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

Edition: December 2024

<u>Agenda</u>: Christmas Party

Trophy Presentation

Venue: PineGrove Bromeliad Nursery

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Study Group meets the third Thursday of each month Next meeting January 16th 2025 at 11 a.m.

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Meeting November 21st 2024

The meeting was opened at approximately 11.00 am The eight members were welcomed. Six apologies were received.

General Business

December meeting is our Christmas get-together, there will be no Popular Vote Competition this month.

Gift swap is as per previous years, bring a gift to participate, the person/s who have attended the most meetings during the past year get to go first and so on. If you haven't signed the attendance book you can't be counted for that month. I've been guilty of that a couple of times, lucky the secretary nudges me.

Generally it has been a good year, membership down a little but I think many Groups have the same issue, so try and encourage a friend to join us next year.

Newsletter articles of your gardening tips etc. are always welcome.

Show, Tell and Ask!

Earlier in the year Kayelene showed us her Tillandsia wheel that she had put together, unfortunately it's not doing so well. She is concerned that perhaps something is leaching out of the old timber as many of the plants are dying.

Gary wondered if overwatering could be an issue as the 'grey leaved/silver' types don't like being too wet for extended periods. This opened the discussion as to whether they are getting sufficient light and air. Kayelene assures us they are getting good air circulation where the wheel is hanging. Perhaps trying more light may help in the future as many of us grow our silver leaved Tillandsias in full sun if this is an indication of light requirement for Kayelene.

An often seen erroneous quote on forums "I grow Tillandsias and Bromeliads".

Tillandsias are Bromeliads so the correct quote should be "I grow Bromeliads and I especially like to grow Tillandsias as they are my favourites".



Vale: Dawn Dennis was a member of our Group for many years. She was very generous with her knowledge and plants which she often brought along to swap with other members. Dawn passed away on Friday 25th October aged 92 years. You have never been forgotten.

Christmas Quiz Questions 2024

- 1. Which popular Christmas beverage is also called 'milk punch'?
- 2. What colour are mistletoe berries?
- 3. Which fairy tale was the first gingerbread house inspired by?
- 4. What are the traditional 12 days of Christmas?
- 5. Which King was crowned on Christmas Day?
- 6. Traditionally, how long before Christmas should you start making Christmas cake?
- 7. How many gifts are there in the 12 days of Christmas song?
- 8. What is the best-selling Christmas song?
- 9. What's the name of the period leading up to Christmas?
- 10. What is traditionally hidden inside a Christmas pudding?
- 11. What is the name of a male turkey?
- 12. In what year was the Queen's speech first televised?
- 13. What sauce is traditionally served with Christmas pudding?
- 14. In which US state would you find the town Santa Claus?
- 15. How many times does the number 1 appear on an advent calendar with 24 doors?
- 16. What gift did the Little Drummer Boy give to the newborn Christ?
- 17. What is the traditional Christmas meal eaten in Japan?
- 18. What was Scrooge's first name in Charles Dickens's A Christmas Carol?
- 19. What well-known Christmas carol became the first song ever broadcast from space in 1965?
- 20. What Hollywood actor played six different roles in The Polar Express?
- 21. Stollen is a famous cake from which country?
- 22. True or false: Christmas crackers were invented by a London sweet maker called Tom Smith?
- 23. Where was baby Jesus born?
- 24. What was Frosty the Snowman's nose made out of?
- 25. What Christmas decoration was originally made from strands of silver?

22nd Australasian Bromeliad Conference 2025



Aussie Broms 2025



Exploring Diversity and Beauty

The 2023 Australasian Bromeliad Conference in New Zealand concluded without any Society committing to convene a follow up in 2025.

This was widely seen as a disappointment as the conferences had been run since the 1980s on a 2-year cycle (COVID excepted).

The Bromeliad Society of Queensland has a commitment from Peter Tristram to act as convenor, he has the active support of John Olsen and Peter Ball as a nucleus to organise a 2025 conference.

The Bromeliad Society of Queensland has resolved to take responsibility for organising the conference under their leadership.

