorentziana see 3.5.4)."

I can find nothing wrong with this move and repeat it here for your information. What action have I taken with plants in my collection? I think I have one clump that qualifies as *A abstrusa* with others now treated as *A. brevifolia* (Large)

Advanced	Jan	April	July	Oct	Total
			July	001	-
Mal & Michelle Cameron	18	_			18
Barry & Ann Kable				15	15
Peter Paroz		5	5		10
Intermediate	Jan	April	July	Oct	Total
Barbara McCune	14	4	18	15	51
Ron Jell	4	13	5	12	34
Maxim Wilson	5	1		7	13
Fred Thomson	5		7		12
John Olsen			4	5	9
Pam Butler	6		1		7
Margaret Kraa		5			5
Pat Barlow	2		1	1	4
Norma Poole	4				4
David Vine		1			1
Novice	Jan	April	July	Oct	Total
Jenny Ittensohn	13			5	18
Charmaine Rooney	5	5		8	18
Rick Cairns				14	14
Barbara Murray	8				8
Kelvin Herrod			5		5
Livia Doidge			3		3
John Hodgkinson		3			3
Sharon Born				1	1
Lesley Gibbs				1	1

Mini Shows Aggregate Results 2015

TENTATIVE COMPETITION SCHEDULE 2016

(awaiting confirmation by Management Committee)

Note: In all MINI SHOWS Class 4 is any other flowering bromeliad species & hybrids

January - MINI SHOW

Class 1 – Aechmea species & hybrids

Class 2 – Vriesea species & hybrids

Class 3 – Dyckia species & hybrids

Feb & Mar POPULAR VOTE – any genus species & hybrids + novelty bromeliad display **April -MINI SHOW**

Class 1 – Bromelioideae not listed elsewhere in Schedule, species & Hybrids (Acanthostachys, Ananas, Androlepis, Araeococcus, Bromelia, Canistropsis, Canistrum, Edmundoa, Fascicularia, Hohenbergia, Hohenbergiopsis, Neoglaziovia, Nidularium, Ochagavia, Orthophytum, Portea, Quesnelia, Ursulaea, Wittrockia) Class 2 – Guzmania species & hybrids

Class 3 – Pitcairnia species & hybrids

May tba

June POPULAR VOTE – any genus species & hybrids + novelty bromeliad display

July - MINI SHOW

Class 1 – Billbergia

Class 2 – Tillandsioideae not listed elsewhere in Schedule, species & hybrids (Alcantarea, Catopsis, Mezobromelia, Racinaea, Werauhia)

Class 3 – Neoregelia up to 200mm diameter when mature, species & hybrids

Aug & Sept POPULAR VOTE – any genus species & hybrids + novelty bromeliad display October - MINI SHOW

Class 1 – Neoregelia over 200mm diameter when mature, species & hybrids

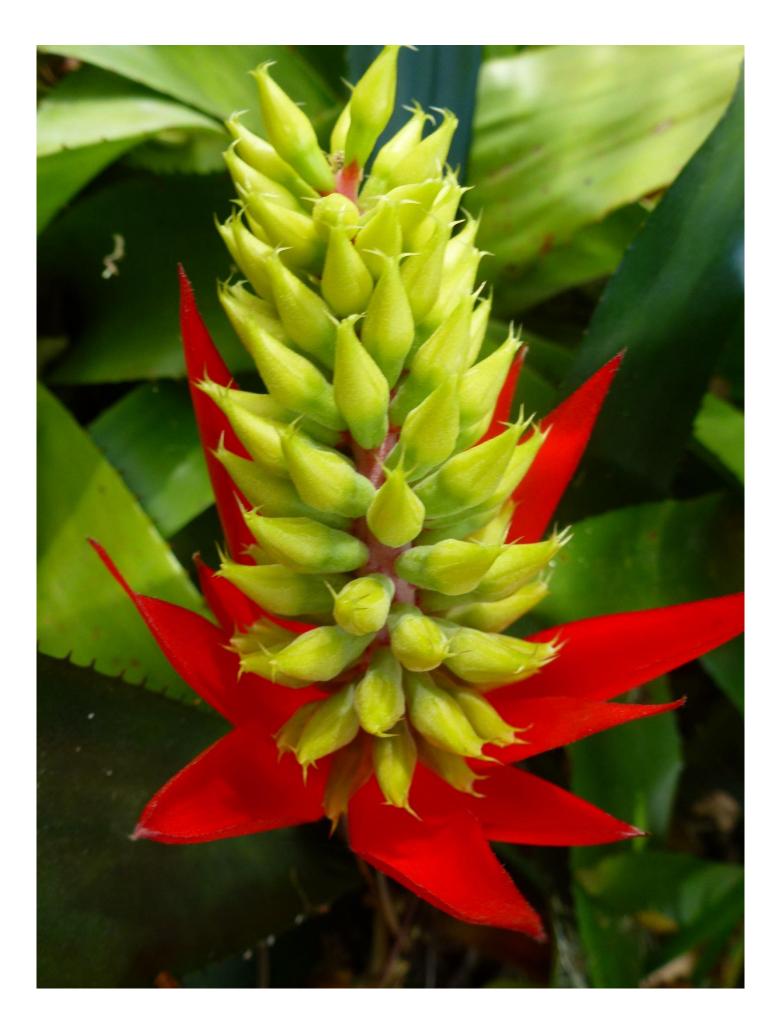
Class 2 – Tillandsia species & hybrids

Class 3 – Pitcairnioideae not listed elsewhere in Schedule, species & hybrids (Brocchinioideae, Lindmanioideae, Hechtia), Puya), Navioideae, Deuterocohnia, Encholirium, Fosterella)

November - POPULAR VOTE

Plant of the month List for 2016

January	Aechmea
February	Tillandsia
March	Cryptanthus
April	Dyckia, Orthophytum, Puya
May	Alcantarea
June	Vriesea
July	Intergenerics
August	Rare Genera
September	Billbergia
October	Guzmania
November	Neoregelia, Nidularium



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