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

Study Group meets the third Thursday of each month

Next meeting 21st February 2019 at 11 a.m.

Venue:

PineGrove Bromeliad Nursery

114 Pine Street Wardell 2477

Phone (02) 6683 4188

Discussion:

January 2019

Election of Officers General Discussion

Editorial Team: Ross Little Helen Clewett

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Meeting 20th December 2018

The meeting was opened at approximately 11.00 am The 17 members present were welcomed. A total of one apology was received.

General Business

Ross opened the meeting welcoming and wishing all a Merry Christmas, he quickly handed-out the Newsletter and opened discussions.

Protracted dialogue occurred concerning show regulations that are appropriate to a Study Group, study group meaning just that:

To study and learn about Bromeliads, their culture and allied subjects. Each quality show bench presentation has the potential to advance knowledge, even those of a lesser quality help us learn via constructive criticism. To help us understand these ideals for our Group regards the Decorative Section complaints of late it has been suggested to those concerned to arrange a demonstration of what should be considered as 'Decorative'.

Ross asked for more members contributions of quality photos. Don't forget the desired photograph's subject is the plant no matter how attractive one feels the background may be. Fortunately our editors can edit/crop etc. your photos so don't feel they are not good enough as we would like to create a members page in future editions. The talk progressed to how to use a basic camera to take a suitably composed picture.

For garden shots or low profile/broad view shots e.g. a Neoregelia take your photo as landscape view.

Turning the camera to portrait view \square improves the presentation of tall flowering plants e.g. Alcantarea, Vriesea etc.

Our December meeting is Christmas party day so it was decided to continue our discussion about taking photos on another meeting day in 2019 when practical demonstrations can be shown and discussed in more detail. Hopefully this will give members more confidence to take some Bromeliad happy snaps.

Helen decorated our meeting venue with the usual array of Christmas decor, baubles, lights, bon bons and trees etc. to help give that festive feeling. As usual there was a very generous amount of absolutely delicious food to be had by all. Being summer various salad dishes were on offer with plenty of cold meats available also. However the ice cream cake brought along by Sue and Steve blew all our ideas of diet out the window, desserts rule. (photo p.9)

Trophy Presentation for 2018

Novice — 1st Coral McAteer

Coral has been entering her Bromeliads into the Popular Vote Competition more seriously in recent years. Coral attributes her win to cultivation knowledge passed on by others to our novice growers. Congratulations Coral, well done.

Open — 1st John Crawford

John was awarded the Open trophy for a year of presenting superb plants. This was a very well deserved recognition. Congratulations John.

Decorative — 1st Keryn Simpson

Each year Keryn puts a lot of thought and work into her Decorative entries challenging others to rise also. This section is about more than just wrapping a ribbon around a pot or placing an eye-catching plant in a pretty pot. It's about using your imagination to tick all the boxes and create an artistic floral decoration. Congratulations Keryn.



Tillandsioideae — 1st John Crawford

This section has only been in existence for part of the year, we have seen some very good exhibits, however next year we hope to see an increase in excellence with more members getting involved. Congratulations John.

Judges Choice — 1st John Crawford

Again a most deserving winner consistently presenting well grown plants, well done John and congratulations once again.

Trophy accumulation is not the main intention of this Study Group, we're about learning, participating and passing on knowledge to others. The more one participates and asks questions the more knowledge one gains.

The afternoon came to an end with the distribution of presents. Each member must contribute a gift to receive a gift. Our tradition of selection is made according to the number of meetings attended. Three members had attended every meeting over the past year, Les, John and Kay were eligible to take first choice. However Les, who last year had first selection, swapped places with Michelle who last year had last place (work commitments), a wonderful gesture Les. Every member was delighted with their gift. The two surplus gifts will be included into January's raffle. Merry Christmas and Happy New Year to All was wished.

Chores for the Month

We are now heading into the hottest part of the year. How the heat affects the plant can be due to the type of nitrogen absorbed. Nitrate within the tissue gives a plant a higher heat survival than if urea and ammonium has been the nitrogen source. Unfortunately it is now too late to think of nutrient adjustment.

Watering is more essential than ever although high night temperature until March in Northern NSW eliminates the need to water non-cams in the morning and cams at night. Both can be watered simultaneously on a daily basis.

During the day water the shade house floor to increase humidity and reduce the temperature.

Other than the "spikeys" it is essential to keep plants under shade cloth of suitable density to prevent leaf burning. Water the "Spikeys" often with a good soak.

