

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

Edition: August 2022

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 September 15th 2022 at 11 a.m.

**Editorial Team:**

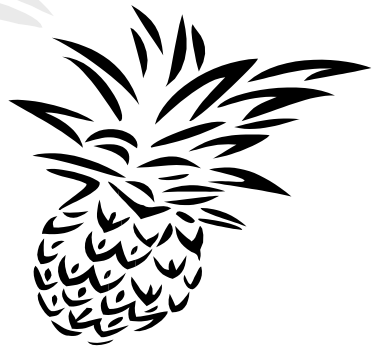
Ross Little

Helen Clewett

Lesley Baylis

[pinegrovebromeliads@bigpond.com](mailto:pinegrovebromeliads@bigpond.com)

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



Statements and opinions expressed in articles are those of the authors and are not necessarily endorsed by the Group.  
Articles appearing in FNCBSG NewsLetters may be used in other Publications on request and provided that the source is credited.  
Use of articles on social media platforms only with written consent for past present or future articles.

## **Meeting 21st July 2022**

The meeting was opened at approximately 11.00 am  
The 8 members present were welcomed.  
Six apologies were received.

### **General Business**

It was good to see Pam again and also to catch up with Doug, both of whom we would like to see attending meetings more often. However the weather the way it's been this past year and travelling long distances hasn't been in their favour. We were fortunate again this meeting with the rain holding off for most of the day albeit a little on the cool side. Spring is not far off, the days are getting a little longer now and should begin to warm up. This doesn't mean you can relax and allow your plants to look after themselves, a little spring cleaning goes a long way to maintaining good plant health.

### **Show, Tell and Ask!**

Dead head/remove old inflorescences and remove dead leaves from around the base of plants. This improves air flow around the plants helping them to dry out a little quicker and lessening the chance of rot setting in and removes hiding places for bugs. Plants can be lost in these cooler months if old, dead foliage stays wet for too long, the air around the plants remains cold for longer upsetting some of the more cold sensitive plants. Those cold sensitive plants should be raised up off the ground out of the inversion layer of cold air trapped at ground level until the warmer weather returns.

However the cooler weather does bring along with it some amazing changes. Our red Alcantareas really do shine at this time of year with their leaves turning the most intense reds, especially *Alcantarea vinicolor* and hybrids of it. The leaf ends of *Alcantarea* 'Raymond Golden Brown' turn much more intense reddish purplish brown at this time of year, a real stand out in the garden.

Mitch says his *Alcantarea* look their best in these cooler months of the year. Especially the red, maroon or purple species and cultivars and the hybrids that have *Alcantarea extensa*, *heloisae*, *imperialis* or *vinicolor* in the formula.

There are two ways I have found the *Alcantarea* colour up easily.

1. Starvation if grown in the garden and only getting nutrients from the ground or nature's processes.
2. Feed heavily from end of winter to the end of January so that the *Alcantarea* has built up sufficient sugar levels to convert to anthocyanins once the cool weather and light frosts arrive.

As the warmer weather arrives the colour tends to fade due to the Alcantareas beginning to grow and burn up the stored sugars.

Some Alcantareas display furfuraceous or glaucous characteristics which is a protective barrier such as *Alcantarea odorata* and *extensa*. This is predominantly seen in winter or in the hot months and acts like a natural sun screen.

Furfuraceous: scurfy; covered with or characterized by scales or powder that resembles bran.

Glaucous: sea green; covered with a bloom (powder) or whitish substance that rubs off.

Anthocyanins: red, blue or violet pigment in the Bromeliaceae which affects colouration.

The issue of growers running out of space for their beloved plants was raised, one suggestion made was to go vertical rather than mulch excess plants or toss them in the rubbish bin. A tree that does not shed its bark is best however I have seen various Bromeliads growing epiphytically in gum trees (bark shedders) in Ecuador. I don't recommend gum trees but yes to callistemons, frangipani, fig trees, jacarandas, poinciana, pittosporums, pine trees, wattles, basically any tree that doesn't shed its bark and can afford a little shade and protection to your plants. Palm trunks, especially those that have fronds with a fibrous base that form pockets, tuck a Bromeliad in the pocket, tree fern trunks work just as well.

