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

Edition: January 2025

Agenda: General Discussion

Venue: PineGrove Bromeliad Nursery
114 Pine Street Wardell 2477

Phone (02) 6683 4188

Study Group meets the third Thursday of each month

Next meeting February 20th 2025 at 11 a.m.

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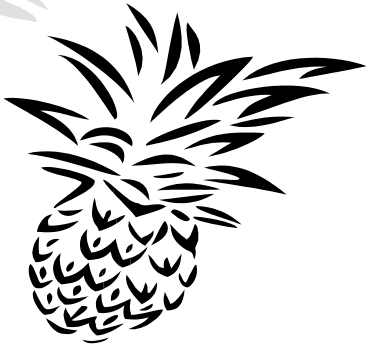


Meeting December 19th 2024

The Christmas get together got underway at approximately 11.00 am
The nine members present were welcomed.
Four apologies were received.

General Business

Our Christmas get together might have only been a small gathering but was with some wonderful friends enjoying a feast together.

Helen and Coral did a wonderful job of setting up the tables and decorating them with sparkling trees, bon bons (crackers) and tinsel to make the day feel full of Christmas spirit. Thank you to both of you for all your efforts.

The 'Gift Swap' table was well supported, I hope everybody was happy with their swap selections.

From Chairperson Kayelene….
Thank you to all for your friendship throughout 2024. Our gatherings have allowed for the sharing of information and experiences that have benefited us all - not just via discussion, but by practical demonstration on many occasions.

Special thank you to those who have undertaken designated roles throughout the year. To Ross and Helen for hosting the meetings - to Coral for her ongoing generosity and desire to have things always set up so beautifully, and of course to those members who have brought such expert knowledge and experiences to share with those of us who are still learning and eager to "have a go" in our quest to grow the beloved bromeliad.

May you all have a happy Christmas and I hope that 2025 is kind to all.

From time to time I've not managed to take photos of all plants brought along to our meetings, be it for our Popular Vote Competition, discussion, asking for identification or simply a 'brag'. When this has happened I've reached out to members of our Group to take photos of their plant for me or in some cases to visit another member and take photos of their plant. For this help I thank you very much as your photos help make our Newsletter what it is.

Thanks also to those who have supplied articles during the year, every bit of info whether you feel it is great or small helps other growers. So please continue writing your articles, long or short they all help. You may find an article of interest to you like Helen has (Bromeliads - Houseplants for Today and Tomorrow) and feel it should be shared with everybody, it's very long but full of helpful info.

Thanks also to our Eagle Eyed Observers for keeping us corrected/honest.

Open Popular Vote Champion - 2024

1st Michelle Hartwell

Tillandsioideae Champion - 2024

1st Gary McAteer

Decorative Champion - 2024

1st Coral McAteer

Judges Choice Champions - 2024

1st Michelle Hartwell

1st Mitch Jones

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.

Bromeliad Species Database (BSD): www.bsi.org/members/?bsd
Refer to this site for species identification, photos, descriptions and more.

New Bromeliad Taxon List : https://bromeliad.nl/taxonlist/
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.

Show, Tell and Ask!

Helen's 'Christmas Quiz Questions' were a bit of fun again, some of us attaining massive scores, 5 or 6 out of 25 but we were having a good laugh along the way. Pam was the winner with a well over 50% score. Well done Pam.

Tillandsia 'Samantha' are in spike around this time of year and some of our members are experiencing their amazing beauty for the first time. They certainly are a sight to behold. Kayelene reports that her plant has no flush of colour yet, it's still quite green but doing very well. Hopefully we'll see it on our Popular Vote tables in the near future.