Aussie Broms

28th - 31st October 2025 Eatons Hill Hotel, Brisbane, Queensland.



International and local expert speakers discussing all things Bromeliad.



Christmas Quiz Questions 2024 - Answers

- **1.** Eggnog. **2.** White. **3.** Hansel and Gretel. **4.** The Twelve Days of Christmas are the last six days of the old year (26, 27, 28, 29, 30, 31 December) and the first six days of the New Year (1, 2, 3, 4, 5, 6 January). **5.** King William I of England in 1066. **6.** Two to three months before. **7.** 364 gifts. **8.** Bing Crosby's White Christmas is the best-selling Christmas song with more than 50 million copies sold. **9.** Advent. **10.** Silver coins. **11.** Gobbler. **12.** 1957. **13.** Brandy sauce.
- **14.** Indiana. **15.** 13 times. **16.** He played a song on his drums. **17.** KFC.
- 18. Ebenezer. 19. Jingle Bells. 20. Tom Hanks. 21. Germany. 22. True.
- 23. Bethlehem. 24. Button nose. 25. Tinsel.

In last month's Newsletter I stated I "refer to the botanical descriptions to be sure the correct name is attributed to the plant in question". The main set of botanical descriptions we have for reference is Smith and Downs Monograph 'Flora Neotropica' parts 1, 2 and 3. In addition to these we have Derek Butcher's files which are mostly made up of S&D descriptions plus descriptions written by many other botanists.

It is parts of the descriptions from S&D that I made reference to e.g. fasciculate and subthyrsiform that may cause some confusion as these are outdated or wrongly used terms now. For those who still refer to the S&D Monographs as a guide to identification, make a note on them to refer to:

Bringing Bromeliaceae Back to Homeland Botany for correction of wrongly used terminology. The article can be found in the BSI Journal as noted below or in our FNCBSG NSW Newsletters, March 2023 Part 1 and April 2023 for Part 2.

Eric Gouda's article response, "because people will become confused by this:

Fasciculate normally used for flowers that are in a fascicle (bundle), with a very short or nearly no rachis, so not in a spike or raceme. If spikes are in a compound inflorescence born nearly at one point as in the first species, we talk about "digitately compound" like the fingers in a hand.

Pinnate is like a feather, so all branches are in one plane, like in a fern for example (therefore it can not be used here!).

There are many wrongly used terms in Bromeliaceae literature of the past, which we already addressed in an article:

Bringing Bromeliaceae Back to Homeland Botany: Scharf, U. and Gouda, E.J. Bromeliad Society International (BSI) Journal 2008 Vol.58 (3): pages 123 -129.

After this article, the wrongly used terminology is no longer accepted in many Journals, including the JBS and Phytotaxa and the article is multiple referenced.

The spikes are not erect ether. Why bipinnate in the first species and pinnate in the second one, what is the difference, both are once-branched? In the second species, the spikes are divergent and then ascending (the stipe of the spikes are probably erect at the base and then divergent in a S-curve). Inflorescence is not thyrsiform in any way, you could say paniculate. The inflorescence is not decurved at the apex ether."

Many of our reference books are outdated now with new and improved modern science e.g. DNA testing, therefore many plant and genus names have changed including some terminologies. Always refer to your Glossary and make a note to refer to Eric and Uwe's article on Homeland Botany for correctness.

I thank Eric for his guidance with these technical matters.

Identification of this Aechmea for Keryn is a bit dubious without an inflorescence, need to wait till it flowers WTiF and some quilling on *Neoregelia* 'Sister Grace'.





Some leaves are sticking together, wash with lukewarm soapy water and try to gently ease them apart. Rinse well with fresh clean water.



Neoregelia carolinae 'German hybrid' grown by Kayelene Guthrie



Aechmea 'Best Black' grown by Helen Clewett

Tillandsia fasciculata 'minor'/ 'Hal's Nidus'

In the Pinegrove Nursery Ledger is an entry:

"# 2662, *Tillandsia fasciculata* hybrid – Guatemala, 5/86, Gleeson" matched by its tag.

Another plant found was tagged: *Tillandsia fasciculata* 'minor', both plants look identical.

