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

Edition: June 2022

Agenda: General Discussion

Venue: PineGrove Bromeliad Nursery

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Study Group meets the third Thursday of each month Next meeting July 21st 2022 at 11 a.m.

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Meeting 19th May 2022

The meeting was opened at approximately 11.00 am
The 13 members and one visitor present were welcomed.
One apology was received.

General Business

At our April meeting Kayelene offered to host a garden visit for members at her home, all agreed and decided to hold our May meeting at Kayelene's home in conjunction with the garden visit. This was the first time our monthly meetings have been held away from PineGrove and what a great success it was. Thank you Kayelene for a wonderful day.

From our May Newsletter, page 7, we discussed Coral's unregistered Vriesea hybrid suggesting she bring it back to a meeting when it's in flower. We can then photograph it for registration purposes and Coral could suggest a name for it.

Ross also discussed the introduction of the new Bromeliad Species Database which is now available on the Bromeliad Society International (BSI) web site. Part 1 of how to access the site and what it's all about in detail is featured on pages 14 and 15 of this issue.

Show, Tell and Ask!

An Aechmea fasciata showing some unusual traits of distortion was discussed, the slightly distorted inflorescence is often referred to as 'cresting/crested'. It's nothing to be concerned about, grow and enjoy the many forms of Ae. fasciata.

Crested: bearing a tuft; having a terminal of proliferating cells producing a grotesque shape. Bearing a crest; crested = **cristata**. (from BSI Glossary)

Fasciation: from the Latin meaning "band" or "stripe", also known as cresting, is a relatively rare condition of abnormal growth in vascular plants in which the apical meristem (growing tip), which normally is concentrated around a single point and produces approximately cylindrical tissue, instead becomes elongated perpendicularly to the direction of growth, thus producing flattened, ribbon-like, crested (or "cristate"), or elaborately contorted tissue. (from Wikipedia)

Fasciation: from the BSI Glossary — a malformation caused by several stems becoming fused into one.

Ross brought along several plants to show, one being *Aechmea macrochlamys* which means large cloak or mantle, large clasping bracts, it is endemic to the State of Espírito Santo in eastern Brazil, discovered by L.B. Smith 25 July 1939. It grows to around 850 mm across by 650 mm high including the inflorescence.

Another plant shown was *Aechmea* 'Del Mar', a very striking plant when in flower with its electric blue inflorescence, this hybrid of undisclosed parentage and breeder grows to around 600 mm across and 780 mm tall including the inflorescence. One probable/most likely parent is *Aechmea dichlamydea*.

His next plant was *Pitcairnia poortmanii* which is a large showy plant with long narrow leaves, it's best grown as a dense clump to gain its best effect. It grows to around 1440 mm high including the spike which supports a lax, pyramidal inflorescence 600 mm tall by 630 mm wide. The panicle itself is made up of nine branches plus the terminal one, the lower few having secondary branching all supporting 60 to 70 mm long red petals. It was found growing saxicolous in Colombia and Ecuador by Edouard François André in the 1800s.

John brought a number of plants along with *Tillandsia dura* Baker,1889 being his first to be discussed, he grows this one in a very well lit location, watering and fertilising often. It is a small species with an average size of around 100 mm wide by 200 mm tall including the inflorescence. It grows as an epiphyte in the rainforest from near sea level to 800 mts altitude in south eastern Brazil.

Next up was *Tillandsia schiedeana* (giant form), giant form being a descriptive term only, hence in brackets, it is also often referred to as "major" being another descriptive term only. John has had this plant for only 11 months and is hoping it'll develop into a nice clump. It was found and described by Steudel in 1841, it grows as an epiphyte at 50-1800 m altitude in Mexico and the West Indies to Colombia and Venezuela.

