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

March 2022

Agenda: General Discussion

Venue:

Edition:

PineGrove Bromeliad Nursery 114 Pine Street Wardell 2477

Phone (02) 6683 4188

Study Group meets the third Thursday of each month

Next meeting April 21st 2022 at 11 a.m.

Editorial Team: Ross Little Helen Clewett Lesley Baylis

pinegrovebromeliads@bigpond.com

Life Members: Gary McAteer, Coral McAteer Debbie Smith, Shirley Smith



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# Meeting 17th February 2022

The meeting was opened at approximately 11.00 am The 14 members present were welcomed. No apologies were received.

## **General Business**

We welcomed several of our members that we haven't seen for quite some time due to Covid-19 and its restrictions. Welcome back Pam, also John and Jennifer who were able to make the journey south across the Queensland border.

We have special birthdays coming up for John, Gary and Shirley, no secrets given away here but the photos on page 5 may tell a different story. We all wished them a happy birthday followed by a happy birthday song of course.

Since our last meeting we celebrated Australia Day, which is the day we pay special tribute to those who have made some outstanding achievements in their lives and have given to their community. In our Bromeliad community it was Derek and Margaret Butcher's turn, each to be recognized with an OAM, Order of Australia Medal. Over the decades these two people have given so much to the Bromeliad world that without them we would only have access to a very small amount of the information which some of us require and want to know. Derek is an archivist and since he got involved in Bromeliads he has archived every shred of information he could acquire from all over the world. Supported by Margaret they were a wealth of knowledge and very giving as many editors would know. If information was required to support articles, be it technical or basic they were both happy to assist, sometimes a little cryptic but that was to help us think and learn about where to search for the information for ourselves. Derek and Margaret compiled 5 hard copy editions of Australian-bred cultivars in 1981-1997 which were eventually added to the Bromeliad Cultivar Registry (BCR). In 2009 this was transferred to the BSI Website. After many years of collating information Derek freely gave it out in the form of a CD, updating it annually. My last transfer of information was 55,985 files in 132 folders! There isn't much more we editors need to assure accuracy in the information given in our Newsletters. Derek was very helpful in proof reading articles and most of all identifying questionable plants and helping us learn to look toward the finer details in a description. Both Derek and Margaret also kept us up to date with name changes by writing articles for Newsletters around the country to inform the members of these changes.

Two of the greatest people of the Bromeliad world - Team Butcher OAM.

Clarification of some Popular Vote Competition rules were requested:

Can I enter a plant this year that was entered last year ? **Yes,** our competition starts in January and finishes in November.

Can I table the same plant more than once in a single year: **No** if it wins a place, if it does **not** win a place it may be entered again. Exception: a plant from any genus entered early in the year in its non flowering stage that wins may be entered again in the same year when it comes into bloom/full flower.

The point scoring system was discussed to clarify to our newer members just how the points are awarded.

Positions vacant: these were snapped up fast - NOT! Most everyone was happy to put a hand up to assist with all positions except for one, the editor's position, the hardest one to pass on, I got it again for another year. This means I need help, photos, articles, all the usual trappings needed to complete each monthly issue. Thankfully our ever valuable proof readers who tidy up the spelling and grammar and all the other bits that get missed said yes again.

Where we do need help is in correct labeling, if in doubt put the species name e.g. Neoregelia unknown, the team can only research names to a certain extent, we can't guess all spelling errors and pet names perpetuated down the line over several years. If at all possible try and ask the person you acquired the plant from for information, you may need to ask their supplier, the more you do, helps.

A request was made that raffle plants be labeled, if you don't know or are unsure of some identifications, ask, most likely somebody will know.

# Show, Tell and Ask!

Reviewing our Newsletter had last months queries answered we hope, which is what we try to do, as not all queries can be answered on the day.

Hopefully we've dealt with the two issues Dave raised last month, one being fertilizing. The simple answer is get your light, air and watering balanced and you're well under way. Dave's second issue was wood grubs, some good advice from other growers who have experienced the same issue in the past should solve Dave's problem. If the treatment is successful, in time we should get a favorable report back.