There are many tying materials used, cable or zip ties, 'U' shaped nails, rope, string, stockings, bale/baling twine, plastic coated wire and aluminium craft wire. Generally whatever you have available will work fine except uncoated copper wire, Bromeliads do not like copper including CCA treated timbers, Creosote, (copper chrome arsenate), best to avoid these if possible. I find using old mother plants tucked into a fork or crutch of a limb successful. Old mothers pup and form clumps quicker than starting with a single fresh cut pup or plant that hasn't flowered yet. When using pot grown plants, remove all the potting mix before tying because the mix will dry out and fall away allowing your tie to become loose, a firmly held plant will set root to the tree better. For tallish plants tie firmly around the base of the plant and its roots if any, I add a second tie not so tight higher up the plant so it doesn't topple, to help keep it stable. Plants with a stolon can be attached to a tree by tying them with twine, stocking, string etc. or a nail directly through the woody stolon, use 'U' shaped nails over the stolon.

Remember when using non expandable cable ties and baling twine around trees in growth, these ties can cut into the tree as it grows. I use bright coloured twine so I see it easily to remind me to snip it once the plant has secured itself to the tree. Don't choke your tree with the tie.

The bug problem has risen its head raising questions about how to control them. All scale (black, brown etc) can be removed with a tooth brush or by spraying with a suitable insecticide like Confidor or similar products (e.g. Spectrum 200) that contain the active ingredient Imidacloprid. It is best to spray in the early morning or late afternoon when bees and butterflies are not active as it's alleged that Imidacloprid is harmful to them.

Doug Binns, said that he uses white oil on his Bromeliads with no harmful effects to his plants. He found that Confidor will kill scale and bugs but not mites like the red spider mite which white oil will.

However, other members have found petroleum based white oil can be harmful to Bromeliads, although a canola oil based white oil can be used safely. Refer: FNCBSG Newsletter October 2019 for recipes for Canola based white oil. FNCBSG Newsletter April 2011 Canola White Oil "Oils ain't Oils Soll!". FNCBSG Newsletter July 2014 "How to Make Canola Oil Spray"

Experiences with petroleum based white oil is that it will take up to five days to break down, while canola based white oil will only take one to two days to break down. The risk is that the petroleum based white oil will stick the trichomes down on the leaf surface not allowing the plant to breathe, hence suffocating it.

The recipe to make Canola oil based white oil by Rob Smythe is:

750ml. Canola Oil.

3 tablespoons dishwashing detergent.

1250ml. water.

I usually mix this in a two litre milk bottle and shake it violently! You can use a blender. Let the white oil emulsion rise to the top. Put a small hole in the bottom of the milk bottle and carefully open the lid. Drain off all the excess water and detergent then put the white oil into a new milk bottle. You will find it fairly quickly separates back into oil and water layers. It should be used fairly promptly i.e. when fresh. The message is to make big batches and store it. Each time you use it shake it well.

Ross mentioned that Mealy bugs were a big threat to Bromeliads. There are a number of ways to deal with Mealy bugs including:

- Spraying with a fungicide.
- Spraying with vinegar.
- Applying Diatomaceous Earth to the potting mix around your bromeliad.
- Mixing Diatomaceous Earth into your potting mix which will not only kill mealy bugs but also root mealy and ants in your pots.
- Putting coffee grounds around the base of your plants.

Ross had two trays of seedlings to show how they were growing through our cooler months. Seed sown was *Puya vasquezii* collected from our own plant that had flowered in 2021 and gave several ripe pods that burst open in March 2022. The other seed was from *Puya spathacea*, both seed sown at the same time.

Mix used to germinate the seed on was fine coco peat mixed with sphagnum moss, a little perlite and some sieved boiler ash added. After combining all the ingredients the mix needs to be sterilized by soaking with boiling water, allow to cool before draining excess water off.

Alternatively a few minutes in the microwave oven will also do the job.

Once the mix has cooled spread the seed over the mix and mist spray with water. Adding some foliar/water soluble fertilizer to the water and spray on the seed will help them along as they begin germinate.



We use two methods for germinating seed:

1. Take away food containers; self contained with lid.
2. Open containers placed in a large translucent storage box with lid, add some water (cup or two) to the storage box to help maintain humidity and close the lid.

