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

Edition: June 2025

Agenda: General Discussion

Venue: PineGrove Bromeliad Nursery

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Study Group meets the third Thursday of each month

Next meeting July17th 2025 at 11 a.m.

### **Editorial Team:**

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### Meeting May 15th 2025

The meeting was opened at approximately 11.00 am

The eleven members were welcomed.

Three apologies were received.

# **General Business**

The bank our Group uses has made changes to the way it operates, it is not issuing cheque books from 21 February 2025 and it will be closing our cheque facility on 2 April 2025. Debbie will be looking into what other arrangements are necessary for us to be able to access our funds.

Newsletters received by mail this month were presented to the Group for members to borrow from the library.

### Show, Tell and Ask!

Revising last month's Newsletter opened further discussion about preparing our plants for the onset of winter. It was agreed now is a good time to move some plants to more sunny positions and those cold sensitive ones under cover. Some of our plants dislike this constant wet weather we've been having, so ensure the potting mix is draining well and hasn't gone muddy around the drain holes which will prevent it from draining as desired. It seems like almost everyone is already on top of this chore.

Some recent chatter about the mix ratio for Spectrum 200SC on our Bromeliads for scale and mealy bug has created some confusion as to exactly what the correct ratio is. It is very important to read the booklet of 'Directions For Use' before using the product. The SureFire Spectrum 200SC chart recommends for mealy bugs and soft scale on ornamental plants 25 mL/100 litres of water. This equates to 2.5 ml in 10 litres of water or 0.25 ml in 1 litre of water. Apply three sprays two weeks apart. A stronger mix ratio could be used on tank type/water holding Bromeliads as the water held in the tanks will dilute the recommended ratio even further which is mainly calculated for dry type foliage plants. This is a systemic insecticide which means it targets sucking insects by being absorbed through the leaves of the target plant/s.

To improve the adhesion or coverage of the insecticide on the target plants or surfaces, adding a sticker/surfactant can help. A few drops of dish washing liquid per litre of water works well as a surfactant.

The shelf life of Spectrum 200SC once mixed is around one day, it will gradually degrade over time making it less effective. Only mix sufficient to use each spray.

Information gleaned from the booklet of: Surefire Spectrum 200SC 'Directions For Use'.

Always read the directions on the label and follow all safety precautions.

Roses	Aphids	25 mL/100	+	Apply as a thorough cover spray at first sign of insect
Ornamental plants	Aphids Azalea lace bug Bronze orange bug Harlequin bug Citrus mealybug Greenhouse thrips Fullers rose weevil	L		infestation.
	Hibiscus flower beetle	50 mL/100 L		Spray buds and flowers as needed.
	Longtailed mealybug	50 mL/100 L + surfactant	*	Apply 3 sprays 2 weeks apart. Use a non-ionic surfactant at label rate.
	Psyllids	25 mL/100 L		Spray at first sign and then a week later
	Soft scales	25 mL/100 L	•	Spray in late spring or when small scales are first seen Apply 3 sprays 2 weeks apart. Add a wetting agent.

The issue of crown rot was raised again and the use of 'Rid-a-Rot' which wasn't mentioned in our FNCBSG Newsletter April 2025 p.4: "other suggestions have been to add food grade cinnamon powder into the centre of the plant. Spray plants with a fungicide like Fongarid, Ridomil, Banrot may help".

To answer the question, yes 'Rid-a-Rot' can be added to the list above of helpful fungicides to combat crown rot.

Deb gave a brief report of her recent trip to Scotland, before she went we asked her to keep an eye out for Bromeliads of course. They were extremely scarce, as expected, she saw one in Inverness, a Guzmania. Better than none I guess.

A question was raised if bigeneric hybrids: xNeomea (Neoregelia x Aechmea), xGuzvriesea (Vriesea x Guzmania), xVrieslandsia (Vriesea x Tillandsia), etc etc can be entered into our Monthly Genus Popular Vote section, all agreed YES.