Kayelene has concerns over her *Vriesea hieroglyphica*, its newly emerging leaves have brown tips again. Air circulation shouldn't be an issue here as Kayelene is high on a hill where she catches good breezes. Perhaps check the pH of the water and if the water supply is delivered through copper pipes. If the later, try using only water from a collection tank. Damage is often caused by adverse weather months before it is noticed, think back a few months, was it extremely hot and dry, if so ensure you maintain a moist environment to keep the humidity up. Sudden temperature changes from cold to very hot can upset plants, often growers suggest the water in their plants is boiling in hot weather and causes the problem. I've never known water to actually boil in a bromeliad, I've used a fish tank thermometer to check water temps over a period of time, it doesn't seem to vary greatly in our area let alone reach boiling temperature. If this was the case the water in every cell of each leaf would boil and burst. Before this happens patches on a leaf surface that are at 90° to the sun show signs of burning. Therefore I would consider Kayelene's problem is water quality or is caused by dramatic changes in the weather, low humidity. Check for an irritant in the centre of the plant, a piece of wire, bit of a twig, piece of gravel, gum nut etc.

Many of our Australian native trees and shrubs have 'hard' leaves which can take from 18 to 30 months to break down. Whereas the soft leaves of rainforest trees can break down in just a few months. A question often asked is "should I clean the fallen leaf debris out of the centre of my bromeliads?"

No if it is grown in the open garden, the decomposition of the leaves is feeding/ fertilizing your plants. The leaf debris can save evaporation and mosquitoes can't get to that water source for breeding.

Yes if you are presenting a plant for competition.

So leave the vacuum cleaner in the shed for 'cleaning the rafters' and just keep around the plants clear and tidy allowing for good air circulation.

A plea to think twice before you comment when it comes to plant identifications. We often see well meaning people offer some very outlandish name calls when somebody asks for an identification (ID). It's great to be helpful but it's not if it's a guess. Too often these guesses 'stick' because nobody checks for accuracy and the receiver accepts the ID call, writes a new tag and perpetuates the error.

Before offering an opinion, if the plant is a cultivar or hybrid check the Bromeliad Cultivar Register (BCR) at http://registry.bsi.org/ and at least confirm to yourself that your thought of an identity matches the plant query.

If you can't find a match on the BCR, the plant in question may be a species, so go to the Bromeliad Species Database (BSD): www.bsi.org/members/?bsd.

To help others follow up on your 'ID call' be sure you have the spelling correct, check it here at the New Bromeliad Taxon List: https://bromeliad.nl/taxonlist/. This list will also show if the plant has had a name change/reclassification e.g:
Nidularium regelioides is now *Nidularium rutilans*.
Tillandsia cyanea L.B. Smith is now *Wallisia cyanea* Barfuss & W.Till.

Finally check *Wallisia cyanea* Barfuss & W.Till hasn't been reclassified.

Another good site for checking species, cultivars and hybrids is:
Bromeliads in Australia (BinA) http://bromeliad.org.au/

These are the best four sites for Bromeliad identification we have, however always be sure and double check your species name against the Taxon List, we all get caught occasionally by not double checking.

***Neoregelia* 'Takemura Grande'** was on the 'Christmas Gift Swap' table and raised a few eyebrows and some discussion again. It's been many decades since these hybrids were produced and they're still eye catching in any collection or garden. That's the test of a good if not great hybrid.

In part here as an introduction but first written about in:
A Tale of the Fabled Takemuras
by James V. Elmore in Grande 1(1): 19-20, 1978

"Shrouded in the mists of the unknown, laced with the mystery of the orient, high priced, exotic, praised as the finest and most rare of Neoregelias, the Takemuras spread their cloak of intrigue over the bromeliad world like a James Bond novel.

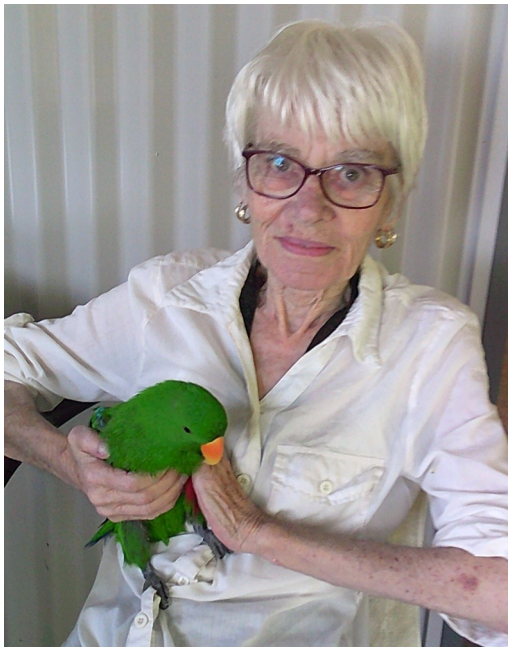
What, exactly, are the plants? Who was Takemura?" ……