The following taken in part from Bromeliads in Australia (BinA) - Photo Index: Derek the Hybrid Detective

DD0912 *Tillandsia schiedeana* from a talk by Derek Butcher, December 2011. Let us now look at cultivars of *Tillandsia schiedeana*:

Everybody knows that the ubiquitous *Till. schiedeana* always has yellow petals and reddish tones to its floral bracts - at least this is what all the taxonomists tell us. Because Barry Genn in Qld, Australia, has plants with yellow bracts we both feel they need a cultivar name. There are two forms - thin leafed (blade 2 mm diam at thickest) and fat leafed (blade 5 mm diam at thickest). Because they don't blush in the floral bracts they must be ultra shy - hence the two names 'A Little Shy' for the smaller plant and 'Shy' for the larger plant. Apparently Nev Ryan knew about these in the 1990s or before and now Barry has proved that they reproduce faithfully from self set seed. Renate Ehlers reports that the form with yellow floral bracts is not rare in Mexico, having found it in many locations, most times in low and humid areas. Eric Gouda also reports the same sort of occurrence in Colombia. There is a form with orange floral bracts but seems to be fairly rare at the moment and is informally called 'Orange Bracts'. This shows

that this species is wide spread and very variable in plant size and furriness of the leaves but nothing is said that the floral bracts can be greenish-yellow to yellow, even in the descriptions of the synonyms. In a way it is odd that you see 'Major' and 'Minor' in Nurserymen's lists and yet there appears to be a variation of sizes in the wild. But then conversely no names have been given because of difference in floral bract colour and yet apparently this trait has been noticed in the 'Trade'.

Ed: some traits for John to look at when next his Till. schiedeana flowers.

John had two different Goudea for Show and Tell, one being *Goudaea ospinae* shown in flower by Kayelene on page 5. This attractive species was originally named *Vriesea ospinae* by Luther in 1983, it was reclassified *Goudaea ospinae* (H. Luther) by W. Till & Barfuss, *comb. nov.* Phytotaxa 279(1): 001-097 in 2016.

John was explaining when to remove pups as this being a sprawling species it tends to act as a ground cover when grown in the garden looking very attractive. As the plants sprawl it is sometimes best to remove some pups and replant back in the central position to help maintain a more full looking clump. When grown in pots its sprawling habit can cause problems of unbalancing the pot causing them to fall over. Goudaea tend to form a trunk, so when the problem arises the trunk can be cut, allowed to dry and replant it as normal, this will give the appearance of it being a short stout plant again.

John also had an unregistered hybrid to show us called *Goudaea* 'Grubby Tiger', this is a hybrid created by Ross Little crossing *Goudaea ospinae* var. *gruberi* and *Goudaea* 'Tiger Tim'. The resultant seedling grex was a mixed bag of greens with small white markings, quite chocolate brown with white markings and some very white plants consistent with 'Tiger Tim'. This grex showed a broad mix of both parents. The plant John had to show (page 5) had leaves with yellow makings and its newer leaves have white makings, it was sprawling out of its pot causing it to topple over, time to cut the trunks and replant it.

Our meeting day at Kayelene's home was a great success with suggestions we try this again at other members homes also. Wandering about the expansive gardens we saw some lovely display gardens and many plants in decorative containers on the patios. Cameras were clicking snapping photos, one standout was a pot of *Neoregelia* 'Red Macaw' (photo p.6) which appears to really favour its selected position showing off its rich red leaf tips and concentric red banding. It was good to see a well supported raffle table, thank you everyone because I don't think anybody missed out in the draws. Another couple of plants of interest were the two *Billbergia* 'Hallelujah' on the Popular Vote table showing how much light can affect the colour of the foliage (photos p.6). Thanks again to Kayelene for a wonderful and very successful day.



Kayelene showing a Goudaea ospinae in flower.



A well stocked raffle table.



John showing *Goudaea* 'Grubby Tiger' growing sideways after it fell over.



Looking good around the garden.



L-R - John, Shirley, Debbie, Ian, Kayelene, Helen, Gary and Coral (reading).