Watch for heat stress symptoms. Plants such as *Cryptanthus beuckeri* are not going to like extreme temperature and high intensity light. Higher altitude plants need to be kept very cool at this time of year, the use of fans is beneficial.

Show, Tell and Ask!

Drew has offered to create an index and web link for our Newsletter to help make it easier to reference past articles, plant information and photos. This will be available to everybody in the near future. Many thanks Drew.

We were all very pleased to see that Drew is already into the spirit of a study group. He showed a plant from the Alan Ladd grex, a billbergia with wider and perhaps a little shorter than usual leaves that were albomarginated - having whitish cream edges. Ross identified it as *Billbergia* 'Booyong Ladd', the reverse leaf pattern to the variegated *Billbergia* 'Allan Ladd'.

Another Billbergia was presented that Ross had acquired from Harvey Ottley in 2015 when he attended the 16th Australasian Bromeliad Conference in Darwin. Only Harvey's name was on the label and Billbergia unknown. The inflorescence had popped out the day or so prior to our meeting giving little time for proper investigation. It reminded us of *Billbergia zebrina* one of the Helicodea group of Billbergia but it wasn't quite a good fit. John felt it was from seed that had been collected by himself and others on a tour in Brazil several years ago. Enquiries were made to Harvey who considered *Billbergia porteana* as the identification and advising that it is native to Bahia. This appeared to be a more comfortable match than *Bill. zebrina* after checking the descriptions.

Distribution. Epiphytic and saxicolous, 800-1300 m alt, Brazil, Paraguay.

The Watch Spring Billbergias in Cultivation

By Lyman B. Smith, Smithsonian Institution, Washington, D.C. Reprinted in part from: The Journal of the Bromeliad Society, January/February 1983, Vol. XXXIII(1)

One of the easiest groups of bromeliads to distinguish is that of the watch spring or helicoid billbergias, because their tightly recoiled petals are unique in the family. In fact some botanists have favoured separating them as a genus, *Helicodea*, but intermediates with true *Billbergia*, like *Billbergia brasiliensis*, make this separation appear undesirable.





Besides their curious petals, the helicoid billbergias have a number of other characteristics in common. Their few leaves form a long, tubular rosette, their scape bracts are very large and a beautiful shade of rose, and their inflorescence is always simple and usually pendent. In fact there are so many similarities that we have little left to distinguish the species from each other except the shape of the sepals and the ovary. However, as a sort of compensation, these vary more than in most other bromeliad genera.

In *Billbergia porteana* the lower part of the flower has an hourglass figure because of the large epigynous tube: (epi, upon, and gynous, ovary) between the ovary and the unusually short broad sepals. This is another species described by Beer in 1857. It is a native to eastern Brazil and is well known both in the wild and in cultivation.

Billbergia porteana

1	1 Ovary verrucose (warty)	2		
	1 Ovary NOT verrucose	porteana		
	2 Sepals rounded tips	zebrina		
-	2 Sepals pointed	rosea		
	Note the warty versucose bits	on Rillheraia zehrina on		

Note the warty verrucose bits on *Billbergia zebrina* on the left and NOT verrucose warty on our plant on the right which makes it a better fit to the description for *Billbergia porteana.*



A *Tillandsia straminea* in full bloom shown by Helen had white petals with purple edges was passed around for all to take in the very pronounced and delightful fragrance.

Habitat: Southern Ecuador to central Peru, from the coastal desert up to 2,500 metres. Can easily be confused with *Till. purpurea* from which it differs by its straw yellow and naked primary bracts.

Peru: near Olleros (Humboldt and Bonpland n. 3496), near Huanuco (Haenke), Tal des Rimac, to the ruined walls of Cajamarquilla (Seler n.252).

Ecuador: near Riobamba (Andre n.4318).



Tillandsia straminea



Tillandsia straminea in habitat, Ecuador 2015

Michelle brought along to show us two very colourful Bromeliad design cushion covers she had recently found on the internet that she couldn't resist purchasing.





<u>Where do I Find the Dates ?</u> 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.





Novice Champion 2018 Coral McAteer

Decorative Champion 2018 Keryn Simpson





Steve and Sue Keryn and Dave



Kay



Ross





Debbie

Shirley and





John

Gary

Helen

Coral

Drew

My Bromeliads Over Orchids

Coral McAteer 2019

As the orchid collection was growing my Bromeliads were gradually relegated to

the floor of the shade house and under the benches where they weren't getting enough light. It was time to move them. The orange tree that stood proudly in our yard had supplied good protection for some of my collection until it suddenly died. I chopped some of the branches off, tied and hung some of my Bromeliads to it. I had my own Bromeliad tree until it too came to its demise, it rotted and fell over. I acquired an old fence panel and covered it with chicken wire and *Tillandsia usneoides*, some pockets were created that I tucked mostly Neoregelias into and around the panel to help disguise it, now I have a Bromeliad wall.