Also refer to FNCBSG NSW Newsletter November 2021 for additional reading**:**
***Neoregelia* 'Takemura Grande' - a cold case or is it?** by Derek Butcher.

Keryn,
always happy
with a beaming smile

Debbie (red hat)
getting into the
Christmas spirit
with mum
Shirley

Kayelene
and
Michelle



Helen
with her photo bombing friend
Verde the eclectus parrot

Ross

Pam
was reading
our Newsletter
with great interest.

A few colourful bromeliads for our Christmas display

1st Open and equal **1st Judges Choice** shield winner 2024 Michelle Hartwell

Decorative
trophy winner
2024

Coral McAteer

Tillandsioideae
trophy winner
2024

Gary McAteer

Winners together

Tillandsiodeae Popular Vote Rules Clarification and Change

2024 saw a bit of confusion in our Tillandsioideae Popular Vote section that needs clarification to begin the year 2025 Popular Vote competition.

FNCBSG NSW Newsletter March 2018 notes from February meeting**:**
"There is increasing interest in a Tillandsia Popular Vote section, however there is a problem of space. We originally had a bench for Open and another bench for Novice. To accommodate Decorative (a newly introduced section) the bench for Novice was halved, a Tillandsia section would halve the Open sections space.**"**

The Novice section was eventually dropped which freed up table space.

FNCBSG NSW Newsletter April 2018 - **"**Our new Tillandsia section made its debut in March. 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*. The changes listed below in FNCBSG NSW March 2017 Newsletter will be accepted in our Tillandsioideae Popular Vote.

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.**"**

OLD NAME		**NEW NAME**
Mezobromelia brownii		*Gregbrownia brownii*
Mezobromelia fulgens		*Gregbrownia fulgens*
Mezobromelia hutchisonii		*Gregbrownia hutchisonii*
Mezobromelia lyman-smithii		*Gregbrownia lyman-smithii*
Tillandsia acosta-solisii	- - - - - - - - >	*Lemeltonia acosta-solisii*
Tillandsia anceps	- - - - - - - - - - - >	*Wallisia anceps*
Tillandsia asplundii		*Josemania asplundii*
Tillandsia cornuta		*Lemeltonia cornuta*
Tillandsia cyanea	- - - - - - - - - - - >	*Wallisia cyanea*
Tillandsia delicatula		*Josemania delicatula*
Tillandsia dodsonii	- - - - - - - - - - >	*Lemeltonia dodsonii*
Tillandsia dyeriana	- - - - - - - - - - >	*Racinaea dyeriana*
Tillandsia grandis	- - - - - - - - - - - >	*Pseudalcantarea grandis*
Tillandsia hamaleana	- - - - - - - - - >	*Racinaea hamaleana*
Tillandsia laxissima	- - - - - - - - - - >	*Barfussia laxissima*
Tillandsia lindenii	- - - - - - - - - - >	*Wallisia lindeniana*

OLD NAME		**NEW NAME**
Tillandsia macropetala		*Pseudalcantarea macropetala*
Tillandsia monadelpha		*Lemeltonia monadelpha*
Tillandsia narthecioides	- - - - - - - - >	*Lemeltonia narthecioides*
Tillandsia pinnata		*Josemania pinnata*
Tillandsia platyrhachis	- - - - - - - - - >	*Barfussia platyrhachis*
Tillandsia pretiosa	- - - - - - - - - - >	*Wallisia pretiosa*
Tillandsia scaligera	- - - - - - - - - - >	*Lemeltonia scaligera*
Tillandsia singularis		*Josemania singularis*
Tillandsia triglochinoides	- - - - - - - >	*Lemeltonia triglochinoides*
Tillandsia truncata		*Josemania truncate*
Tillandsia venusta	- - - - - - - - - - >	*Racinaea venusta*
Tillandsia viridiflora	- - - - - - - - - - >	*Pseudalcantarea viridiflora*
Tillandsia wagneriana	- - - - - - - - - >	*Barfussia wagneriana*

Fortunately not too many of these changes directly affect our collections, I have indicated those that I feel are most common in our collections that will need their labels changed - - - >, if I have missed some please advise me.

