

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

Study Group meets the third Thursday of each month

Next meeting 15th August 2019 at 11 a.m.

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

Discussion: July 2019
General Discussion

Editorial Team:

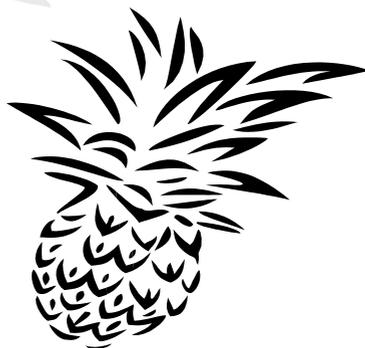
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Meeting 20th June 2019

The meeting was opened at approximately 11.00 am
The 14 members present were welcomed.
A total of two apologies were received.

General Business

Drew, our regular minutes taker is away holidaying overseas this month so Helen has stepped in to do this month's notes/minutes. We're looking forward to hearing tales of Bromeliads Drew may have sighted in England.

Winter has arrived being quite evident with most members well rugged up for the day, some with plants in hand for Show and Tell and what a beauty Jennifer had to show us. Jennifer with a beaming smile on her face held in her hands one of the finest examples of *Neoregelia* 'Lorena Lector' we had ever seen. Jennifer told us that after five years of growing this plant it has finally decided to flower which explained its exceptional leaf stack. (photos p.6)

We started off with reviewing last month's Newsletter mainly discussing each other's *Neoregelia* seed raising efforts. Even though the winter weather change had arrived those who took seed home have had successful germination by keeping their seed raising containers in a warm, well lit location. Well done to those who participated. However seed was taken from several different plants and not all has germinated. We know from past experience that not all seed will germinate in the same time frame so a little patience may be needed for the slower ones. Time will tell.

While we have generally agreed to refrain from entering plants into our Popular Vote Competition with formula only on their labels the question was asked about entering unidentified plants/lost labels. This opened the quandary of "throw the formula label away" however most members feel this is not in the best interest of learning. While these sorts of actions can't be policed it is felt that it would be best to name the plant and add unregistered after it, this action at least links the name to a particular clone/seedling from the seedlings grouped by the formula. In regards to plants in our collections with names lost or forgotten which we all have we still want to see these grace our Popular Vote tables and hopefully an identification can be made by another attending member on the day. We do have some good researches in our midst, one being Helen (aka Miss Marple) who is quite willing to do some research and hopefully identify some of the plants. Also we do have some Eagle Eyed readers who do identify some of our 'unknowns' in photos that appear within our pages which is greatly appreciated.

Ross asked for volunteers to remove a pup from a *Bromelia karatas* growing in the garden which wasn't easy to get to for a photo shoot. The plant measuring 2.60 metres from its centre making it over 5 metres across means it's not an easy plant to deal with at the best of times. In amongst the tangle of very well armed leaves was a pup standing very erect measuring 2 mtrs tall. Now will be the safest time to attempt to remove the pup before it spreads its leaves. Volunteers were offered a supply of bandages and a cuppa afterwards, alas no hands were raised so I guess it's up to me (Helen) to tackle this one. The distribution of *Bromelia karatas* is terrestrial in woods and thickets, 50-1500 m alt, Mexico and the West Indies to Brazil and Ecuador. Ross mentioned that he saw these growing in Chiapas, Mexico during his travels there in mid 2018. (photos p.7)

On reviewing Drew's article about keeping records in a register Sue commented that it is a good idea as it gives you something to refer back to regarding your plant acquisition history. Sue also advises that it is a good idea to back everything up on a usb stick or a portable hard drive in case your computer crashes and all info may be lost.

Show, Tell and Ask!

x *Vriecantarea* 'Julietta' or should that be *Alcantarea* 'Julietta' has arrived in great numbers released through a large retail chain. Hopefully in the near future we will finally get some flowering specimens to photograph and dismantle a flower structure. Refer article FNCBSG NSW Newsletter, March 2018, p.4.