If fungus becomes an issue use Milton tablets in an atomiser bottle and spray the seed or seedlings, repeat as required.



The best time to sow is when the seed pods are ripe, for *Aechmea*, *Hohenbergia* and *Neoregelia* this is when the berry type pods change colour to mostly blue, some to red. *Alcantarea* and *Vriesea* it's when the pods burst open and release their plumose seed. For *Dyckia*, *Hectia* and *Puya* their pods burst and release a dry, flat, winged seed.

Don't forget to label them.

**Vriesea fosteriana** L. B. Smith, 1943.

compiled by Ross Little

*Vriesea fosteriana* was found growing at 1000 metres (3,280 feet) altitude in full sun at Morro do Sal in the state of Espirito Santo, Brazil in 1940.

Kayelene brought along her nicely grown pot of *Vriesea fosteriana* with a question mark beside it. With so many of these plants having been grown from seed over the years it is very difficult to put an exact name on them due to seed grown variants.

One could enter fosteriana into the search box in the Bromeliad Cultivar Registry (BCR) and troll through the dozens of cultivar and hybrid entries and hope to find a match.



In the Journal of The Bromeliad Society Vol.49 No.6, p.261, 1999 Chet Blackburn pointed out the problems with identification of the many forms of this species but little information has filtered through to the Registrar so that it can be captured for posterity.

*Vriesea fosteriana* when grown from self set seed will produce seedlings with different coloured leaves.

*Vriesea fosteriana* var. *seideliana* can produce seedlings with different coloured leaves.

In 1975 Alvim Seidel reported that from one seed capsule he got 60% seedlings similar to the description but of the other 40% he could discern 8 main groups that differed to some degree from the description of the variety.

Key to varieties:

Leaves above green, underneath with purple transverse striations =

var. ***fosteriana***

Leaves above and below pale yellow with purple transverse sinuous striations =

var. ***seideliana***

From the Chet Blackburn article "In *Vriesea fosteriana* var. *seideliana* Reitz, the white portions of the leaf are much more prominent than in the typical form".

**Wallisia pretiosa** Mez, 1919.

compiled by Ross Little

Originally described as *Tillandsia pretiosa* it was found growing as an epiphyte in forests at 900 metres altitude in Pichincha, Ecuador in 1886.

Keryn brought along her very nicely grown example of *Wallisia pretiosa*. Quite often the timing of flowering and a Group meeting don't coordinate, fortunately this plant opened its white centred, blue petals just at the right time. Beautiful.



Reprinted from: *Tillandsia pretiosa* from Ecuador by Werner Rauh in the Journal of The Bromeliad Society Vol.34, No.6, p.266, 1984.

*Tillandsia pretiosa* is a beautiful plant, very rare in cultivation and known only from Ecuador in the valley of Mindo and the Pichincha region. We collected this plant in July 1983 in the Mindo Valley in a mist forest at an altitude of 1700 metres.

*T. pretiosa* belongs to the group of *T. lindenii*, *T. umbellata* (please see *Journal* 31(5): 200-202; 1981), *T. anceps*, and *T. cyanea*. The main difference between *T. lindenii*, *T. umbellata*, and *T. pretiosa* is, according to L. B. Smith, the surface structure of the floral bracts. In the first two these are prominently nerved, in *T. pretiosa* even more so. All three species possess simple, complanate, sword-shaped inflorescences with deep blue petal-blades with a white eye at the base. While the ensiform inflorescences are arranged in a single plane and are dense in *T. lindenii* and *T. umbellata*, they are lax in *T. pretiosa* after flowering.

Complanate: flattened; level.

Ensiform: sword shaped.

Lax: loose, distant. The term is applied to the inflorescence and describes the degree of closeness of the flowers. A lax inflorescence would indicate that the flowers are not touching one another.

Simple: of one piece; not compound; a single unbranched inflorescence; an inflorescence with a single flower spike.