What about other Tillandsioideae species for Popular Vote? (2018)
All other genus species not listed here e.g. Catopsis, Goudaea, Guzmania, Vriesea, Werauhia etc, should be entered in the Open section.

Tillandsia - Popular Vote Rule Change - 2025

Since 2018 the Tillandsiodeae section being inclusive of both past and present Tillandsias in our Popular Vote competition worked well. We feel sufficient time has passed now that we should be used to the genus name changes. Therefore we are now changing to a singular genus section - **Tillandsia** Popular Vote. Entries in this section as of January 2025 shall be for Tillandsias only. All other genera previously allowed in this section are to be entered in the OPEN section. Refer to: The New Bromeliad Taxon List for genus classification for your entry.

However if you wish to enter a Tillandsia into the Open section you can. If your Tillandsia wins the Open section it **cannot** be entered into the Tillandsia section the following month or any other month of the same calendar year.

Accepted condition**:** if the Bromeliad you have entered into competition is not in flower (no visible inflorescence) when entered and wins, it can be entered again at a later stage in the same calendar year when in flower (mature inflorescence).

You can only enter one plant in **each** Popular Vote section per person. Clearly print your full name and Bromeliad name under the appropriate headings on the Competition Entry Sheets, this will help make the point scorers job much easier.

“ Important Notification “

Note the new / changed dates of this event.

Bromeliads - Houseplants for Today and Tomorrow Part 4

by Walter Richter (Translated by Adda Abendroth, Teresopolis, Brazil)

Climate and Distribution …….. continued from: BSI 1967 V17 (6)

Many bromels are also found in the eastern strip of the hilly country abridging the states of Espirito Santo, Rio de Janeiro, Guanabara (ex-Federal District), Minas Gerais, Bahia, Pernambuco, Maranhao, Pará, and others. The climate varies, and so do the plants. Tropical warmth dominates, subdued in the upper ranges. Rainfall varies even more than the temperatures. Compared with the interior of the continent, some regions of which have totally rainless months, the land near the coast has much rainfall, the dry season is shorter and not so pronounced. The rainforest on the eastern range is as luxuriant as that along the Amazon, but here bromeliads abound. Beautiful and very decorative Billbergias grow in the states of Bahia, Pará and Pernambuco.

The Catinga formation in northeast Brazil with its scarce rainfall presents still another type of bromeliad habitat. The Catinga as a whole is not uniform. Immense plains of grassland alternate with stretches containing low, scrubby trees. Owing to a dearth of water, the bromels living there are of the hardiest type, often associated with cacti. Next to the Catinga lies the "sertao" an uninhabited, natural country with extensive runs of sand and quartz. The vegetation betrays extreme lack of water; only plants able to store water can survive. Other than succulents, only a few extra tough bromeliads can take it.

The existence of bromeliads in Argentina and in Chile has its limits in the south. Peculiar to the Argentine and interesting for us are the plants of the dry prairies and semi-deserts. Here vegetation consists of an extremely dense combination of thorn-plants and succulents. This area is called the Monte. Tall trees are rare. Besides terrestrial bromeliads armed with heavy thorns (Bromelias and certain Aechmeas) a number of epiphytic species, especially Tillandsias are noteworthy. Semi-tropical climate predominates in the Chaco, a vast combination of woodland and grasslands. Here bromeliads make their stand with the cacti. Towards the highlands, copious mountain rain, principally in the summer, creates an island of abundant plant life that has almost a tropical character. Many epiphytes live here, among them many beautiful Tillandsias. One strip in the Argentine Andes, coming from the north and reaching as far as the bromeliad limit to the south is devoid of trees of any kind. This is the home of the hardiest of bromeliads, the Dyckias, Fascicularias, strongly-armed Aechmeas, and lesser known species and genera.