Variation instability within our plants was discussed as several members have plants losing variegation. Variegation isn't necessarily a stable attribute of many Bromeliads. To get new variegated hybrids a transmitter must be used, that is, a variegated plant that will transmit its variegation to its seedlings when used as a seed parent not pollen parent. Rarely, but it does happen, a plain green plant may produce a variegated vegetative offset referred to as a 'sport'. One such mutation discussed was found by John Catlan and registered with the BCR as *Aechmea* 'Aztec Gold'. (article p.13).

When a variegated offset loses variegation we refer to it as a 'novar' meaning no variegation. For example if your *Ae.* 'Aztec Gold' lost variegation you would tag it as *Ae.* 'Aztec Gold' novar. Any future pups from this 'novar' that regain variegation again would be tagged as *Ae.* 'Aztec Gold'. The term 'novar' being used to remind the owner of the plant that it derived from a variegated plant originally. Therefore any subsequent plants/offsets from this 'novar' are not necessarily a new 'sport' but simply regaining its variegation again.

Sport: A spontaneous deviation from a typical form; a mutation.

John had a pot of *Cryptanthus* needing confirmation of its identity, with those long tentacle like stolons with plantlets at their ends John was assured his plant was *Cryptanthus* 'Cascade'. (photo by Drew Maywald)



Cryptanthus 'Cascade'

by Olwen Ferris in Bromeleter 18(1): 1981

When Mrs Glad Lawrence moved to her new home, I purchased a number of her surplus plants. Included with the cryptanthus, were a number of offsets that I took to be *Cryptanthus* 'Cascade'.

The little rosettes were larger than mine so some were put to one side for future stock plants, while several were sent out with orders. Then one day I noticed that they were slightly different from my own plants of C. 'Cascade'. Was this because they had come north from the Sydney Winter, to our warmer climate? On closer inspection, the plants had wider leaves and the spines were further apart.

I took one of the plants up to Grace Goode and it also differed from her plants, but she said that another Queensland grower had told her that he thought there were two forms of *Cryptanthus* 'Cascade'. Mrs Goode and I decided to grow our plants on to maturity and see what happened.

The smaller form grows quickly and makes numerous cascades under my conditions, with no foliar fertilizing, it measures about 5 ins. (13cm) across and grows well in a small hanging pot. The larger plant grows until it covered the top of an 8 inch hanging basket. After our long, dry year, we have at last had some rain. Perhaps it is because of the higher humidity, for suddenly all my larger type C. 'Cascade' are producing their long stolons with tiny plantlets at the extremities so I no longer have the sneaking feeling that perhaps I have sold someone the wrong plant for C. 'Cascade'.

On thinking back, I believe this is the plant I grew when we lived in Sydney. When we came north I bought plantlets from Mrs Goode and filled orders with my larger plants, while growing the smaller ones on. My original plant proved to be very touchy and resented water on the leaves in cold weather. I lost the mother plants, but was able to build up stock with the little plantlets from the cascades. I took it for granted that my new purchases in Queensland, were easier to grow because of the warmer climate, but now feel that this smaller form of *Cryptanthus* 'Cascade' is much more hardy than the larger form.



Aechmea 'Fireman Sam' is an easy to grow red bract cultivar of *Aechmea dealbata*. It requires bright light to maintain good form and colour and seems content growing as a terrestrial as well as being grown epiphytically in the gardens of PineGrove.

Information gleaned and taken in part from: *Aechmea dealbata*, Worth Cultivation but Sometimes Misunderstood by Elvira Gross in Journal of the Bromeliad Society 47(3): 1997.

It is closely related to and was considered a form of *Aechmea fasciata* for many years. In *Aechmea fasciata* the rosette is formed by about 20 leaves, the leaf blades are rounded and cuspidate, the white bands are very distinct and occur mostly on both sides of the leaves. The rosette of *Aechmea dealbata* is formed with fewer leaves, the plant has rounded acuminate leaf blades, the bands beneath the leaf are not as distinct and the leaves are uniformly green above. Both species have different inflorescences: that of *Ae. fasciata* is compound and broadly cone-shaped, that of *Ae. dealbata* has mostly simple, narrow cone shaped inflorescences, sometimes one or two little lateral spikes are developed.

