

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

Study Group meets the third Thursday of each month

Next meeting May 17th 2018 at 11 a.m.

Venue: PineGrove Bromeliad Nursery
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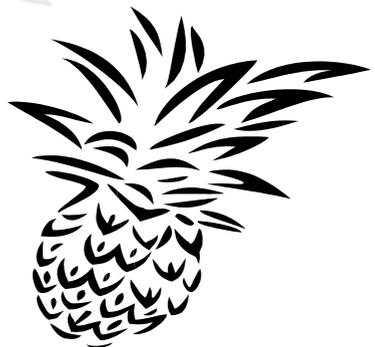
Discussion: April 2018

General Discussion

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Meeting 15th March 2018

The meeting was opened at approximately 11.00 am
The 16 members were present and welcomed.
A total of four apologies were received.

General Business

Our 'Popular Vote' Show Rules were extensively discussed and reviewed, it was decided that the over-riding rules for all shows will remain with a few changes.

Some of the changes are as follows:

- The plant of the highest standard in any section can be the: 'Judges Choice'.
- Plants and all plant material to have been owned by the exhibitor for a minimum of 6 months.
- Due to space limitation all presentations should be of modest size.
- One plant (entry) per section (three sections) per member.
 Open, Decorative, Tillandsioideae
 Novice, Decorative, Tillandsioideae.

The '**Decorative**' section will now embrace Decorative, Artistic and Floral Art combined, some additional Rules are as follows:

- The exhibit to be as artistic as possible, brash exhibits are undesirable.
- All plants are to be capable of continued growth. (Floral Art excluded)
- At least 90% of the exhibit's content must be Bromeliads.
- Embellishments, if used, must not be the dominant feature.
- Writing within the exhibit to be restricted to plant names.

The rules will be printed and laminated and placed on the relevant table at every Meeting, this gives a twofold benefit:

- The exhibitor is reminded of the rules.
- The voter can determine the validity of the presentation.

Exhibits in the March '**Decorative**' section were used to describe a 'Decorative Display'. Tillandsias mounted on driftwood are an example of continuous growth. The container for a dish garden should not be obtrusive. An oriental figure carrying 2 small plants was considered too much ornament and too little plant. A large ornament as the central feature in another entry was considered disproportional.

Floral Art exhibits can be created any time up to just prior to the Meeting and are not expected to survive a long period. Bromeliad leaves can be cut into artistic shapes rather than using leaves of a foreign source. Only the inflorescence / flowers of Bromeliads to be included, not foreign flowers.

Our new Tillandsia section made its debut this month. In accordance with the recently published DNA Revision of Tillandsioideae Nomenclature the show classification is to be the Family name not the genus. This facilitates the inclusion of plants that until recently were described as Tillandsias. Therefore the Tillandsia section is to be known as the: '**Tillandsioideae**' Popular Vote. As an example of name change: *Tillandsia cyanea* is now *Wallisia cyanea*. (Current name changes are listed in FNCBSG December 2017 Newsletter)

The original reason given for a '**Tillandsia**' Popular Vote section was Tillandsias not in flower could not fairly compete with more showy plants in the **Open** and **Novice** sections. But what about other Bromeliad species? There was a suggestion that to cater for less frequently seen genera we should have a 'Genus of the Month' section. No one seemed very sure of how this idea could be made workable other than to suggest that a genus or group of genus be specified for a pre-selected monthly meeting. Members are to bring a plant/s of the specified genus/group of genus for discussion/prag, this section of the meeting would be incorporated into our **Show, Tell and Ask**. General queries especially those plants which have short flowering periods where identification can more easily be achieved when your plant is in flower. Photos are a good option, be sure to capture every detail e.g: full plant/inflorescence and close-ups of the flowers.

The raffle is an opportunity to give a friend a quality plant. For all of us the raffle is a chance to obtain at little cost a quality plant that will give a lot of pleasure. As we admire the raffle gifts it is not unusual to hear comments such as: "I would like that plant". In describing a '**Popular Vote**' show winner it is often said by the grower "The original came from the raffle". It has been noticed that the quality of the raffle plants declines occasionally. The raffle table shouldn't be considered a dumping place for garden clean-outs, bring these along as give-aways. As the raffle is a source of income for our Group we all have a lot to loose if the raffle is allowed to degenerate. Any plant that is not good enough to keep is not good enough to donate to the raffle! Only donate plants to the raffle that one would wish to receive themselves. Good hygiene is essential, be sure plants are clean, clear of pests and disease, this applies to give-away plants also and labelled.