Goudaea 'Tiger Tim'



Neoregelia 'Red Macaw'



Billbergia 'Hallelujah' grown by John Crawford



Aechmea warasii var. intermedia grown by Keryn Simpson



Billbergia 'Hallelujah' grown by Kayelene Guthrie



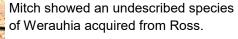
◀ Tillandsia dura Tillandsia schiedeana ▶ (giant form) grown by John Crawford



Guzmania 'Dawn' variegated grown by Keryn Simpson

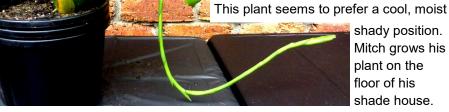


Neoregelia 'Burgundy' grown by Michelle Hartwell



It was collected by Jason R. Grant and James R. Rundell, 14 February 2000 in Reserva Forestal Fortuna, Panama.

A tentative name of "bassonita" was given for the inflorescence being in the shape of a bassoon crook.



shady position. Mitch grows his plant on the floor of his shade house.



Billbergia 'Talbot Cherry Maple'
1st Open and Judges Choice





'Bromeliad for World Bee Day' 1st Decorative John Crawford



Tillandsia 'Bob's Amigo' 1st Tillandsioideae John Crawford



Tillandsia bulbosa

1st Tillandsioideae Gary McAteer



Tillandsia ionantha grown by Keryn Simpson



'Fairy Garden' shown by Keryn Simpson



Tillandsia funckiana grown by Mitch Jones



'Hanging on a Limb' shown by Mitch Jones

<u>In Search of a Very Special Species Part 2</u>: by Peter Tristram *Goudaea ospinae* var. *gruberi* Luther

Unexpectedly, just across the dam wall near the military post, the originally described *Goudaea opsinae* Luther was found. It was the beginning of a fairly narrow wet zone towards the base of the Cordillera Oriental. Here, *Goudaea ospinae* was found in abundance, growing from the eastern side of the dam at 1500 m, almost all of the way to Santa Maria at 1200 m. It grows in clumps and strands in semi-shade, among rocks and scrambles over cliffs and boulders, especially along the margins of the rainforest. The real prize, however, was still to be found.



Down we drove, through rough-cut tunnels, some a kilometre long, complete with cascading, groundwater carwashes, streaming, at times, in torrents through the age-fractured bedrock, past thousands of stands of *Goudaea ospinae*, to the small town of Santa Maria, nestled among towering, emerald-veined mountains. The town of San Luis de Gaceno was further on, closer to the plains.

This whole area, famous for its emeralds, is not on the tourist routes and still regarded as potentially 'hot', especially for foreigners. The road hadn't been



Victor and Aldo – no 'Gruberis' here!

upgraded for 50 years, it seemed and there were very few side roads. Using local knowledge and guides, my driver, Aldo and I, were to travel safely in these areas, enjoying the friendship and hospitality of the locals.

It was mid-afternoon and mid-summer, in the extremes of a Colombian heatwave, when we finally arrived at Santa Maria. Families were cooling off in pools of spring water beside the road but not much else was happening. We were searching for the village where the dam workers had lived in the 1980s, a location suggested by Franz. With the help of the chance find of a local *Heliconia* expert and botanical artist, Victor, and some cooling Poker cerveza (beer), we eventually found the remnants of the village and, though it wasn't

likely 'Gruberi' country at all, we still needed to check the area, exploring along the river and seeing lots of other bromeliad species festooning the trees and road banks, but not a sign of a 'Gruberi'. I had photos of the desired plant on my phone and we showed these to various locals, without leads.

Although the description gives no hint, I had decided the 'Gruberis' just had to be rock scramblers or cliff dwellers, much like we had just observed of the standard species. Aldo did the translating and Victor took us back towards the dam where there were gardens of Goudaea ospinae, a spectacular sight in itself, but no sign of 'Gruberi'. Too high, again, we surmised. Franz, during a quick call (Yes, there was cellphone/mobile reception!), had assured us that the required altitude was below 700 m so, since the road was heading uphill, we were going in the wrong direction. There was, however, the incongruous sight of the local ambulance, doors flung open and stretcher, wheels down, perched on the concrete



floodway. Some of the locals were enjoying a swim in the refreshingly cool stream, ambulance handy in case of an emergency!