A bigeneric cross is the crossing of two different genera to form a hybrid genera. The nothogenus which is the name at generic level for a hybrid between two or more species in different genera is preceded by a multiplication sign (x).

When writing a hybrid formula, the names of the two parents are connected by the multiplication sign x, the seed parent is always written first followed by the pollen parent. However this rule doesn't seem to apply to bigeneric hybrids, these names are decided upon on how they sound/roll off the tongue rather than by the usual rules of seed parent followed by pollen parent.

Remember latin names should be reserved for species and varieties found in the wild and written in *italics*, with non-Latin or "fancy" names used for hybrids and cultivars (a plant produced in cultivation as opposed to growing in habitat.

### **Open Popular Vote**

1st Michelle Hartwell Neoregelia 'Loucana'
2nd Keryn Simpson Vriesea hybrid unknown

2nd Shane Fitzgerald Neoregelia 'Tallai Orphan Alfred'

### **Tillandsia**

1st Shane Fitzgerald *Tillandsia* 'Enano Tectorum' 2nd Deb Baker *Tillandsia stricta* (fine leaf form)

3rd Gary McAteer *Tillandsia* 'Druid' 3rd Helen Clewett *Tillandsia latifolia* 

## Monthly Genus — Aechmea

1st Michelle Hartwell Aechmea 'Rakete'

# **Judges Choice**

1st Michelle Hartwell Neoregelia 'Loucana'

### Web Links for Checking Correct Identification and Spelling?

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

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

New Bromeliad Taxon List : <a href="https://bromeliad.nl/taxonlist/">https://bromeliad.nl/taxonlist/</a> 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.

### **Monthly Genus** for May was Aechmea

Aechmea is a genus in the Bromelioideae subfamily having 246 species plus 73 infraspecific taxa: forma (f), varieties (var.) and subspecies (ssp or subsp).

Smith and Downs Monograph lists eight subgenera within the genus:
Podaechmea, Lamprococcus, Aechmea, Ortgiesia, Platyaechmea, Pothuava,
Macrochordian and Chevaliera.

Aechmea has often been considered the dumping ground for dubious species, if unsure put it in Aechmea. DNA studies will hopefully sort it all out one day.

Smith and Down's Monograph p.1768 on Bromelioideae (1979) said "Aechmea includes some very discordant elements and is very likely of polyphyletic origin. Further research is likely to divide it with some parts becoming independent genera and others merging with genera at present considered distinct."



Aechmea 'Rakete'
1st Monthly Genus Michelle Hartwell

The name Aechmea was derived from the Greek for spear (spear like leaves),



Aechmea dealbata
grown by Keryn Simpson

it was first coined by Hipólito Ruiz and José Pavon in 1793; nomen conservandum (a name to be conserved for later use). The first Aechmea, the type form to have the name applied to it was:

Aechmea paniculata Ruiz and Pavon, 1802.

Some Aechmea we have known as such for many years were originally described as Bromelia in 1703 e.g.

Aechmea nudicaulis var. nudicaulis was Bromelia pyramidata aculeis nigra, described by Charles Plumier in 1703.

Wittmackia lingulata was <u>Aechmea lingulata</u>
Baker 1879 which was originally described
as *Bromelia ramosa* et *racemosa* by
Charles Plumier in 1703.

In the 1700s there were few Bromeliads in collections to do comparisons with for botanists to decide which genus to place something new in. Also communications between botanists in different countries often took months or longer. Therefore it's understandable that a plant could start off in a genus until differences are noted in plants within the group, so they get reclassified.



Aechmea arrangement by Ross Little



Aechmea 'Yamamoto's Flamingo' grown by Kayelene Guthrie



Aechmea inflorescences can vary a lot as can be seen here, from left to right: distichantha, 'Kiwi', 'Summerland', 'Makoyana', comata, gamosepala, weilbachii, fasciata, aquilega, distichantha, distichantha, ramosa, blanchetiana hybrid.