Bolivia is bromeliad country in a more moderate measure. Situated in the domain of the trade winds, all rain comes from the east, plenty of it, permitting the formation of luxurious rain forest. The western section is definitely a desert, especially in the south, rainless for years on end. In the rainy areas the rising

humidity condenses into fog and clouds. The fog forest holds abundant epiphytes, including many bromeliads.

In Peru we can distinguish three climate zones. The desert of Bolivia continues north. An oddity in this area are the rootless Tillandsias that seem to float in large masses on the desert dunes. Their water requirements are met exclusively from the air. The second zone, the so-called Sierra, does not interest us. It is followed by the third zone, on the eastern slopes of the Andes. It is remarkable for being the home of the Puyas, the giants of the family, growing at great altitudes. The lower parts of the slopes have a tropical climate. Abundant rain delivered by the trade winds favor rich epiphytic growth, including that of bromeliads. Peru has some very interesting Tillandsias.

Covering about 300,000 sq km, Ecuador has three different types of landscape. Here the Andes form two chains. Only their lower sections, having a tropical climate, interest us. The eastern lowlands are as yet little explored. Their dense virgin forests very likely preserve many unknown bromeliad treasures. The western lowlands, stretching from the Andes to the ocean, has a varied climate. Especially the northern section of the coastal strip is climatically favorable with its rain forests containing many epiphytes, among them beautiful Tillandsias, including *T. cyanea* and others.

In Colombia proximity to the equator combined with a high elevation provides a most varied climate. Between the western, central and eastern chains of the Andes lie the broad valleys of the Cauca and the Magdalena rivers, covered with luxuriant virgin forest. Humid winds coming from all directions bring abundant rain to all the mountains, up to 8,000 meters and more, permitting development of vegetation on a grandiose scale. Towards the north (Orinoco) drier regions take over, changing eventually to a landscape similar to the Brazilian Catinga, which contains thorny bromeliads. This is the so-called "Tierra caliente," the torrid zone, which attains about 1,000 meters altitude. Next comes the "Tierra templada", the temperate zone. Originally it was covered with forest, but now is under cultivation, many epiphytic orchids and bromeliads being lost in the process. The third zone, "Tierra fria", or cold zone, thanks to almost ever present fog, has rich epiphytic development. The uppermost forest limit is at an altitude of about 3,000 meters. A typical bromeliad of the Colombian rain forest is *Guzmania lingulata* var. *cardinalis.*

Mexico is situated on the northern edge of the tropics, and with only a few exceptions, marks the northern limit of the Bromeliaceae. Trade winds saturated with moisture absorbed from the hot seas of the Mexican Gulf carry abundant rain to the eastern slopes of the Mexican highland. Rainfall lessens in proportion to distance from the Gulf, so that the highland proper gets much less rain. Transition from moist to dry climate finds impressive changes in plant life, especially in epiphytes. Mexico is rich in bromeliads. Some of the host trees

are deciduous. The ensuing changes in light are an important factor in the development of plant life. The Pacific side of the highland gets very little rain and is very dry along the coast.

It now remains to clarify the basic ideas underlying the various vegetation forms conditioned by climate, which are often mentioned in connection with detailed descriptions of bromeliads.

The Tropical Rain Forest Climate — Its main characteristics are constant warm weather, average temperature above 18°C, a minimum of one month of abundant rainfall of about 2-3 meters and more; absence of a cool resting period in plant life, but a periodical dry rest period in the climate, which, however, is not very pronounced. The difference in temperature between the warmest and the coolest months varies from 1° to 6°C. The effect on plant life is the production of evergreen, high-growing forest, carrying a rich epiphytic flora favored by high humidity. On both sides of the equator, the rain forest widens north and south wherever the trade winds are intercepted by mountains. The mean annual temperature of the tropical belt which covers more than 40% of the surface of our planet varies between 24° and 30°C. Constancy of temperature results in the absence of an annual cold period. Nonexistent also are sudden changes from day to day, so keenly felt in temperate climes. Distribution of rainfall varies considerably as to locality. Rain comes mostly at certain hours of the day, in hefty gushes, with or without a thunderstorm. Mild, steady rain occurs seldom.