We requested our guide to find cliffs, any cliffs, and at a lower altitude, so off we set, back to Santa Maria, then on the road to Medina where Victor assured us there was a gorge. In the meantime Franz messaged Aldo a map he had drawn in the early 1980s, which he had found and scanned, so the trail hotted up. We were in the right area!

The road to Medina loosely followed the fast flowing Rio Bate, downstream from the dam, as it headed towards the Rio Guavio before spilling its massive cargo of silt and pebbles, gouged from the Andes, into the flat lands. It was now late afternoon and my hopes were dwindling. We passed evidence of recent calamitous rainfall, whole mountainsides having been literally poured into the narrow river valley. The local folk, friendly as usual, were very poor, not sharing in Colombia's recent prosperity. Their subsistence abodes were squeezed between the rough road and the white-water river. Finally, defeated, I asked Aldo to find a spot to turn around; we still needed a hotel for the night and Medina was not on the recommended list. Aldo conferred with our guide who gestured to keep going, "Dos kilometres mas!"...

And, just a couple of kilometres further on, the very first cliff loomed. And straight away, on a protected, moist, vertical wall, nestled among mosses and tropical vegetation, a beautifully tessellated treasure glowed in the fading light — We had found it! We were all excited now! It was even more beautiful than

expected in its own natural paradise. The altitude was 700m, just as Franz had predicted. It was likely the very first

Goudaea ospinae var. gruberi photographed 'au naturale' and likely the first one to be noted in habitat for a very long time. Some more colonies were found but only in a very small area, all in deep shade; cliff hangers, dangling, at times, on long stems and occasionally attached to aerial roots of trees.

Our goal was achieved, and what a thrill!

Mission accomplished, but not the end of the story yet!



Señor Victor, the Heliconia man, now has some beautiful *Gruberis*' to adorn his Santa Maria garden and show off to friends. The excited Franz, who was phoned with the good news and e-mailed some photos, also has some new clones to play with.

You never know what to expect off the beaten track in Colombia and this road was no exception. Accommodation was found at the surreal Las Cabañas, just up the hill to the east of town, which topped off the day perfectly. After a hearty

feast back in town, washed down by some celebratory Cerveza Águila, it even rained that night for the first time in months. Aldo set up his hammock in the gazebo and I retired to my room, both overlooking the ornately blue-tiled pool. We were the only guests.



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The next day the air was still and damp and low clouds testified to the night's rain, though were soon to clear. As usual, the morning began with coffee and a hearty breakfast (including a local fermented sugarcane brew) and talk of plants and emeralds, before heading east to San Luis de Gaceno, towards the heart of the heatwave and eventually onto the fuel-tanker highway and a long day's drive south to Villavicencio.

We filled up with 'DISEL' and were still in the right area for our treasure - all that we needed were cliffs!

We appeared to be leaving the rugged foothills, back into dry country, when a mountain spur approached, through which the Rio Colorado has carved a massive gorge over countless centuries. The narrow, corrugated, dusty road had few places to safely stop, so Aldo kept a look out for vehicles while I scanned the shaded cliffs across the river with binoculars and took photos to check by zooming in. Yes, there were 'Gruberis' - thousands of them! A little further on, the road cut along the edge of the gorge and on darker protected cliffs, 'Gruberis' also grew, albeit almost unrecognisable in the brown dust coating everything. Climbing a little higher above the road, large colonies of cleaner specimens cascaded over the rocky cliff edges. Like in our cultivated plants, they varied considerably in shape, size, colour and boldness of markings, in both locations. It must be that plant enthusiasts rarely travel in this area for this species not to be reported over the last 30 years. The new altitude – 450 m.

This amazing species grows among some of the most beautiful, lower altitude wilderness in this area, only protected by the ruggedness of its habitat, which should, however, ensure its survival.

Franz was thrilled and amazed that we had found this bromeliad treasure after so much time.

Discovering such a famous plant in habitat was THE highlight of the trip!