I grow many of my Bromeliads under an awning where they get a little morning but mostly afternoon sun. I'm happy with how they are growing now but I've run out of space again. My husband decided to build me two long steel benches along the side of the house where they get mostly afternoon sun. Being higher off the ground they have better air circulation and I find it a lot easier for me to look after my Bromeliads making the task pleasurable again. Thank you Gary.



I enjoy my Bromeliads very much plus the friendships gained at the meetings and get togethers every month. Coral

<u>Tilliandsia tectorum in Peru</u>

Taken in part from: BSI Journal Vol. 48, January-February 1998, No.1

We were fortunate to have arrived right after Christmas. Each year, local people collect thousands of these plants to use as simulated snow in their nativity scene in the town plaza. Afterwards, they are dumped into a heap at the edge of town for children to jump up and down on the soft fluffy pile. There seems to be little danger of this species becoming endangered in this area even though they are collected by the thousands each year. Most of them grow on steep canyon walls, which are totally inaccessible, on the opposite side of a great roaring river a mile below. Accessible plants have to be found on our side of the river, which is not an easy task.

Lee Moore



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>http://botu07.bio.uu.nl/bcg/taxonList.php</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, Detective Derek Articles.

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

A Little About Navigating the BCR



A quick search of the BCR can be relatively easy, for example if I want to know all the forms, varieties, cultivars or 'hybrids of' relating to a particular plant e.g. *Tillandsia leiboldiana* but I can't remember all of them to search individually for, I just enter leiboldiana into the search box and I get five results to peruse.

	BROMELIAD SOCIETY INTERNATIONAL			Bromeliad Cultivar Register	
BCR Advanced Search	New registration	What's New	Information	Name List	Catalogues
28 Results		Dues	naliad C	deixaan D	a mintan
	`		neliad Cu	litivar R	legister
AECHMEA Albo-vittata	Advance	Search			
AECHMEA Aton					
AECHMEA Auslese AECHMEA Big Mama					
Fasciata			Advanced	BCR Sea	rch
 AECHMEA Canvey Pink Surprise 					
AECHMEA Checkers			-select-	~	
AECHMEA Clara		genus	-select-	•	
AECHMEA DeLeon AECHMEA Electric Light		name			
AECHMER Electric Light AECHMER Flavi-vittata		breeder			
AECHMEA Frost			[
AECHMEA Ghost AECHMEA lvory		year bred			
AECHMEA Wory AECHMEA Kiwi		seed parent			
AECHMEA Leucadia	notes	pollen parent			
AECHMEA Mackerel AECHMEA Morgana	notes	notes	L		
AECHMEA Morgana AECHMEA Primera			fasciata group		
AECHMEA Sangria		references			
AECHMEA Sangria Blanco		updated since			(yyyy-mm-dd)
AECHMEA Silver King AECHMEA Silver Queen					(AAAA-uuu-oo)
AECHMEA Smoothie		Max. Results	0 100 0 500 0	1500	
AECHMEA Snaakse Ding			Search Home	1	
AECHMEA Stalker AECHMEA Stingray				3	
AECHMEA Sungray AECHMEA Supernova			You can search	ach field combina	tion
				vords or part of a r	

If I were to do a search for *Aechmea fasciata* varieties and cultivars I would get 82 results including its hybrids. To narrow the field down to only varieties and cultivars, go to Advanced Search, enter fasciata group into notes for 28 results.

Feature in the Tree Garden *Racine Foster* BSI Journal 1955 V5 (4) *Acanthostachys strobilacea* (Schult. f.) Klotzsch

Perhaps we can more easily visualize cascades of ferns or Rhipsalis on a tree

or palm than we can cascading bromeliads. What is a cascading bromeliad?

The Acanthostachys strobilacea, (means spiny spike with cone-like fruit) only member of this genus, is a delightful bromeliad with cascading attributes that can add unusual charm, grace or interest to a tree garden or an inside hanging-basket.