Aechmea spectabilis

was found flowering in the garden this month. It generally grows as an epiphyte in forests from 500 - 1600 mtrs altitude in Colombia and Venezuela.

However it is being grown terrestrially here in the garden at PineGrove in bright dappled light and receives no additional watering other than rain making it an easy care plant for most gardens. It's not a regular flowerer here but it definitely stands out when it does.





Neoregelia 'Lorena Lector'

grown by Jennifer Laurie showing a central blush of rose red and an amazing amount of leaf stack.

Neo. 'Lorena Lector' is a R. Coleman hybrid of:

Neo. 'Lorena' x 'Hannibal Lector'



BCR Spelling Up-date

The incorrect spelling of *Neoregelia* 'Hannibal Lector' **has now been rectified** the correct spelling is: *Neoregelia* 'Hannibal Lector' note 'er' not 'or'



Neoregelia 'Tunisia' grown by Sue Mackay-Davidson



Tillandsia neglecta 'bronze form' grown by Steve Davidson

John asked Ross about a rather tall flowering plant he had seen out in Ross' yard which they both went and inspected. On return with the plant we were advised it was *Puya floccosa*. The plant was 700mm across with an inflorescence to 1.70mtrs tall, it prefers a well drained growing medium and is grown in full all day sun. In their natural habitat they grow on rock and rocky ground from 270 to 3000 m alt. in Costa Rica, Colombia, Venezuela and adjacent Brazil.



Taken from Smith & Downs p.104:

It is interesting to note that *Puya floccosa* has the greatest range for the genus in both territory (over 1500 miles or 2500 kilometers) and elevation (nearly 3000 meters). At the same time the only variation it shows is in the length of branches in the inflorescence and that is not necessarily of any significance.



Bromelia karatas pup ▲ standing 2 mtrs tall, inflorescence photo taken January 2019 ►





Pitcairnia smithiorum
1st Open and Judges Choice
Dave Boudier



Vriesea 'Forest Gem' series unreg.
1st Novice Michelle Hartwell



Neoregelia 'Scarface'
grown by John Crawford



Sincoregelia 'Galactic Warrior'
grown by Coral McAteer



'Tills on a Log'
1st Decorative Dave Boudier



Tillandsia funkiana
1st Tillandsioideae Gary McAteer



Tillandsia pseudobaileyi
grown by Sue Mackay-Davidson



'Rock on Juncea'
shown by John Crawford

Amazing Grace Celebrates Her 102nd Birthday in July 2019

Grace Goode, OAM will celebrate her 102nd birthday in July this year. The Sunshine Coast Bromeliad Society Inc. and the FNCBSG NSW wish her all the best and thank her for the fantastic contributions she had made over many years to the Bromeliad world.

Grace was born on the 23 July 1917 at Nambour and has spent most of her life on the Sunshine Coast. She was always a gardener, roses, carnations, dahlias, orchids all sorts of flowers. By 1970 she had discovered the love of her life – Bromeliads.



This started when Grace was introduced to Bromeliads by her mother who gave her a plant later identified by Olwen Ferris as *Billbergia pyramidalis* v. *concolor*. Grace was well into her 50s when she was introduced to Bromeliads and her only regret is that she hadn't found out about them earlier.

Within a few years she was travelling to conferences around the world, and became a well known hybridist.



Neoregelia 'Charm'

hybrid is probably *Neo.* 'Charm' which is a cross between *Neo. marmorata* and *Neo. chlorosticta*. As a matter of interest, Grace considers *Neo.* 'Charm' is exactly the plant she was trying to produce from this cross, as it combines the form (conformation) of *Neo. marmorata* and the colouration of *Neo. chlorosticta*.

Most people know Grace through her hybrids. She started hybridising in the early 1970s, largely in response to the very limited number of Bromeliads available then in Australia. Initially, she concentrated on Neoregelias. Some of her earlier hybrids are: 'Sheer Joy', 'Little Joy', 'Blackie', 'Red Plate' and the well known 'Amazing Grace'. Her best known



Neoregelia 'Amazing Grace'

Another major area of hybridisation activity has been with *Cryptanthus*. Some of her early hybrids are: 'Misty Charm', 'Misty Dawn', 'Misty Glow' and 'Misty Flame'. Bob Whitman took many of Grace's *Cryptanthus* hybrids to the United States of America (USA). They included: 'Melanie', 'Seven Veils', 'Black Mood', 'Hells Bells' and 'Spellbound'.