One of the favourites of growers is Aechmea fasciata which has been grown in cultivation since 1828.



Aechmea 'Ensign' which was registered as:

Aechmea 'Reverse Ensign', this one grown by Deb Baker



Aechmea muricata grown by Ross Little

This species was found in 1810 growing as a terrestrial in Pernambuco, Brazil and was originally described as Bromelia muricata.



Aechmea 'Feather Foot' grown by Shane Fitzgerald



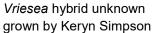
Neoregelia 'Loucana'
1st Open and Judges Choice
Michelle Hartwell



Neoregelia
'Coolum Red Rainbow' unreg.
grown by Deb Baker



Neoregelia 'Dyn-O-Mite' grown by Kayelene Guthrie





Tillandsia 'Enano Tectorum' 1st Tillandsia Shane Fitzgerald





Show, Tell and Ask!

Keryn brought along this Vriesea for identification that has silvery green leaves covered with red to crimson spots on the upper surface. It often helps if a plant is in flower to confirm identification, however we're quite sure this one is distinct enough to say it is:

Vriesea saundersii

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*Tillandsia* 'Druid' grown by Gary McAteer



Tillandsia latifolia grown by Helen Clewett

Tillandsia rodrigueziana grown by Michelle Hartwell



Tillandsia ehlersiana (small form) grown by Keryn Simpson



Tillandsia stricta (fine leaf form) grown by Deb Baker

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Kayelene has found this 'Silvan' 5 litre battery operated spray unit with USB charge very handy for around her extensive gardens.

It has an over shoulder strap making it a very comfortable unit to handle, an extendible spray nozzle for reaching those plants higher up in the trees.

It's fabulous!!







### **Aussie Broms 2025**

The 22<sup>nd</sup> Australasian Bromeliad Conference Aussie Broms 2025 will be held at Eatons Hill in Brisbane on the 4th - 7th November 2025.

> Theme is: 'Exploring Beauty and Diversity'

The Bromeliad Society of Queensland invites the global Bromeliad community to participate.

This is a 3-day conference jam packed with Bromeliad information from the best speakers in the world.

Early Bird registration for Aussie Broms 2025 ends on the 30<sup>th</sup> June.

# **Bromeliads - Houseplants for Today and Tomorrow**

by Walter Richter (Translated by Adda Abendroth, Teresopolis, Brazil) Continued: BSI 1969 V19 (6)

# Cultivation of the Xerophytes

Xerophytic plants have their build and constitution adapted to the drought prevailing in the areas where they live. Unlike succulents that live under the same conditions and similar environments, bromeliads have no inner waterstoring tissue. Assimilation takes place mostly during the rainy season; several annual drought periods are overcome by the reduction of functions; the plants undergo a sort of rest period.

Bromeliads of a xerophytic nature include the genera Dyckia, Hechtia, Greigia, Puya, and a few others, hardly known in Europe as far as the terrestrials are concerned.

In spite of the fact that wide distances separate the areas where xerophytes occur, conditions under which they live are always similar. The soil is a compound of clay, sand, and pebbles, practically devoid of nourishment; nutrients come only from minerals. No humus can accumulate because there are no trees or brush to cast their leaves. Only scrub can exist. Owing to the lack of leafy vegetation there is no shade: the plants are completely exposed to light. Rain is always scarce, often even in the rainy season if there is one to speak of. Moisture comes from nightly dew alone.

Plants that live in such an inhospitable environment possess certain anatomic features that enable them to withstand hardships — for instance, a thickened outer cover composed of several layers of epidermis. In many species the underside of the leaves bears a dense coat of dead hairs guarding against evaporation. Roots are better developed than in other bromeliads; underground stolons help vegetative reproduction.