Hopefully Kayelene's possible crown rot issue was answered for her also.

Last month Keryn had an issue with algae growing in her plants and deposits on the leaves, this was easily resolved for her, flush the plants and wipe the dried algae off with a soft damp cloth. This month she brought along two plants that at first glance appeared to have been peppered by hail. On closer inspection we could see that it's lichens growing on the leaves. Apart from improving light and air movement around her plants it's also thought that the high humidity we're experiencing could be a cause. Alginox was suggested as a quick fix and hoping the following article may help with some good advice offered here.

#### Algae - How to Remove from Seedlings

Paul Turvey

I'm no expert at all with Tillandsia seedlings, but I thought some experiences with other bromeliad seedlings might help. Not directly, but maybe to help avoid disappointment!

I've seen swimming pool algaecide products like "Algitrol" and "Alginox" being recommended to kill algae on bromeliad seedlings and bromeliad germination/ seedling media and I've used them myself for that purpose. They work really well for that, plus as general sterilising agents and you can splash them all over the place without poisoning yourself. The active ingredients are of the same type found in general household cleaners like "Spray and Wipe" etc.

These chemicals are classified as "general biocides" and they are actually quite toxic to cells that they can get into. We have layers of inert dead cells covering us that prevent these chemicals from getting in. A lot of bromeliad seedlings when they are very small are actually pretty damn tough too, with strong barriers against a lot of stuff from outside and they survive these chemicals just fine while the algae around them gets nuked.

Problem is, when bromeliad seedlings like Vrieseas, Neoregelias, Aechmeas etc start getting big enough to hold water in their leaf axils and develop the leaf axil absorption capabilities that give them their amazing abilities as epiphytes (at maybe 5-10cm across), they absorb the algaecide as well and get nuked too. Which does not auger well for our super-absorptive Tillandsias.

#### So, I'd suggest that:

1) use chemical algaecides happily in seedlings like Vrieseas, Neos, etc, for a little while following germination, but stop well before they start holding water.

2) given that a lot of Tillandsias are geared to absorb just about everything they can get through almost every available surface at any time, I'd be avoiding chemicals like this completely. The key is probably to keep them moist just often enough to support growth, but with drying out for enough of the time to kill off the algae, just as they would experience on a tree branch in the wild.

**From another grower:** I use Alginox regularly to control algae in the nursery, because we do fertilise it is necessary to control the algae. I have used it on seedlings and large plants and even tank Tillandsias at all sizes without any

issues at all. It even seems to stop and prevent rot in sensitive plants. I dipped a large tectorum for a friend 6 months ago because it was so black with algae and it is now flourishing.

If you read the label and follow the recommended rates you should not have any issues. We also use it 3 or 4 times a year to clean irrigation pipes in the nursery.

I have never had a problem using Alginox on any bromeliads, may be climate and conditions based. (ed: do a small test sampling first).

Another suggestion is: Phytoclean is a product that does contain the active ingredient Paul has mentioned. It has no copper in it. I have used it as an anti bacteria and surface disinfectant. When used at low concentrations it is safe on plants and can be run through your irrigation system. Orchid growers also use it for bacterial problems.

Ed: A few suggestions here that may be worth Keryn and Dave trying to help solve their algae and lichen problems.





John





1 - simple

- 2 simple 2a compound spike
- D = Floral bract and T = Primary bract



- A discussion was had about simple and compound flower spikes / inflorescences. Most Neoregelia have a simple unbranched inflorescence.
- Simple means of one piece, single not branched.