Our assumption is a guess was made by person unknown as to its identity being a small form of *Tillandsia fasciculata* where the term 'minor' was added as a descriptor.



On a Tillandsia Discussion Group it was suggested that *Till. fasciculata* 'minor' is probably a natural hybrid or it may be Rauh's *Till. nidus* and has similarities to a wild collected natural hybrid from Guatemala registered as *Tillandsia* 'Coquette'.

Refer article: FNCBSG NSW Newsletter November 2015, pages 9 and 10: *Tillandsia* 'Hal's Nidus' to the Aussies and 'Coquette' in the USA, by D. Butcher.



Also refer to the Bromeliads in Australia (BinA) web site for all the discussions about this group of plants where you will find in the: Photo Index - *Tillandsia* 'Hal's Nidus' and also in:

Detective - DD 12/09

Tillandsia 'Hal's Nidus'

It's a tangled web so we stick with what's on the label for reference.

Tillandsia fasciculata 'minor' /
'Hal's Nidus'
grown by Helen Clewett

6



Nidularium rutilans 1st Open Keryn Simpson



Vriesea 'Abigail Jean' Judges Choice Michelle Hartwell



Tillandsia streptophylla 1st Tillandsioideae Gary McAteer





For **Show**, **Tell and Ask!** Gary brought along his *Tillandsia caput-medusae* that are displaying colour variation, he was wondering if this is normal.



The description in Smith and Downs monograph indicates the floral bracts can be, red, pink and green.

The colour in Gary's plant may change as it matures however he may have two different colour variants.

There is also a form with white petals to look out for and also other colour variants that may enhance your collection like these more pink forms we saw in Mexico.





Tillandsia caput-medusae grows as an epiphyte and on rocks in Mexico and Central America from 40 to 2,400 meters altitude.

We saw quite a few colour variations while travelling around Mexico, mostly pinks of varying shades, pink to green and some that were just green.





Note the pink blending toward green floral bracts of these plants.



Tillandsia caput-medusae can be compound (multi branched) or it can have a simple (single) inflorescence.

Tillandsia caput-medusae isn't always influenced by light or gravity for its direction of growth (tropism). It often appears to be quite happy growing sideways or upside down at times.



Bromeliads - Houseplants for Today and Tomorrowby Walter Richter (Translated by Adda Abendroth, Teresopolis, Brazil)

From: BSI 1967 V17 (5)

A Little Botany continued

The color of the leaves varies greatly. The basic color, of course, is green; but it is graded in many shades, varying from the bright linden-green in *Guzmania lingulata* to blackish in some of the Billbergias and Aechmeas. The classic bright green common to many plants is found only in Pitcairnia. Leaves covered with scales are subject to notable changes in hue, depending on humidity and light. Plants receiving strong light, maintained in moderate alternation of humidity, show extra beautiful light grey tones. The grey approaches pale green if the plants get more shade and constant humidity. Actual intensity of coloring depends on density of scales; their number determines the tone.

Leaves of some species have wine-red or maroon tones, especially on their underside, like *Aechmea miniata* var. *discolor* and *Aechmea fulgens* var. *discolor*. Others have a violet-purplish underside. In addition, strong sunlight or other illumination affect the coloring of the blades of certain species. They may take on a reddish tint, but it is not permanent and will revert to green in less intensive light. This peculiarity provides the grower of bromeliads with a considerable range of possibilities to influence the looks of his plants.

Some species have stripes, lines, and spots of a different color on the blades. It is impossible to describe all the variations. They certainly make the plants most attractive. *Vriesea philippo-coburgii* and *Neoregelia spectabilis* have red leaf-tips: *Vriesea guttata* has reddish spots on its leaf blades. One of the most ornamental bromels, *Vriesea splendens*, has dark, almost black, crossbands on its green leaves. A design of fine dark, wavy lines crosses the blades of *Vriesea hieroglyphica*, *Guzmania musaica*, and others. *Vriesea tesselata*, *V. fenestralis*, and *V. bitmunosa* show a faint zigzag design. As in all Vrieseas having colored leaves, the design shows better when seen in translucency. About *Vriesea jonghii*, which belongs in this group of leaf design, I want to include a contribution from Dr. Mueller, Blumenau, Brazil:

"In light coming from above, the face of the blade looks plain green most of the time, its back is plain brown; but generally a design like in *Vriesea tesselata* may be surmised - alternate darker and lighter lengthwise stripes, crossed by irregular kinked crossbands. No two leaves have the same design. The picture is most impressive when sunlight shines through the blades from above. Translucency enhances both color and design.