Cryptanthus 'Spellbound'

She also sent hybrid *Cryptanthus* seed to the USA, from which have been produced plants such as: 'Fond Memory', 'Happy Thoughts', 'Texas Star' and 'Crown Jewels'.



Cryptanthus 'Melanie'



Cryptanthus 'Black Mood'

Grace has produced close to 1000 named hybrids. As well as *Neoregelia* and *Cryptanthus* hybrids, she has produced *Aechmea*, *Billbergia*, *Nidularium* and *Tillandsia* hybrids. She has also made several bigeneric hybrids, with perhaps the best ones being *xNiduregelias* 'Something Special' and 'Vision Splendid'.



Neoregelia 'Alley Cat'

Well into her later years Grace was still actively producing hybrids. Some outstanding *Neoregelia* hybrids include: 'Amen', 'Africa', 'Alley Cat', 'Mandela' and 'One and Only'.



Niduregelia 'Vision Splendid'



Grace receiving her OAM

In the 2004 Australia Day Awards, Grace was awarded the Order of Australia Medal in recognition of her efforts in growing and, in particular, hybridising Bromeliads. Grace is also an honorary trustee of The Bromeliad Society International as well as The *Cryptanthus* Society and is a life member of the Bromeliad Society of Australia, Cairns Bromeliad Society, Bromeliad Society of Queensland, and the Sunshine Coast Bromeliad Society.

In the last few years her health has started to fade and she now lives in a nursing unit on the Sunshine Coast

Billbergia nutans not *Billbergia* 'Queen's Tears' by Drew Maywald

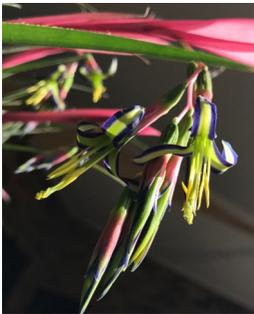
In October 2018, my neighbour gave me a Bromeliad labelled *Billbergia* 'Queen's Tears'. She did not want it as it wasn't anything special as it was only "green leaves". On my return to Australia in early July 2019, from 5 weeks in the UK visiting family, imagine my surprise when I looked at my 'Queen's Tears'. It was flowering with some 9 or 10 pink flower stems, and looks magnificent, as can be seen in the photograph below.



I thought I would take the opportunity to share this wonderful event with members of the FNCSB Study Group. The green petaled, individual flowers are superb with a purple line around the edges of each petal, and the yellow stamens loaded with pollen hang down, giving the entire bloom a rainbow appearance.

I thought I would do some research about the plant for the Study Group but could not find *Billbergia* 'Queen's Tears' in either the BCR or the FCBS. The FCBS lists a plant called *Billbergia nutans* which has the same flower.

John Crawford showed me his 'Queen's Tears' which is the same as mine, but he also had a *Billbergia nutans* (mini) 'Queen's Tears', which he explained is a mini version of 'Queen's Tears'.



With Ross's help I now know that the scientific name of my plant is *Billbergia nutans*, which is one of a few Bromeliads that have two names, as the common name for it is *Billbergia* 'Queen' Tears'. *Billbergia nutans* is a species that is native to Argentina, Brazil, Paraguay and Uruguay. Nutans means Nodding and that's exactly what the flower stems do when the wind blows.

The leaves of *nutans* are green all year, and it has thrived since it was given to me. It is a vigorous "pupper" having produced some 6 pups in 12 months. I have it hanging on a pool fence facing West where it gets the full afternoon sun. It is shallow rooted and gets watered twice a week during the summer. In the winter it is lucky if it gets watered once a fortnight. Before I went overseas at the end of May, I fed the plant with Power Feed liquid fertiliser.

Unfortunately, I suspect that it will have finished flowering before the next study group meeting, so I decided to write this brief article so that all members could share this beautiful plant with me.