Tillandsia brachycaulos grown by Gary McAteer



Summers Heat, Death of the Roses' shown by John Crawford



'Gold Fever' shown by Dave Boudier



'A Small Arrangement' shown by Helen Clewett



*Neoregelia* 'Lorena Lecter' 1st Open John Crawford



'End of Summer' 1st Decorative Mitch Jones



*Tillandsia* 'Magnificent' 1st Tillandsioideae John Crawford



Tillandsia mallemontii 1st Judges Choice Dave Boudier

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*Tillandsia* 'Marron' grown by John Crawford



*Neoregelia* 'Red Macaw' grown by Kayelene Guthrie



Alcantarea 'Vampira' F2 Striated grown by Mitch Jones



*Aechmea* 'Inca' grown by Dave Boudier



*Vriesea* 'Crimson Bling' grown by Michelle Hartwell

John brought in for **Show, Tell and Ask!** a *Wallisia* 'Triflor' with its three sided - tristichous inflorescence making it the easiest to identify. His second plant has a medium length peduncle (stalk), this most likely fits *Wallisia* 'Emilie'. *Wallisia* 'Duvalii' has a much longer peduncle which rises above the foliage.



<u>To Clump</u> <u>or</u> <u>Not to Clump - 2</u> When preparing photos for our February 2022 Newsletter I did some back referencing to see what I had previously written about Michelle's *Billbergia* 'Kolan Flashback' unreg. I found that this plant was first presented to us in 2017 as a single non flowering plant, in 2018 it was tabled again flowering. Since 2018 that single plant has multiplied so well Michelle now has a clump to be proud of. Hopefully we'll see the clump flower in the future. Our next clumper was Helen Clewett with her *Lemeltonia dodsonii* (previously in Tillandsia) which has seven inflorescences. Dave agreed his plant with a single inflorescence and pups developing will be best allowed to grow into a clump.

**Lemeltonia dodsonii** (L.B. Smith) Barfuss and W. Till, 2016. Lemeltonia named for Elton Leme (1960 –) from Rio de Janeiro, Brazil, a leading authority of Brazilian Bromeliaceae.

The type specimen was found by C. H. Dodson growing as an epiphyte in old orange trees along the Santo Domingo to Quito road, Pichincha, Ecuador, 1100 m altitude on December 27,1972.



Vriesea carinata and Tillandsia bulbosa from our clumper archives.

# **Questions and Answers**

#### Q.1 - Some of my bromeliad leaves develop ridges or lengthwise crinkles. Why, and what can I do to eliminate this?

**A.** In some plants this is believed to be a genetic defect, as it seems that it is passed on from generation to generation. In some neoregelias it can be a cultural defect produced by growing in high light, little water, and with no or very little fertilizer. In either instance, it could be a nutritional deficiency. As an experiment, try feeding with a very low nitrogen, high phosphate and potassium fertilizer that contains trace elements, such as Peters 10-30-20. Be sure to adjust the pH to about 6.25 after dissolving the fertilizer. This is important as trace elements are only absorbed when the pH is between 6.0 and 6.5. If the problem is purely genetic this will not help and, perhaps, you should trash these plants.



#### Q.2 - I suspect that some of the plants I purchase have dead roots. Can this be determined, short of knocking them out of the pot? Can older plants be rerooted?

**A.** It would be wise to unpot all new plants, examine and wash the roots before repotting in your own mix. Even if the roots are not healthy there should be no difficulty if you foliar feed. This is the normal method for most bromeliads. Given fresh mix and a little time the roots should re-establish themselves. The most important thing a bromeliad asks of a pot is stability. We have re-rooted several plants that have developed long, unsightly caudexes. The caudex (trunk) should be cut about three inches below the bottom leaves, dusted with Rootone, allow to harden for two days, then repotted and fed with phosphate while being kept in a shady area for about ten weeks.

#### Q.3 - What bromeliads are best to grow in the house? All my neoregelias turn green.

**A.** All bromeliads require some light. Another problem encountered in the house is low humidity. Neoregelias require high light so they will probably never be successful under most home conditions. They will, however, tolerate about a week at a time in the house before being returned to better conditions. *Guzmania, Nidularium* and *Vriesea* would probably be the genera of choice. Some *Cryptanthus* are grown in terrariums, but the results are usually not spectacular. Culture within the home is more difficult than greenhouses or shade houses, yet many people have no other choice and are successful. They keep their collections close to an east or south window and provide some means of raising the humid-ity of the surrounding area. Many tillandsias will do well under these conditions.