"When Alfred Moeller found himself on top of Mount Spitzhopf (900 m) looking up at a canopy of these beautiful sunlight illuminated rosettes for the first time, not only he himself but also his less sensitive native companions halted in astonishment so deeply were they impressed by the grandiose sight. A large dark purple spot (about 2cm in diameter) at the tip of the leaves, black when seen against the sun, adds further charm to this beauty. It is the sun that brings out the splendor of this plant, and it is only in full sun that it will thrive and develop. In deep shade it wilts within a few months."

White to creamy stripes alternate with green in *Nidularium innocentii* var. *lineatum, N. innocentii* var. *striatum, Aechmea caudata* var. *variegata, A. comata* var. *macoyana, A. fasciata* variegated, *Cryptanthus bromelioides* var. *tricolor, Ananas comosus* var. *variegatus*, and others. It is easy to understand that all these species attract attention because of their beautiful foliage and therefore are much in demand. Multiplication on a large scale, however, possible only by raising from seed, is barred by the fact that seedlings from the colored plants have plain green leaves.

In early youth many bromeliad seedlings have entirely different leaves from what they will show in later life. Many species have what botanists call a "juvenile form," which makes identification most difficult. Seedlings of Vrieseas, Guzmanias, and Tillandsias have in their first year or even later thin, grass-like leaves of a uniform green. Only as development proceeds do the generic characters appear. Tillandsias, especially the extreme air forms, often have twisted or curled leaves, but it takes several years before they show up in seedlings. The species that produce berries - Aechmeas, Billbergias, Neoregelias, Nidulariums — also possess juvenile forms, but normally their development is more rapid and broad leaves come sooner. Environment, of course, plays a considerable part in the development of individual plants. Only an experienced specialist can tell if two given seedlings grown under different conditions are of the same species. Plants that get extra good care often preserve some of their primary leaves until flowering. These youthful leaves identify them as seedlings, for offshoots start out with much broader and longer leaves.

Colored photographs of plants taken in their natural habitat prove that the influence of tropical sunlight on leaf color and leaf design is infinitely more intense than we may hope to achieve in colder climates. In addition, plants growing wild in their homeland necessarily look different from their kin cultivated in Europe because we simply do not have what it takes to reproduce conditions in foreign lands. This refers especially to light intensity. In my daily communion with bromeliads I notice again and again what a difference light can make, its influence on growth and development, even on the reduced scale of regulation at our disposal in northern climes.

Climate and Distribution from: BSI V17 (6)

All plants are limited to where they can grow; they can survive only in certain areas. Their habitat may be widespread or may be restricted. It may abridge a continent or be limited to only a few square kilometers. This aspect of plant life is known as endemism and means the distribution of a family, a genus, or a species.

The bromeliad family lives exclusively in the American tropics and sub-tropics. Its northern border is in eastern Virginia in the United States, at about the 38th northern parallel, where a few species of Tillandsia may be found. The extraordinarily hardy and slow growing species Fascicularia and Greigia represent the southernmost members. They can be found in Chile as far south as the 44th parallel. If we locate a given area on a globe or map, we can more or less realize what a great influence difference in climate is bound to exert on the plant and how great a variety of peculiarities in the appearance of plants we may expect to find.