A genus first named by Klotzsch in 1841(see Mez. p.101) went into several taxonomic changes such as *Hohenbergia strobilacea* and *Ananas strobilacea*. Many of the early botanists, whose names are associated with bromels, such as Glaziou, Riedel, Sellow, Regneli, St. Hilaire, Burchell, all collected it in several states in Central Brasil. My husband and I collected it in the states of Espirito Santo, Minas Geraes, Sao Paulo and Parana on our first trip to Brasil in 1939; it was a joyous find and we have had it in cultivation ever since. In 1937 Carl Mez (in Das Phlanzenreich) stated that it was not in cultivation, however, it has been reported in many botanical gardens among their rare bromeliads.



Acanthostachys strobilacea A cascading bromeliad thriving in the boots of a Sabal palmetto palm, Palm Beach, Florida.

A genus having only this one species, it is an odd bromeliad with long, thin, terete, spiny leaves from a stoloniferous caudex. The inflorescence coming out of the terete leaves is like a tiny pineapple, being hard and composed of stiff red bracts. Whereas a pineapple has purple flowers, this has tiny yellow flowers.

The stringy cylindrical leaves are olive-green with dim whitish spots which add to its attraction, but the whole mass of sprouting, stiff leaves bursting out of a tree or palm trunk, enlivened by the red heads of the pseudo-cone, make the plant excitingly attractive and irresistible. As a decoration for a tree garden in frost free areas it has the contour, the colorfulness, the massed effectiveness, as well as the sparse openness of a cascading fern.

Give it plenty of acid leaf mold or fern fiber and ample water then you can have a joyous touch of charm.

The 2019 Bromeliad Taxon List shows two: Acanthostachys *pitcairnioides* Acanthostachys *strobilacea*

Spots and Hieroglyphs David Barry Jr. — Los Angeles, California

Spotted leopards and cheetahs, speckled hens, freckled boys and spotted bromeliads are of much more interest than if plainly colored. Spots have high decorative value, but not many bromeliads are spotted. Now I wonder why some are spotted and some are not.

About twelve years ago I had an exciting experience when collecting bromeliads in the Isthmus of Panama. I was taken to a deciduous forest of small trees where it was dry, the sun was burning hot, and there was no shade. The thin limbs of the trees were gaunt and naked except for many small bromeliads all about eight inches in width. Their rosettes were silhouetted against the sky like summer's bird nests in winter. Each lovely little plant was profusely spotted with small polka dots. They were as easy to collect as picking oranges, and I gathered quite a few and sent them with great expectation to my nursery in Los Angeles. I was in for a disappointment. They soon grew into large plants about two feet across, their spots disappeared, and they produced tall spikes of an indifferent green. I gave away a few plants and threw out the rest. Bench space was too important to waste on such colorless plants. They were *Vriesea sanguinolenta*.

It occurred to me recently why the spots disappeared. When the trees were leafless, the spots were needed to reduce the intensity of the sun on the leaves of the bromeliads. As the trees leafed out and provided some shade from the bright sun the spots were not needed so they faded away. The coming and going of the spotting on these bromeliads is annual and determined by the deciduous nature of the host trees. The development of the bromeliads from seed to seed is probably also annual. The rapid growth of bromeliads in Panama is made possible by the warmth and rain there. What would more heat and water do for your plants?

Tillandsia dyeriana from Ecuador is another bromeliad that loses its spots in maturity. Its host plants are undoubtedly deciduous trees. Other kinds of bromeliads keep their spots. Examples are *Vriesea racinae*, *V. guttata*, and some of the small neoregelias such as *N. punctatissima*, *N. tigrina* and *N. pauciflora*. As their spots are to reduce the brightness of light on the green of their leaves, it is evident that the plants live in exposed places and in cultivation must be given a great amount of light. In the tropics this means full sun. *Vriesea racinae* is difficult to grow, if not to keep alive, "in captivity", as it is usually not given enough light. I was told years ago to treat *Vriesea guttata* "rough" and I eventually figured out that this meant with little protection and with much exposure to strong light.

Broken linear markings of irregular pattern, or hieroglyphs, are used by some bromeliads to reduce light intensity on their leaves. Examples of such plants are *Vriesea hieroglyphica, Guzmania vittata, G. lindenii, G. musaica* and *Canistrum* × *'leopardinum'*. The stubbornness to flower of *Vriesea hieroglyphica, Guzmania musaica* and *Canistrum 'leopardinum'* is very likely due to lack of enough light. *Guzmania vittata* has been culturally difficult for the same reason.