Aechmea recurvata 'Aztec Gold'

by John Catlan in Bromlink July/Aug 1997

'Aztec Gold' is really the story of trying to produce a desirable plant by swinging the odds in the grower's favour by manipulation of growing conditions.

One day in 1981, a friend of mine found a plant in a group of my *Aechmea recurvata* plants with a good clear yellow stripe on one of its leaves. The variegated leaf appeared on a fully mature plant that had failed to flower that year. It was the unanimous lament that plants of friends as well as our own had shown partial variegation that had not been passed onto the pups. The low averages to almost non-existent were definitely against success, but with this plant we hoped it was possible as the variegated leaf was low down on the butt of the plant where the pups originate.

After researching the material available, looking for a magic wand I found that there was none, or more precisely, none that I could find. Now was the time to put into action three lessons learnt while observing our plants.

One day while sitting on an old stump, with a shovel in one hand and a cup of coffee in the other, trying to get inspiration to clean up and level off our rubbish dump, I noted just how hardy bromeliads really were. There were dozens of discarded plants lying on their sides with their pups happily sitting up ready to grow into new clumps.



Lesson 1: If a plant falls over and then a pup forms, nine times out of ten the pup will start on the top side of the plant.

Like most bromeliad growers with more plants than room, I would take pups off and sit them in a pot of very open mix to keep them upright until potting up time. If you were too long, you would wind up with a solid ball of roots. This resulted in tearing them apart and damaging the roots when potting. Gradually it dawned on me that the root system initiated from one side of the pup, the opposite side from the heel piece that was attached to the mother plant. The rule became: face the round side to the centre of the pot. The roots all grow to the outside of the pot and are easier to separate. This explained to me why in a clump of bromeliads the pups are generally grown on the mother plant furthest from the grandmother.

I reasoned that the roots on that side absorbed the nourishment and gave slightly more food to that side of the plant. I foliar fed the plants on one side only and this resulted in a very high percentage of pups from that side.

Lesson 2: If you liquid feed a plant by foliar feeding it on one side, you increase your chances of getting a pup from that side.

I remembered one year, there being not enough bench space for all the plants, that some were placed under a bench. Being winter, the sun was low in the sky and light penetrated very well in under the bench as it faced north. Spring arrived and busy-busy-busy then well into summer. Lo and behold! There were the bromeliads with all their pups, like soldiers, facing the path. At that time I thought it was rather convenient for the removal of the pups. Remember light is a source of food for plants and in a clump of bromeliads the outer-side of a plant should be receiving more light than the side facing the clump.

Lesson 3: If the plant is denied light on one side, it will throw its pups on the side facing the light source.

The time had come to bite the bullet. We laid the plant at an angle of 45 degrees facing away from the sun with the leaf with the yellow stripe being on top facing the sun. A few weeks later at an angle of 90 degrees to the yellow stripe appeared a green pup. This pup was removed with a sharpened screwdriver. Our theory was that the pup had started its growth cycle prior to our meddling with nature. Be patient and wait. Success immediately followed by disaster. The pup was there but it was pure yellow. We had only one variegated leaf and the pup was right under it. So all we could do was leave it as an interesting experiment.

A few months later when the pup had grown and we looked and wondered, for there on the upper side of the leaves was a solid green stripe. A phenomenon of this plant is: all pups appear as plain yellow, but as the plant develops the green stripe improves and it turns into a sturdy, vigorous grower for a variegate.

To promote the growth of "Aztec Gold" we left it attached to its parent. This promoted vigorous growth resulting in a mature plant that produced 10 pups over three years. Any pups appearing on the green parent were cut off so that "Aztec Gold" received all the energy.

We were aware that with some variegated bromeliads that too much fertiliser had the ability to cause a plant to lose its variegation, for just prior to 'Aztec Gold' we had over-fertilised some variegated *Neoregelia* seedlings and the variegation disappeared for ever! So this time we took fertilising very cautiously with our original plant. Some variegated plants can take fertiliser and some can't

and there are variegated plants that only seem to flourish when they are fertilised well and on a regular basis.