Show, Tell and Ask!

A green plant with four variegated pups was brought to **Show and Tell** by Keryn asking "why" and "what to name them"? A simple explanation was given: the parent of the green plant was variegated. It is not unusual for a variegated plant to throw a plain non-variegated pup. These divergents should be retained only if of special merit. Should a plain pup be retained 'novar' should be added to its parental name which advises the grower that future variegated pups are not

'new' sports requiring another name. The green plant Keryn received should've had a tag written as *Aechmea* 'Reverse Ensign' (novar). Therefore those nicely variegated new pups of Keryn's can be tagged as *Aechmea* 'Reverse Ensign'. (novar means: no variegation). (photo p.7)

Keryn had two *Aechmea* for identification both with a similar inflorescence but differing in the foliage. Plant 'A' has brownish undersides of the leaves (abaxial) with silver cross banding. Not a positive identification given but suggested it may be *Ae. tessmannii* or *manzanaresiana* crossed with *Ae. chantinii* or similar. Plant 'B' has foliage wholly green, it appears to have been grown in lower light evident by its strappy leaves. Both plants need to be grown in brighter light and fertilized which will help improve the size and shape of future pups. There are so many plants of this type in our collections today grown by "opportunistic" seed growers it is difficult to say with any certainty who 'dad' is. (photos ps. 6 and 12)

Kay mentioned that Yates Confidor is no longer available from Bunnings stores as it is considered to be harmful to bees. Yates Confidor is a class of pesticide (Neonicotinoid) which some studies suggest possibly affects bees navigation and immune systems, resulting in colony death. Bunnings however admitted: "their decision was based on precaution rather than scientific evidence deciding to err on the side of caution. Bunnings will stock natural and organic pesticides as a replacement to Neonicotinoid based products that are a class of pesticides which is absorbed by the plant rather than coating its surface. The chemicals spread to all parts of the plants and are exposed to bees through pollen". Searles Congard is an identical insecticide sold at various other retail outlets BUT spraying when the bees are not active isn't a solution so please consider the safer to bees alternatives.

Ross showed a very eye catching *Wallfussia* 'Feather Belle' a hybrid created by Peter Tristram which we had not seen before. (article p.11)

He also discussed two *Nidulariums* tagged only as "Nid. sp unknown" with blue buds that never open, he eventually identified them as *Nidularium angustifolium*. One member thought that ants managed to enter the bud and another suggestion was entry by the proboscis of a moth causes fertilisation. (photos p.5) The true explanation is: Among the multitude of genera there are plants with Autogamous flowers (self fertilising). Flowers that never open are known as Cleistogamous flowers Non-opening flowers don't release odour or fragrance and have no nectar. Insect intervention is not required. The pollen sacs are above the gynaecium (Female parts). Androecium (Male parts) when mature fall onto the stigma and thus cause self fertilisation. This phenomena also applies to open petalled autogamous flowers that have not received a pollinator.

Nidularium angustifolium Ule, Ber Deutsch. Bot Ges. 16 351. 1898.

Nidularium angustifolium was described in 1898 by Ernst Ule who provided only a brief description of the species in the protologue and named the collection site ("Serra da Bica "). He did not even include his collection number as was the custom and contrary to his usual style. Mez (1935) accepted the species as valid and gave a much more detailed description than the original one. He designated specimen *Ule 4039* from Serra da Bica as the holotype. Two decades later, Smith (1955) considered *Nid. angustifolium* to be a synonym of *Nid. procerum*, and this was maintained in Smith & Downs (1979). The description of *Nid. viridium* as different from *Nid. procerum* paved the way to recognizing *Nid. angustifolium* as a distinct taxon. After analyzing the type species based on specimen *Ule 4039*, collected at Serra da Bica and deposited in the herbarium of the Botanical Museum in Berlin-Dahlem (B), as is mentioned in the protologue, it became obvious that *Nid. angustifolium* was identical to *Nid. viridium*. The flower colour pattern in *Nid. viridium* represents just one extreme for this species, apparently an almost total lack of anthocyanin. The decision to place *Nid. viridium* in synonymy also made it possible to recognize *Nid. angustifolium* as a species distinct from *Nid. procerum*.