*Billbergia sanderiana*  
1st Open and Judges Choice  
Helen Clewett



*Tillandsia dura*  
1st Tillandsioideae  
Helen Clewett



'Tropical Festival'  
shown by Mitch Jones



*Neoregelia 'Michi'*  
grown by Keryn Simpson



'Dearest Mum'  
1st Decorative Keryn Simpson



*Aechmea 'Foster's Favorite Favorite'*  
grown by Michelle Hartwell



*xHohenmea 'Freak Show'*  
shown by Mitch Jones



'Christmas in July'  
shown by Helen Clewett

**Aechmea nidularioides** L. B. Smith, 1953.

The type specimen was found by Schultes and Black along the Rio Loretoyacu, Amazonas, Colombia, 1946. It was found growing as an epiphyte at 100 - 1200 metres altitude in southern Colombia to northern Peru.

*Aechmea nidularioides* has a reddish orange white tipped inflorescence 10cm across which turns yellow on maturity, the plant can grow to 1.15 metres across with red brown foliage.



**Aechmea alba** Mez, in Martius, Eichler & Urbain, 1892 by De Faria, Wendt & Brown in Bot. Journ. Linn. Soc. 162: 7-10. 2010. The type specimen was found in Bahia State, Brazil, without specific locality in 1834, Blanchet.

*Aechmea alba* is almost restricted to the south of Bahia state, being recorded at lesser frequency in boundary areas with Minas Gerais State. It grows at 5 - 700 metres altitude, in herbaceous, shrubby and wooded restingas, dense ombrophile forest and florestas de tabuleiros as an epiphyte or terrestrial to 24.5 - 47.5 cm high plant.



**Tillandsia leiboldiana** Schlechtendal, 1844. compiled by Ross Little

*Tillandsia leiboldiana* is found growing in southern Mexico and Central America as an epiphyte at altitudes from 25-2000 metres. It's a stemless plant flowering from 200 - 600 mm high. Its leaves 100-300 mm long form a crateriform rosette, they are concolourous green (of the same colour throughout) or spotted.

Mitch brought along one of the several variations of *Tillandsia leiboldiana* that have been in collections for many years without their own names. Mitch's plant was previously known as *Tillandsia leiboldiana* 'variegata' until 2017 when it was decided the three variants needed their own cultivar names.

This variegated form was registered on the Bromeliad Cultivar Register as *Tillandsia* 'Leiboldiana Median' for its median variegated leaves. This form was imported into Australia via Peter Tristram ex Chester Skotak around 1990.



Chester Skotak in Costa Rica advised that this plant may have originated in Europe. Unfortunately European leads haven't shed any further light on the problem.

Derek Butcher wrote in October 2017: "There is yet another variegated plant that is grown in collections but has no formal name. It would be nice to have named it after the first person who had this mutation but alas we can only assume that it occurred in the USA but is not on the current lists of the larger US nurseries. There are references in the 1980s to a pendant inflorescence form but this seems to have gone out of fashion. There are also references to a spotted leaf form that was known as var. *guttata* until Harry Luther considered it unnecessary in DeRebus I 1994, p29. You rarely see this spotted form in cultivation and nobody has considered that it might need a cultivar name".

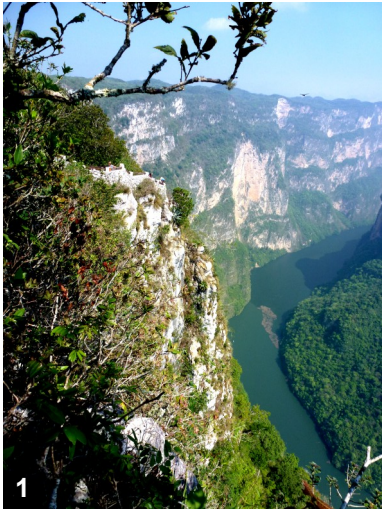
The form with the pendant inflorescence is now *Tillandsia* 'Leiboldiana Pendant' and the spotted leaf form previously known as *Tillandsia leiboldiana* var. *guttata* now has the cultivar name of *Tillandsia* 'Leiboldiana Spotted'.

Mitch's plant having little variegation on one side needs the side with the greater amount of variegation to be kept facing the light to encourage pups/offsets to develop from the variegated leaf axils.