Cultivation must make allowance for the features outlined. Dyckias, Hechtias, Puyas, and similar terrestrials come from a semi-tropical climate, sometimes from altitudes up to 3000 m above sea level. They are what we call cold-house plants, which in winter are kept in temperatures from 6 to 10°C—temporarily even lower—and in summer get put outdoors in a protected sunny spot. They don't belong in warm houses where they lose their natural looks and degenerate, especially if, in addition to warmth, they are submitted to moisture. They should get as much light as possible; full sun is a blessing for them as long as transition is not abrupt; that is, putting specimens from poor winter quarters directly into light. Their cultivation is like that of succulents in every way; the two can be kept side with success. During the warmer season they should receive ample water; in winter water only rarely. There is no danger of the plants drying

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out. I once left a *Dyckia leptostachya* in a sunny plant window from December to April without once watering it; the leaves became gray and droopy but soon recovered after a few waterings; only the tips of the leaves remained crumpled.

Raising from seed differs from Group I simply by lowered germination temperature; it should be from 10 to 15°C. Aerate soon in order to get the seedlings used to tougher surroundings, more light, moderate temperature, and a meager diet. For seedlings use sandy leaf mold, the adults the same, plus a good portion of loam and more sand.

The whole cultivation process is simple; xerophytes are good houseplants. On the other hand, some are generously garnished with spines, a fact that makes them less lovable. They add, however, an interesting item to a collection as compared with other members of the family.

### <u>Humidity</u> - BSI 1970 Vol. 20 (1)

The need of water rises under the effect of light and warmth; it recedes as air cools and illumination gets fainter. The lesson we learn is that in bromeliad culture humidity must be adjusted to light and temperature. Supply humidity when warmth and light abound; if they are scarce, use water sparingly. The rule follows what happens in nature: a winterly rest period and growth in summer.

Soil and air humidity need not necessarily be alike as bromeliads do not depend on their roots for moisture the way other plants do, a moderately moist rootclump combined with high air humidity produces best results. Bromeliads do not want to be wet all over, especially not while cooling off.

Species coming from rain forest climate—Vrieseas and Guzmanias, appreciate uniform humidity in the soil and in the air. Only in winter, provided surrounding air is warm enough, can humidity be slightly lowered. Members of Group I (Aechmeas, Billbergias, Neoregelias, and Nidulariums) should get alternate periods of more and less humidity, according to time of day and season of year.

Watering in bromeliad cultivation makes no great demands on labor. One thorough weekly soaking of the highly absorbent planting mix is generally sufficient. Spots that dry up quickly—a place near heating pipes or close to ventilation panels should get more frequent inspection. Easy to water are the plants accommodated in boxes, but always keep a lookout for drier spots.

Spraying involves a little more dedication. On hot days it should be repeated three or four times between 9 o'clock in the morning and 2 in the afternoon. A further spray later in the afternoon should only be resorted to on extra warm days and if you can be sure that by nightfall the plants will have dried completely. The finest spray is the best because it will not increase soil humidity. Permanent spraying fixtures are on the market, and their installation in the greenhouse is recommended. Water coming from mechanical sprays under

sufficient pressure is like a fine mist and spraying can be reduced to a minimum. A general rule is to stop spraying Group I when the thermometer falls to 15°C, and Group II at 18°C.

Quality of the water was discussed elsewhere. Let me say again the best water is that taken from a river, a brook, or a pond. If tap water is very hard, it should be softened artificially.

Water accumulated in the cups poses a serious problem from the chemical point of view. Even rain water is not always perfectly pure; it may contain salts the plant will not absorb. Water in the cups evaporates and will concentrate what salts it may contain. Such concentration may harm the plant and stunt its development. Problems of this kind have as yet not been studied to any degree, but they do lead us to an additional growth factor.