South America, the main distribution area of the Bromeliaceae, has its greater part located in the southern hemisphere. Latitude, kind of countryside, and other factors determine the climate which, given the size of the continent, is extraordinarily variable. As to the type of landscape, we may roughly distinguish three north-south zones. The Andes, with elevations up to 7,000 meters, transverse the continent from north to south like a gigantic backbone. A narrow strip of land on the west coast has a climate of its own because the high mountain range cuts off all influence from the interior. Scarce rainfall on the coast leaves its mark on the vegetation. The two, in places three, northern main ranges, on the other hand, border highland valleys with a climatic condition different from the main one. Towards the south these three ranges unite into a uniform chain, which is the home of the giants of the family, the Puya.

The eastern portion of South America is divided into two mountainous areas, averaging 300 - 600 meters above sea level and boasting only a few peaks as high as 2700 meters. They are single elevations in low mountain ranges or in tableland. Large wide flatland, often very arid is the predominant character of the region. Such are the hilly sections of Brazil and of Guyana, including the llanos, dry areas with poor plant growth, yet containing bromeliads.

An enormous flatland, covering 40% of the continent, lies between the east and west mountain ranges. Bounded on the west of the Andes, the low country touches the Atlantic at the mouth of the Amazon and in Patagonia. The Amazon and Gran Chaco regions attain elevations less than 200 meters. They contain large and extensive river systems, of which the Amazon is the largest in the world. The luscious vegetation resulting from heat and abundant water,

however, shelters only a relatively small number of bromeliads. A study of the various landscapes suggests that the family keeps away from the very hot and the very moist areas. The bulk of the great wealth of Brazilian bromeliads is concentrated in the south where the climate is temperate.

The east coast is washed by trade wind drifts and by the Brazil drift. They are definitely warm and increase the humidity and the rainfall on the land. The opposite happens on the west coast, which is subject to a cold drift flowing south north. The low temperature is further cooled by cold drifts coming from the bottom of the sea close to the land. This drift, called the Peru or Humboldt drift, reduces rainfall on the coast to a minimum.

The wind is also a decisive climate factor which affects all plant life. Wind coming from the ocean always brings plenty of rain, and in some areas it is this wind that determines both duration and intensity of rainfall.

Brazil, the home of the greatest number of bromeliads both in genera and species, has two distinct landscape characters: the lowlands of the Amazon and the highlands beyond. The Amazon basin, the greatest river basin on earth, is situated in the equatorial zone and is covered with an evergreen rain forest or jungle. The heavy rains during the wet season do not affect the Amazon so much as they do its tributaries, the Rio Negro, for instance rising to 12 meters above normal during a rainy period. Such an overflow allows development of only high-crowned trees having long straight trunks, which, in turn, impose an epiphytic way of life on bromeliads. Only one-sixth of the rainfall reaches the ocean, the rest evaporating on the long way to the sea. As conditions like this also prevail along other tropical rivers, it is easy to imagine how wet the atmosphere must be. It is this humidity that makes life possible for most of the epiphytes, including bromeliads. Summer in the Amazon runs from July to October, when it rains less.

It is the hilly country of Brazil that contains the greatest number of bromeliads. The states of Sao Paulo, Rio Grande do Sul, Paraná and Catarina are part of the hilly area of south western Brazil, but because of the varied influence of the ocean, they do not have a uniform climate. The entire coast from Sao Paulo to northern Rio grande do Sul is covered with typical rain forest of a tropical character extending well into the south. It is the home of many beautiful bromeliads. On the actual plains, a tableland, the forest thins out and eventually gives away to "campos", vast prairies covered with brush. It is here that the hardy terrestrial, strongly-armed species of bromeliads live.

Open Popular Vote

Nidularium rutilans 1st Keryn Simpson 2nd Helen Clewett Aechmea 'Best Black'

3rd Kayelene Guthrie Neoregelia carolinae 'German hybrid'

Michelle Hartwell 3rd Vriesea 'Abigail Jean'

Tillandsioideae

1st Gary McAteer Tillandsia streptophylla 2nd Keryn Simpson Tillandsia velutina

3rd Helen Clewett Tillandsia fasciculata minor - 'Hal's Nidus'

Decorative

HAPPY NEW YEAR

2025

Coral McAteer 1st 'Christmas is Coming'

1st

Michelle Hartwell Vriesea 'Abigail Jean'

Judges Choice



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 "Diarv".

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