## *Tillandsia vanhyningii*

by Pamela Koide Hyatt of Bird Rock Tropicals

Someone got promoted to SPECIES status! *Tillandsia ionantha* var. *vanhyningii* was first described by Mulford B. Foster in 1957. Foster discovered the now



*Tillandsia vanhyningii*  
(van-HIGH-nin-gee-eye)  
in the Sumidero Canyon of Chiapas, Mexico,  
growing along steep limestone cliffs in large  
formations.



At first glance, Foster was sure it was a new species, but after blooming and observing the plant, it appeared they have the same composition as many other forms of *ionantha*. In a paper last year, Carlos Beutelspacher and Roberto Garcia-Martinez argued for the reclassification of *Tillandsia ionantha* var. *vanhyningii* by elevating it to species status due to the caulescent growth habit not observed in other varieties or cultivars of *ionantha*.



3  
Unidentified Hechtia species growing on steep cliff face with *Tillandsia vanhyningii*.



The name change was accepted, and so *Tillandsia vanhyningii* is born. The name, which can be difficult to say, honors long time Tillandsia collectors, the Van Hynings.

Photos 1, 2 and 3 taken by Ross Little, photo 4 taken by Pamela Koide Hyatt.

## **Bromeliad Families, Genera and Species:** compiled by Ross Little

### **Excluded Taxa: Variety, Subspecies and Forma.**

In our FNCBSG NSW July 2022 Newsletter we published Peter Waters (NZ) up-to-date list of Bromeliaceae Family Names, Genus and number of Species for each genus. To complete the list to date, here are the Families and Genera containing infraspecific taxa, which is the scientific name for any taxon below the rank of species e.g. variety (var.), subspecies (ssp / subsp.) or forma (f).

**species:** a group of organisms that have in common one or more characteristics which definitely separate it from any other group. A plant found growing in nature in its natural habitat, not originating from a garden or shade house.

**variety:** a plant having slight but distinct differences that distinguish it from the type species; a botanical variety as opposed to a cultivar.

**subspecies:** a category below the level of species; a group within a species united by geographic or ecologic distinction. Often used as a synonym of variety.

**forma:** a sub-group within a species displaying a minor characteristic, but not great enough to be called a variety - a form of.

**cultivar:** a plant produced in cultivation as opposed to one (a species) found in habitat; a horticultural clone or strain. A plant type within a cultivated species that has recognizably different characteristics.

The plant world is an ever changing landscape making it difficult to keep up to the constant name changes as can be seen with the recent elevation to species status for *Tillandsia vanhyningii*. To maintain accuracy when publishing articles or even writing plant name labels it is imperative to check the most up-to-date and informative species list such as:

The New Bromeliad Taxon List maintained by Eric Gouda.

The Encyclopaedia of Bromeliads also maintained by Eric Gouda.

Up dates/changes so far this year to August 2022 are 32 new and/or species elevations. On checking the latest Taxon List we find that eight *Vriesea* after phylogenetic analysis have morphological similarities to *Stigmatodon* and have been reassigned to that genus.

<i>Stigmatodon andaraiensis</i>	< <i>Vriesea andaraiensis</i>
<i>Stigmatodon freicanecanus</i>	< <i>Vriesea freicanecana</i>
<i>Stigmatodon lancifolius</i>	< <i>Vriesea lancifolia</i>
<i>Stigmatodon limae</i>	< <i>Vriesea limae</i>
<i>Stigmatodon oliganthus</i>	< <i>Vriesea oligantha</i>
<i>Stigmatodon pseudoliganthus</i>	< <i>Vriesea pseudoligantha</i>
<i>Stigmatodon vellozicolus</i>	< <i>Vriesea vellozicola</i>
<i>Stigmatodon zonatus</i>	< <i>Vriesea zonata</i>

There are 198 natural hybrids and two bigeneric natural hybrids found in wild habitat listed on The New Bromeliad Taxon List:

*xGuzlandsia barbiei* (Rauh) Gouda

*Guzmania monostachia x Tillandsia complanata* grows in western Ecuador.

*xGuzlandsia* is a bigeneric nothogenus between *Guzmania* and *Tillandsia* within subfamily Tillandsioideae.

*xHohenmea itaipuana* Furtado, L.; B.R. Silva and L.F. Sousa

*Aechmea ramosa x Hohenbergia augustae* found growing in Niterói, Itaipu, Serra da Tiririca State Park, Morro das Andorinhas, Rio de Janeiro, Brazil.