Nidularium angustifolium is clearly related to *Nid. procerum*. It differs from the latter in its lax, long-pointed, stellate inflorescence, primary bracts red (usually only near the apex, long-acuminate and spreading-ascendant toward the apex, sepals obovate with wide-acute to rounded apex, ovary white, as are the fruits, with a greenish yellow to yellow persistent calyx. There is an interesting colour variation in this species. At one extreme are plants with totally green bracts and white or bluish white petals, a pattern that is compatible with the description of *Nid. viridium*. In contrast, at the other extreme are plants with almost totally red primary bracts and blue petals with white margins. The average pattern, however, is shown by plants that have primary bracts with the apical 1/3 red and blue petals with white margins.



Nidularium angustifolium

Previously known as
Nidularium viridium
photos by Ross Little





Two Aechmea brought along for identification
by Keryn Simpson



Neoregelia 'Scarface' and *Neoregelia* 'Lorena Lector'
shown by John Crawford



Dyckia unknown
by Keryn Simpson

Tillandsia 'Sumo Size White'
by Keryn Simpson



Tillandsia 'Nashville' and
shown by Helen Clewett

Tillandsia araujei



Aechmea 'Reverse Ensign'
query by Keryn Simpson



Neoregelia 'unknown'
I.D. asked by Steve Davidson



Aechmea 'Roberto Menescal'
1st Open John Crawford



Neoregelia 'Maya'
1st Novice Steve Davidson



Neoregelia 'Donna'
grown by Coral McAteer



Tillandsia velutina
1st Tillandsia Dave Boudier



Neoregelia 'Predator'
grown by Sue Mackay-Davidson



Goudeea 'Tiger Tim'
1st Judges Choice Flo Danswan



'Happy Easter' 1st Decorative Helen Clewett



'Strictly Green' by Sue Mackay-Davidson



'Tills Oriental Style'
by Dave Boudier



Cryptanthus Dish Garden
shown by Les Higgins



'Tilly Lamp'
by John Crawford



Vriesea glutinosa
by Dave Boudier



Cryptanthus acaulis var. *rubra*
grown by Les Higgins

The Making of *Wallfussia* 'Feather Belle' by Peter Tristram 2018

In the late 1980s and 1990s I was messing with a nice clone of the then *Tillandsia laxissima* var. *moorei*, now a *Barfussia*, trying to keep the beautiful species going from seed. I didn't succeed but I did create some hybrids.

The plant was collected by Coffs Harbour grower, Rob Phillips, near Tarapoto in northern Peru in 1985. Only 1 of about 10 of them survived the gas and this one turned out to be a smaller, nicely compact clone. It only ever produced 1 pup irrespective of what I did and eventually faded out in the late 1990s.



Photo: the Butcher files

Apart from attempted self pollination, I also put pollen from a wild-collected form of *Wallisia cyanea* onto some of the flowers and about ten seedlings resulted that were obviously the cross. Another cross included what I named *Barfussia* 'Sexy Pink', *Bar. laxissima* var. *moorei* x *Wall. wagneriana*.

The *Barfussia laxissima* only bloomed a few times over the years and I unfortunately missed opportunities to do more with it.

Wallfussia 'Feather Belle' is a grex name. Plants are similar to, but smaller than *Wallfussia* 'Creation', easy to cultivate and flower yearly with a dazzling, bright pink burst of feathers with blue, fragrant flowers.



Wallfussia 'Feather Belle'
plant: 110cm across
height: 60cm overall
Inflorescence: 30cm x 24cm

photos by Ross Little

Aechmea manzanaresiana

H. Luther, Selbyana 19(2): 218-226. 1998

Type: ECUADOR. Napo: new road Hollin--Loreto-Coca, 1,300 m elev., 27 Feb. 1988, *Luther, Kress and Roesel* 1276 (Holotype: SEL; Isotype: QCA, QCNE).