# Q.4 - How can I tell by looking at a bromeliad how much light it should have?

**A.** Simply impossible. Anyone who says they can is just not taking into account their knowledge of the requirements of the various genera and species within the genera. Study and learn the habitat of many species, not forgetting the microclimates within any growing area; the level at which the plants occur on trees; whether they thrive in a ravine or on the top of a hill; on an east or west cliff. The more scurf on a plant, the dryer it will probably grow, but this is not necessarily an indication that it will thrive in full sun. Your best bet is to observe where your source has been growing the plant. Don't bother to ask as you will probably be told, "Oh, just out in the shade house with the rest of the plants." Within that shade house are a dozen microclimates. Is it high on the pole? Is it where the morning sun shines in under shade cloth? Is it shaded by a hanging basket? Is the shade cloth 58% or 73%? There are so many variables. Any good grower will make an educated guess, then observe the plant and not be afraid to experiment. Just refrain from big, sudden changes as this is an invitation to disaster.

#### Q.5 - Why do bloom spikes sometimes come right out of the potting medium instead of up on the plant? Have the parent plants been treated to bloom, causing the pups to freak for generations later?

**A.** It is hard to see how this condition could pass down over several generations. The bloom formation is triggered by certain hormones, either natural or artificial. In talking to Mr. Harry Luther, he suggests the following explanation. Since most bromeliads bloom from a terminal tip, I assume that your bloom came from one of the eyes, or immature offsets that occur at the base of every leaf. Of course, when the old leaf dies and falls off, the eye remains, provided it was not injured. If the plant is chemically treated as to overload it with hormones, then it is possible that one of these vestigial eyes could bypass the formation of a new plant and simply supply a terminal tip to produce an inflorescence. Another possibility could result from the destruction of a very immature inflorescence leaving the plant full of natural hormones, thus triggering the same response. In any case, these hormones should become non-functional and deteriorate after a few weeks or months.

#### Q.6 - The mix that was recommended to me does not dry out quickly enough when we have heavy rains. What modifications should I make to correct this?

**A.** Experiment. Reduce the amount of peat moss, compost, soil or any other material that has a tendency to pack. Increase the amount of material that will keep the mix open, such as lava rock, perlite, shredded tree fern and bark. Vermiculite has a tendency to collapse in time or, rapidly, if you pack it too firmly when potting.

### Bromeliad Genus Name Etymology - part 1 compiled by Ross Little

Acanthostachys – from the Greek "acanthos" spiny plant and "stachys" a spike.

**Aechmea** – from the Greek "aichme," spear, referring to points on the perianth:the entire floral envelope consisting of: the calyx (sepals) and corolla (petals).

**Alcantarea** – for Dom Pedro II (Dom Pedro de Alcãntara João Carlos Leopoldo Salvador Bibiano Francisco Xavier de Paula Leocádio Miguel Gabriel Raphael Gonzaga 1825 - 1891), second Emperor of Brazil 1831 - 1889.

Ananas - comes from the Guarani Indians of Brazil.

**Androlepis** – from the Greek "andros" man or male and "lepis" scale, referring to the scale-like appendages on the stamens.

**Araeococcus** – from the Greek araios, thin, and the Latin coccum, berry, having the smallest fruits with the fewest seeds in the family.

Barfussia - for Michael Harald Johannes Barfuss (1977-) an Austrian botanist.

Billbergia – for Gustave Johannes Billberg, Swedish botanist, 1772-1844.

**Brewcaria** – for Charles Brewer-Carías (born 1938) a Venezuelan explorer and naturalist.

**Brocchinia** – for G. B. Brocchi, 1772-1826, who was an Italian student of biology and geology.

Bromelia – for the Swedish botanist, Olaf Bromel, 1639-1705.

Canistropsis – is from the genus Canistrum and the Greek "opsis" (resembling).