The Climate of the Monsoon Forest — The evergreen rain forest described above becomes known as a monsoon forest where a pronounced dry period takes over, the result of a more intensely marked change in the annual climate. Trees in the monsoon forest are not so high as those in the rain forest. Tree crowns have more branches and spread wider. Consequently, there is less variety in form among the epiphytes, but special adaptation (development of scales) enables them to overcome dry periods without difficulty. Trees shed their leaves as the dry period advances. Counterwise to conditions in the rain forest, terrestrial bromeliads are able to survive, as for example Cryptanthus in the periodically dry forest of northern Brazil.

Climate in the Savanna — This is marked by a definite period of drought, an average rainfall of less than 1000 - 2500 mm per year, and temperature differences from month to month up to 12°C. Transition type forest occurs in steps from luxuriant rain forest with its wealth of epiphytes down to the scrubby savanna growths. The solid mass of high verdure gives away to thorny brush and open grassy prairie. The dry period occurs in southern winter or in southern spring. These conditions struck the Spanish conquerors as being "against celestial order".

Inhabiting the ever-humid tropic rain forest, the majority of Guzmania species,

epiphytes, and sometimes terrestrials in the northern Andes and the southern part of Central America, have first place. Next come species like *Vriesea splendens* and its kin from Guiana. They must have it warm. Central America and Brazilian Vriesea species, coming in part from a periodically humid rain forest, need lower temperatures, as well as a suggestion of rest period corresponding to the winter dry spell in their homeland. They are epiphytes, with only a few exceptions.

The large genus Aechmea is representative of a modern rain forest type; that is, they are plants that thrive in a less high temperature in the tropic forests of the east coast. Neoregelia and Nidularium have the same origin; consequently they are sturdier plants and have the beginning of armature on their leaf edges. Similar features are to be found in certain Aechmeas and Billbergias that grow in the same area. Scales on the leaves are on the increase because a constant supply of water is not available. The genera are epiphytes or rock dwellers, storing water in their tubes. However, such is not the case in Cryptanthus, which being terrestrials get moisture through their roots. They need scales only to survive the dry period. Because of drought adaptation has produced harder leaves, larger spines, and denser scales, as in the case of certain Aechmeas, Billbergias, and Bromelias. Modification in the landscape from low trees to shadowless grasslands affects bromels in various ways. Some genera take to the ground, wholly or in part. The process stiffens leaves and lengthens spines. These bromeliads display the typical Catinga formation, climax of the savanna.

It is in Mexico that we find extremes of the type, as far as hardiness is concerned, in the species Hechtia. They are genuine xerophytes or plants gifted with a rare ability to withstand outmost drought. Again we find this type of bromel in great numbers south of the tropic of Capricorn, which is beyond the tropical boundary proper.

The Dyckia, a near relative of the Hechtia, is a characteristic plant of the "Campos" in central South America, a dry and stony region, almost bare of plant life. A number of other genera, that cannot be considered ornamental, are able to cling to rocky slopes where they often build up large clusters, such a community being the surest guarantee of survival. Single plants are much more exposed to climate hardship. The southern bromeliad limit, down to the 44th parallel, contains plants of concentrated growth, low, still rosettes embracing the inflorescence. An exception are the giants of the family, the Puyas, which grow high in the Andes of Peru and Chile. Pitcairnia, a large genus but including few species of ornamental value, originated mainly in the Andes, where it grows in altitudes to 3,000 meters. The plants find survival possibility in most difficult surroundings because they deviated from the funnel type of growth. They are grass-like, growing in fast close clumps, their ample root system finding sufficient water and nutrients.

To be continued ……...