In 2015 an opportunity arose to travel throughout Ecuador, our first thought was to research the available books for what Bromeliads we were likely to see. Of course *Jewels of the Jungle Bromeliaceae of Ecuador* by José M. Manzanares pages were studied at length. With so many amazing Bromeliads gracing the pages of those books one could only hope to see just a few of them. One plant crossed off the list was *Aechmea manzanaresiana* seen in its full blooming glory growing as an epiphyte in large clumps. The vibrant red to orange primary bracts make this plant easy to spot high in the trees at a distance when walking through the rainforest. When driving around the countryside we couldn't help stopping at each sighting to take photographs. Ecuador - an unbelievable visual feast for Bromeliad enthusiasts.



Keryn's **Show and Tell** plants appear to have some affinity to *Ae. manzanaresiana* but who is 'dad'. With such striking colours they are standouts for any collection. Hopefully somebody will recognize these two and be able to offer a name for them.

Photos by Ross Little and Lesley Baylis



Tillandsia Part 1- Introduction

by Les Higgins 2018

Circa 1977 huge amounts of *Tillandsias* became available and a *Tillandsia* Craze ensued. It was not just Bromeliad growers who indulged in an orgy of *Tillandsias*. Women glued *Tillandsias* onto bedroom mirrors. On office desks and counters, there was a *Tillandsia* glued onto a 'Pet Rock'. The public were convinced that *Tillandsias* as 'air-plants' just grow.

A rough road trafficable only by trucks had been cut into the Jungle. *Tillandsias* were collected in quantities beyond belief. Photographs show that to increase a trucks carrying capacity "Hungry Boards" up to three metres high were added. As trucks lurched along the rocky road it became carpeted with squashed *Tillandsias*.

Early *Tillandsia* imports were cheap, 500 plants cost less than \$50.00 AUD. The export price of *Tillandsias* rapidly increased as greedy hobbyists joined in the carnage by offering more money for Specimen Plants.

As *Tillandsias* are light weight the air transport costs are for volume not weight. To keep costs to a minimum the plants were crushed into the smallest possible box. With respiration restricted the plants arrived in a debilitated sweaty condition. Some were perforated by the spines of other bromeliads. A few were dead and others were near to death. It would take weeks of care and knowledgeable dedication for an importation to recover.

Plants taken from habitat can be expected to have a low nutrient reserve. Weeks of languishing in a Sth. American nursery further debilitated all plants. Then the plants endure a torrid, dark and airless journey taking days. Finally they arrive half way around the world where, for terrestrials, the earth's magnetic field is different. All this has to be taken into consideration to make a successful recovery. For plants that died in private Quarantine Stations "Quarantine Procedure" is blamed.

One wealthy person imported six mature specimens of *Tillandsia xerographica* mounted on a generous quantity of cork. Each individually wrapped in newspaper and placed in separate boxes. Those *Tillandsias*, having ample air space, were unaffected by the journey. Considering the value of *Tillandsia xerographica* in Australia the decision to pay the high cost of luxury volume air transport was worthwhile.

On arrival every *Tillandsia* is carefully inspected, cleaned and dried before fumigation. Wild collected epiphyte *Tillandsias* are expected to have a live gnat maggot within a small root gall. Tank types could carry a menagerie. Fumigation is essential to gently caress the plant's surface killing every living creature. Correct post fumigation procedures ensures Methyl Bromide has no adverse effect on Bromeliads. Every trace of gas has to disperse before each *Tillandsia* can be mounted or potted and only then given water. (Premature watering causes the residual gas to enter the plant).

The fumigation is carried out in Sydney's city centre. If an insect escapes there is no chance of its survival. One day there was hundreds of *Tillandsias* plus other plants all needing immediate attention. The plant fumigation chamber has a small capacity. Overwhelmed by plants a mistake was made. The Alternative Quarantine Procedure was used on a *Tillandsia* importation. For 20 minutes the whole importation was soaked in Malathion E C 500™ and white oil. The result was absolute waterproofing of every *Tillandsia*. All attempts at recovery failed and every plant died. (Let this be a warning: **NEVER** use oil or any form of oil emulsion on a plant with trichomes).