**Canistrum** – from "kanos," Greek for basket, the inflorescence being in a basket of bracts.

**Catopsis** – named by Grisebach in 1864, meaning a view in Greek, may refer to its growing in trees.

**Cipuropsis** – named for its resemblance (Greek "opsis", sight or appearance) to members of the genus Cipura Aubl. (Iridaceae).

**Connellia** – for Frederick Vavasour McConnell, English ornithologist, biologist and explorer of Mt. Roraima, 1868-1914.

Cottendorfia - for Baron Cotta von Cotendorf (1763-1844), a German botanist.

Cryptanthus – "crypt" means hidden; "anthos" means flower.

Deinacanthon – from the Greek "deios" enemy and "acanthos" spiny plant.

**Deuterocohnia** – second genus named for Ferdinand Julius Cohn, 1828-1898, like Deuteronomy for "numbers again, repeated law or second law" in the Bible.

Disteganthus - from the Greek "dis" (two), "steg" (covering), "anthos" flower.

**Dyckia** – for Prince Joseph von Salm-Reifferscheid-Dyck, German patron of botany, 1773-1861.

Edmundoa – for Edmundo Pereira (1914 - 1986), Brazilian botanist.

Eduandrea – for Édouard André (1840-1911), plant collector.

Encholirium – Greek words meaning 'sword-lily' refers to its tall flowering stalk.

**Fascicularia** – from latin "fascis" bundle and "aria" pertaining to, in reference to the flowers growing in bundles.

**Fernseea** – for Heinrich Wawra Ritter von Fernsee (1831 - 1887), a German botanist who collected widely in Latin America especially in Brazil.

**Forzzaea –** for Rafaela Campostrini Forzza, botanist, curator of the Herbarium of Rio de Janeiro Botanic Garden, Rio de Janeiro, Brazil.

Fosterella – for Mulford B. Foster by Lyman B. Smith in 1960.

**Glomeropitcairnia** – named by Mez in 1905 for its clustered flowers resembling those of a Pitcairnia. Glomerate = dense or compact cluster or clusters.

**Goudaea** – for Eric Gouda, Dutch botanist, specialist in Bromeliaceae. It was first described and published in Phytotaxa Vol. 279 on page 51 in 2016.

**Gregbrownia** – for Gregory K. Brown (1951–), professor of Botany at the University of Wyoming, Laramie.

**Greigia** – for Major General von Greig, president of the Russian Horticultural Society in 1865.

**Guzmania** – for A. Guzman, a Spanish naturalist, by Ruiz and Pavon, pioneer botanical explorers of Peru, in 1802.

Hechtia - for councilor (geheimrat) Julius Hecht of Potsdam in 1885.

**Hohenbergia** – for the Prince of Wuertemberg, a German patron of botany, known botanically as Hohenberg.

Hohenbergiopsis - "opsis" meaning resembling or like a Hohenbergia.

**Hoplocryptanthus –** Greek "hoplos" meaning armoured beast or heavily armed, a Cryptanthus heavily armed.

Hylaeaicum – referring to the short length of the leaf blades.

# **Open Popular Vote**

1st 2nd 3rd	John Crawford Kayelene Guthrie Dave Boudier	<i>Neoregelia</i> 'Lorena Lecter' <i>Neoregelia</i> 'Red Macaw' <i>Aechmea</i> 'Inca'
		Note: spelling correction from 'Lector' to 'Lecter'
Tillandsioideae		
	John Crawford Helen Clewett Dave Boudier	<i>Tillandsia</i> 'Magnificent' <i>Lemeltonia dodsonii</i> <i>Tillandsia mallemontii</i>
Decorative		
1st	Mitch Jones	'End of Summer'
Judges Choice		
1st	Dave Boudier	Tillandsia mallemontii

# Web Links for Checking Correct Identification and Spelling ?

Bromeliad Cultivar Register (BCR): <u>http://registry.bsi.org/</u> Refer to this site for correct identification and spelling of your hybrid or cultivar.

New Bromeliad Taxon List : <u>https://bromeliad.nl/taxonlist/</u> 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 many with Table of Contents Index and there's 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.