'Aztec Gold' was grown in 170mm hanging baskets potted in a very open mix and hung 18cm from the roof. They had plenty of light and nine-month Osmocote as fertiliser. They were watered regularly, but they were very well drained and had plenty of air movement. The growers who have had trouble growing Aztec Gold' are probably giving it too much water and not enough light and air movement to keep up with the watering.

When the pups were taken off the original "Aztec Gold" they were given the code A, B, C, D, E, F, etc. When plant A threw its pups they were numbered A1, A2, A3, etc. When plant A1 threw its pups they were numbered A1A, A1B, A1C, etc. When plant A1A threw its pups they were numbered A1A1, A1A2, A1A3, etc. All this information was written up into a book so you had a complete family tree of the descendants of 'Aztec Gold'. By looking up the family tree you knew what to code the pup and you entered it into the family tree. The plants were kept all mixed up in one area and all watered and fertilised the same.

'Aztec Gold' E2 bred like a rabbit. Its descendants dominated the whole breeding program. For months we looked at "E2" and its descendants but they all looked the same to me and everyone else who was asked. I then separated "E2" descendants and put them on the one bench. It was immediately obvious the central green stripe although it was the same width was a slightly deeper green and the yellow a touch more golden and this made the difference, more food faster and more pups. Pure white is the only colour in a bromeliad leaf that does not manufacture food - from sunlight. Yellow is in fact able to manufacture food as it has chlorophyll in its cells, which to us appears yellow.

The following taken in part from: Journ. of The Brom. Soc. 45(2):59-60, 62.1995

After our success with 'Aztec Gold' I acquired a plant of *Aechmea orlandiana* 'Ensign'. This plant had a good variegation on one side. The other side was only slightly variegated. We faced the slightly variegated side against a fibro wall-the strong variegation facing the light source. Pups came out all over the place, but we did eventually get a good 'Ensign' that we left on the parent plant till we got a good, sturdy plant.

We wondered whether, as *Aechmea orlandiana* was a climbing bromeliad more than a clumper, maybe our rules for this type were not as applicable.

I hope that the preceding information will help along your collection of bromeliads. Don't forget to let us hear of your results.

Novice Popular Vote

1st	Michelle Hartwell	<i>Vriesea</i> 'Forest Gem' series unreg.
2nd	Sue Mackay-Davidson	<i>Neoregelia</i> 'Tunisia'
3rd	Steve Davidson	<i>Goudeaea</i> 'Smudge Grub'

Open Popular Vote

1st	Dave Boudier	<i>Pitcairnia smithiorum</i>
2nd	John Crawford	<i>Neoregelia</i> 'Scarface'
2nd	Coral McAteer	<i>Sincoregelia</i> 'Galactic Warrior'
3rd	Keryn Simpson	<i>Neoregelia concentrica</i> 'Red'

Tillandsioideae

1st	Gary McAteer	<i>Tillandsia funkiana</i>
2nd	Sue Mackay-Davidson	<i>Tillandsia pseudobaileyi</i>
2nd	Dave Boudier	<i>Tillandsia stricta</i> x 'Holmes Azurite'
2nd	Helen Clewett	<i>Tillandsia</i> 'Eric Knoblock'

Judges Choice

1st	Dave Boudier	<i>Pitcairnia smithiorum</i>
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Decorative

1st	Dave Boudier	'Our Tillandsia Log'
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Web Links for Checking Correct Identification and Spelling ?

Bromeliad Cultivar Register (BCR): <http://registry.bsi.org/>

Refer to this site for correct identification and spelling of your hybrid or cultivar.

New Bromeliad Taxon List : <http://botu07.bio.uu.nl/bcg/taxonList.php>

Refer to this site for latest species name changes and correct spelling.

Bromeliads in Australia (BinA) <http://bromeliad.org.au/>

Refer to this site for its Photo Index, Club Newsletters, Detective Derek Articles.

Keep these web sites set as desktop icons for quick reference access.

Where do I Find the Dates ?

www.bromeliad.org.au then click "Diary".

Check this site for regular updates of times, dates and addresses of meetings and shows in your area and around the country.