The rationale for giving stronger light to spotted and hieroglyph bromeliads than to unmarked plants is that it is needed to compensate for the comparative lack of green area in their leaves where the photosynthetic process can work on the chlorophyll in the manufacture of food. This requirement is not confined to these particular bromeliads but extends to other kinds of plants with deficiencies of green areas in their leaves.

BSI Journal 1973 Vol 23 (1)

Tillandsia 'Tomellinensis'

by Derek Butcher November 2018

In October 2002 Renate gave me a plant with this name via a batch that Len Colgan had imported. It first flowered for me in December 2015. I gave a piece to Ray Clark and because of his tender care it flowered in 2018. It is growing in at least 2 places in Adelaide (the other being Len Colgan's) so it must like living in Adelaide. Regrettably Renate didn't get around to publishing this plant and it's possible that current taxonomists may treat it as a variable *Tillandsia hammeri*. Therefore I have decided to record the name as a cultivar in the Bromeliad Cultivar Register.

It was found in Mexico, State of Pueblo, near the border of Oaxaca, on the road between Tehuacan and Oaxaca near Calipan, 2000m. alt, terrestrial on rocks upstream about 8km. by H. Gieseke in 1988. It flowered in April 2000 in the collection of Renate Ehlers.

It differs from *T. hammeri* in: Plant smaller and secund, not narrow and erect. Leaves greener and substantially shorter. Sheath shorter and distinct, outside green, inside light brown, not both sides deep dark brown. Inflorescence shorter, more compact and wider, with few very broadened long spikes. Primary bract not longer than the spike, hardly half as long. Floral bract exceeds the sepal, longer (to 2.3cm compared to 1.5cm), broader, clearly keeled, glabrous, lacquered red with lepidote tip, the edges and top portion with winged large asymmetric trichomes not green red and uniformly dense fine white lepidote.

Plant in Australia stemless, forming clumps, single plant flowering 25-35cm high, forming an erect often secund rosette, Leaves to 30cm long, narrow triangular. Inflorescence of 1 spike to 10cm long, Floral bracts 2-2.3 cm long, carmine – red, glabrous, shiny lacquered, the tip dense fine pruinose lepidote.

Summer Problems

Now that we are through summer you may find that some of your plants are showing some unwanted features that could be related to summer's unique conditions. The following are some problems you may be encountering and some possible solutions.

Sunburn: This can occur extremely quickly on very hot days. All attempts should be made to ensure maximum protection for the middle of the day but thought should be given to late afternoon protection as the sun can be quite intense even after 5.00pm on some days. Relocation of a plant when taken from low light (indoors) to outdoors (even not if into direct light) may cause extensive burning. Gradual increase in light will allow the leaves to toughen up after an extensive indoors stay. The sun is higher in the sky so that which was in shade during winter (2hrs mild midday sun) may not be during summer (4hrs intensive direct midday sun). The days are longer in summer which may cause bleaching.

Heat: Usually this is in association with sunlight and dehydration. Plants can be cooked in a glasshouse where the light isn't necessarily high and the humidity is very high. Watch out for heat reflected from walls, windows and from the pavement. Plants will be burnt on one side even though they are not in direct light.

Dehydration: The drying out of plants puts strain on plants which in itself will result in irregular growth. The drying of roots reduces their ability to take up nutrients. Soil will fall away from the roots or may be set into a pot-shaped rock. The re-wetting of the soil may be difficult and take a long soak. The lack of moisture can cause young leaves not to develop, stick together and longitudinal leaf curl may occur. To avoid the problem, water more often, locate plants in a place where dehydration is minimized, use soil conditioners such as compost, peat moss or artificial conditioners. Wetting agents for the soil also help as they will ensure when watered the moisture goes through all of the pot and is captured.

Pests: These are generally fewer in number in summer however not totally absent. Crickets seem to be the most active, since they are prepared to eat anything, Bromeliads are at risk. Grasshoppers are similar. Mozzies breed and although they wont harm the Broms they may upset people. Heat and humidity in glasshouses (and shade houses) results in high activity from the likes of mealy bug and scale.

Wind: Our strongest winds are winter winds but thunderstorms are common in Perth in summer as are strong easterly winds. However the most destructive aspect is probably due to their drying affect, particularly to those items that are suspended above ground level. Give special attention to hanging baskets and Brom trees which may need watering daily. If wind is a problem then you can put up a wind break with shade cloth, move plants out of the winds passage or simply lower them to ground level temporarily.

Reprnted from: Bromlink the bi-monthly Journal of The Bromeliad Society of Western Australia Inc. Volume 8, No.4, January / February 1988.