*xHohenmea* is a bigeneric nothogenus between *Hohenbergia* and *Aechmea* within subfamily Bromelioideae.

Nothogenus: a hybrid genus produced by crossing (plants from) two different genera, indicated by a multiplication sign before the name.

The order of a nothogenus name isn't necessarily indicative of the parental order e.g. which was pollen or seed parent ?

**Natural Hybrid List, Bromeliaceae** compiled by Derek Butcher Dec. 2017

"These are hybrids named under the ICN rules and apply to plants found in the wild. They do not appear in the Bromeliad Cultivar Registry which follows the ICNCP rules. However, they may have been given a Cultivar name and this is noted. There is also a possibility that a manmade hybrid has been done using the same parents but we should try to keep these separate! They are recorded in the New Bromeliad Taxon List <https://bromeliad.nl/taxonlist/>. Should you find a natural hybrid in any literature given a latinised name or grex formula and not in this list please advise full details including a photograph if possible. Remember that grex formulae are acceptable under this system".

-----

To most growers name changes aren't important, it's too complicated and too difficult to keep up to and remember, however when it comes to buying plants this information does become important. For example a grower buys two plants with different names only to find that they have actually bought the same type/form/variety of plant twice. One of the sellers and for that matter the buyer hadn't kept up with the name changes whereas the other had. Don't get caught, keep up with the changes or at least check, we aren't expected to remember them all.

For hybrids and cultivars only use the Bromeliad Cultivar Register (BCR) to check for hybrid and cultivar identification, some variegated forms of species get assigned cultivar names which need to be considered when buying plants.

Family Names	Genus	variety	subspecies	forma	Total
Bromelioideae	Aechmea	62	3	8	
	Ananas	1	-	-	
	Androlepis	1	-	-	
	Billbergia	35	-	1	
	Bromelia	2	-	3	
	Canistropsis	-	-	5	
	Cryptanthus	5	-	1	
	Edmundoa	2	-	-	
	Fascicularia	-	2	-	
	Fernseea	-	-	1	
	Greigia	4	-	-	
	Hylaeicum	4	-	-	
	Neoregelia	4	1	4	
	Nidularium	7	-	-	
	Orthophytum	6	-	-	
Portea	3	-	-		
Quesnelia	2	-	-	<b>167</b>	
Lindmanioideae	Lindmania	6	-	-	<b>6</b>
Navioideae	Navia	7	-	-	<b>7</b>
Pitcairnioideae	Deuterocohnia	2	5	-	
	Dyckia	11	-	-	
	Fosterella	1	-	-	
	Pitcairnia	66	3	-	<b>88</b>
Puyoideae	Puya	14	2	-	<b>16</b>
Tillandsioideae	Catopsis	3	-	-	
	Goudaea	4	-	-	
	Guzmania	23	-	3	
	Josemania	1	-	-	
	Lutheria	5	-	-	
	Racinae	20	2	-	
	Tillandsia	125	10	14	
	Vriesea	38	1	2	
Werauhia	1	-	-	<b>252</b>	

Total of varieties, subspecies and formas = **536**

Total bigenerics - 2, natural hybrids - 198 = **200**

Total species in 82 genera, August 2022 = **3719**

**Grand Total = 4457**



## Open Popular Vote

1st	Helen Clewett	<i>Billbergia sanderiana</i>
2nd	Mitch Jones	<i>xHohenmea</i> 'Freak Show'
2nd	Keryn Simpson	<i>Neoregelia</i> 'Michi'

## Tillandsioideae

1st	Helen Clewett	<i>Tillandsia dura</i>
2nd	Mitch Jones	<i>Tillandsia</i> 'Leiboldiana Median'
2nd	Keryn Simpson	<i>Wallisia pretiosa</i>

## Decorative

1st	Keryn Simpson	'Mum For You'
-----	---------------	---------------

## Judges Choice

1st	Helen Clewett	<i>Billbergia sanderiana</i>
-----	---------------	------------------------------

### 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.

The new Bromeliad Species Database (BSD): [www.bsi.org](http://www.bsi.org)  
Refer to this resource for bromeliad species information.

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](http://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.