### **Nutrition and Feeding**

In the past it was thought that bromeliad roots have only an anchoring function and that they do not absorb nourishment. This concept has had to be abandoned: at least, it cannot be generalized. Terrestrial bromeliads — like other terrestrial plants — use their roots to take in food and water. In bromeliads with scales on their leaves, the situation is a little different. The scales help to trap moisture from the air during dry periods and will carry the plant through a spell of drought. Quite a number of epiphytic bromeliads have an extensive texture of roots that fastens them to their support and doubtless also absorbs water and nourishment. The scheme complements the work of the scales without making the plant directly dependent on the roots. In practice this means that such species will prosper in cultivation without fertilizer in the potmix if food coming from the scales in the funnel and on the blades is sufficient. In the wilds the "slow but steady stream of food floating past" is a fairly sure source of nourishment. In nature it does not matter if some of the plants starve and stay behind in development. But in our nurseries or in the cultivation of single plants it is a different matter. We want sets of uniform plants that have more or less the same growth rhythm; we count on their fast and satisfactory development. In our case careful and judicious feeding is very important.

In cultivation it is risky to use fertilizer in the cup. Organic substances, even if much diluted, often cause decay. Inorganic products are apt to disfigure the leaves with their precipitates. Satisfactory results have been arrived at with the application of very weak (say 1:1000) fertilizer sprays at frequent intervals. This may, to some extent, equal conditions in the homeland.

Nowadays it is thought to be of greater advantage to use pre-fertilized plant-mix for larger plantings, or liquid fertilizer in the soil when needed. The work of Dr. Josef Sieber, Freising, Germany, throws some light on how the fertilizer works.

It was asserted beyond doubt that young plants respond better to root fertilization than to fertilizer in the funnel or on the leaves, a method that is downright harmful at this stage. At a later period, feeding the leaves produced better growth than no fertilizer at all. Best results, however, were obtained with combined root and leaf fertilization. Dr. Sieber thinks the reason is that nitrogen is more readily absorbed by the leaves while the roots take in phosphorus and potash. Careful tests proved his assumption to be correct. The following ingredients were used in the tests. To warrant purity and to attend to every possible need the following pure chemicals were dissolved in ten liters of perfectly clean rain water: 16.57 g of Ammonium Sulfate, 75.38 g Calcium Nitrate, 39.62 g Mono-Kaliumfosfate, 45.62 g Kalium Nitrate, 20 g Magnesium Sulfate, 2 g Ferric Ammonium Sulfate, 1 g Ferric Ammonium Citrate.

The 2% solution was diluted 0.125% to 0.25% and tried out on different plants in their successive development steps. *Nidularium innocentii* received concentrations from 0.1 to 0.15% during the main growth period; *Aechmea fasciata* got concentrations from 0.1 to 0.25%. The results were convincing proof of the necessity of complementary fertilization. On the other hand, Vrieseas and Guzmanias gave signs of being sensitive to salts even in their adult state. With them it is advisable to apply only the weakest concentrations or else organic fertilizer.

Further experiments showed that peat or patent-mix favors root development much better than gravel or chopped brick. This incidentally means that the soilless method would be of no avail. Sieber's experiments also yielded interesting information as to what happens when a single nutrient is left out. Lack of nitrogen caused tubular growth, narrow leaves, and pale-green to yellowish coloring often with a reddish whiff and many brown dead leaf tips. Lack of phosphoric acid had an even stronger effect on *Aechmea fasciata*. The plants remained small with only a few leaves that were dead in their upper half. Lack of potash produced uneven, stunted parts, a very pale tone on the blades, and many dead leaves. A few samples suffice.

The experiments reveal that we are just beginning to learn which food is good for bromeliads; we are entering a domain that will enable us to accelerate cultivation and improve growing methods in the home. But they also show that the natural slow growth rhythm of the Bromeliaceae permits speeding-up only within narrow limits. The influence of nutrients on flower formation and size of spikes is still in the dark. Bromeliad species with little root formation must get their fertilizer by way of their leaves. Spraying with weak nutrient solutions during the growth period has advantages; this method harbors no danger as long as you work judiciously. This information applies to all bromeliads in a general way. Our ambition to shorten the development period should never induce us to expect too much from our plants.

To be continued .....