Vandalism of pristine areas worldwide became extreme. An attempt to control exploitation of rare species was made with the introduction of The Washington Convention on Trade in Endangered Species Act 1979. Complying countries produced 'The Red Book' of their endangered species recording them as Class 1, 2 and 3. Class 1 plants are considered to be so endangered that they are unlikely to survive in the wild. Export permits for class 1 are strictly research purpose only. However nursery grown Class 1 seedlings are considered Class 2 plants. A limited quantity of Class 2 plants are allowed to be exported. Class 3 have fewer restrictions.

The Washington Convention has been superseded by CITES. This gives stricter control over the exportation of endangered plants. Unfortunately there is no way that vandalism of native areas can be prevented.

Indigenous people are a huge problem! They are allowed unrestricted access to flora and fauna. Unscrupulous nurseries exploit the natives who collect whatever is required for no more than the equivalent of a few Australian dollars. The selling price of a class 1 plant is huge and there are hobbyists eager to pay! Rare plants, mostly orchids, are given names of less vulnerable plants of the same species to hopefully evade export regulations. Smuggling is an alternative when a name substitution is not possible. Concealments can vary from stupid to very ingenious.

Tillandsia Rust is a serious disease. The first arrival in the N.S.W. Quarantine Station became the 'Type Specimen' that is now held in the Herbarium. Rust spores are weightless and can float high in the air over long distances. One single introduction has the potential to affect all *Tillandsia* in Australia. The N.S.W Bromeliad Society, Sydney was very concerned. They informed every club in Australia the name of the supplier and a photo of the rust.

Eventually a letter from the South American Nursery arrived: Sales to Australia had been so profitable that the Nursery owner had been contemplating visiting Australia. He anticipated being welcomed at nurseries and Bromeliad Clubs. But now "Why is no-one buying my plants?" It was pure chance that the identified nursery was the first to supply a rust infected wild collected plant. Other South American nurseries maintained the unending flow of wild collected *Tillandsia* into Australia complete with pests and disease.

Buyer Beware

Recently on Face Book we saw the result of what happens when commercialism enters the market with a photo of a plant named *Neoregelia* 'Monet' shown. This photo raised a few eyebrows with many growers querying the name as the plant showed great similarities to their *Neo*. 'Treasure Chest'. Some investigation by Geoff Lawn the International Cultivar Registrar was made with local and overseas growers all agreeing that *Neo*. 'Monet' sold in European and US nurseries and now Australia is not similar to *Neo*. 'Treasure Chest' but is the same plant.

Unfortunately rebranding occurs in our industry to increase/reboost sales, this is more common than we would like. It is up to growers to "blow the whistle" if they feel there is an issue with identifications, some are blatantly trying to cheat for \$\$\$ while some are honest mistakes. If you the grower don't get involved in checking and confirming the plant you have purchased or are about to purchase has the correct name on it you are only perpetuating the problem.

The BCR entry for *Neoregelia* 'Treasure Chest' has been amended to indicate the link between the two plants 'Monet' and 'Treasure Chest'.

This leads us to the "pink" problem raised by John Crawford in our FNCBSG March 2018 Newsletter. This month we received some feedback about other confused pinks e.g: *Neo*. 'Groves Passion' and 'Pink Passion' are they one and the same? Are there others out there needing to be brought to our attention?

We wouldn't have these issues if hybridisers registered their creations prior to release instead of leaving it to others.

Novice Popular Vote

1st	Steve Davidson	<i>Neoregelia</i> 'Maya'
2nd	Coral McAteer	<i>Neoregelia</i> 'Donna'
3rd	Sue Mackay-Davidson	<i>Neoregelia</i> 'Predator'

Open Popular Vote

1st	John Crawford	<i>Aechmea</i> 'Roberto Menescal'
2nd	Flo Danswan	<i>Vriesea</i> 'Tiger Tim'
2nd	Dave Boudier	<i>Vriesea glutinosa</i>
3rd	Les Higgins	<i>Cryptanthus acaulis</i> var. <i>ruber</i>

Judges Choice

1st	Flo Danswan	<i>Vriesea</i> 'Tiger Tim'
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Decorative

1st	Helen Clewett	'Happy Easter'
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A Get Well Message to Trish

Trish has been a well respected member of our Group for many years now, unfortunately she has fallen quite unwell in recent months but informs me that she expects to be back on her feet and attending meetings by May.

Wishing you well Trish

Hope we see you soon

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.