Ever since 'Gruberi' appeared in horticulture it has made bromeliad headlines. Cultivars have appeared, through sporting, seed raising and tissue culture in the U.S. (especially Hawaii), Europe, Australia and Asia. Many hybrids also feature in the BCR.

Entering gruberi into the BCR search box gives 35 results, just a few listed here:

Goudaea 'Hot Chocolate' (Tristram)
Goudaea 'Scaredy Cat' (Tristram)
Goudaea 'Smudge Grub' (Tristram)
Goudaea 'Sons of Tiger Tim' (Tristram)
Goudaea 'Tiger Tim' (Tristram)

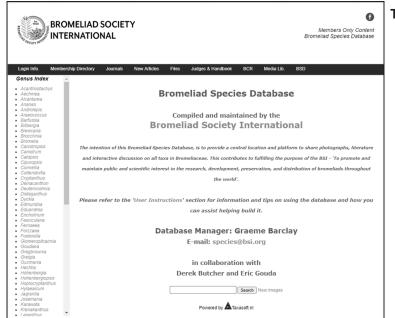
Goudaea 'Chivor' (Gruber)
Goudaea 'Medina' (Gruber)
Goudaea 'San Luis' (Gruber)
Goudaea 'Santa Maria' (Gruber)

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The New BSI Bromeliad Species Database (BSD) Part 1:

After three year's work in collaboration with Eric Gouda (Utrecht, Netherlands) and Derek Butcher (Adelaide, Australia), I am delighted to present the all new Bromeliad Species Database (BSD), now available on the BSI website at www.bsi.org. The BSD is the all new "go to" resource for bromeliad species information online, further fulfilling BSI's purpose of promoting and maintaining public and scientific interest in Bromeliads around the world. It sits alongside the well known Bromeliad Cultivar Register (BCR), but is exclusively for species only, providing all bromeliad enthusiasts with an interactive platform for accessing and sharing species photos, resource files and discussion.

Graeme Barclay



The BSD home page, accessible at www.bsi.org either from the main menu page (public restricted access) or within the Member Only Content section (log in for full access to all files).

How does the BSD work?

The BSD uses a continuously updated taxon list of all current genera, species, varieties and forms - including their synonyms. This taxon data is supplied via a live link from the *Encyclopaedia of Bromeliads* and *The New Bromeliad Taxon List*, which are actively maintained online by BSI Webmaster Eric Gouda and colleagues, in Europe. This ensures all genus and species names in the BSD are kept up-to-date and aligned with the latest taxonomic classifications from *Bromeliaceae* botanists and experts around the world.

The BSD structure is very intuitive and easy to navigate, based on the familiar BCR design that has been available for public use over the past decade or so. Simply click on a genus name and then a species name in the menu to access the photos and file archives relating to that species or genus. As with the BCR, the BSD is designed to be accessible and usable (in part) to the public, in order to foster interest in bromeliads and also to attract new BSI members.

What is inside the BSD?

There are two main sections of data. The first is a dedicated photo "Gallery" page for every species, which is fully available to the public after clicking on a species name. Photos in the Gallery are shared both ways with the FloraPix Brom-L Picture Gallery archive (also maintained by Eric Gouda), unless they are uploaded as "BSI member only" images in the BSD, when they are not shared. Any user is therefore able to instantly upload species photos at any time into the BSD Gallery pages. All new photos are checked and verified daily for accuracy, with the BSD Managers having the ability to edit and change plant names and notes as required. As mentioned above, there is a choice to either upload photos for public viewing, or reserve them for "BSI members only" in large format. All users can also add notes and make comments on publicly available photos and even ask for identification if unsure.

The second section is reserved for BSI members only.

This is the "Description & Resource Files" archive, which is accessed via the grey button on the taxon or genus photo Gallery pages. These files are viewable to the public in small thumbnail format only (cannot be clicked on), full access requires a valid BSI member username and password to open all files and view photos in large format. Within this archive are over 36,000 photos and files across ALL *Bromeliaceae* species and genera. These have been diligently sourced, updated and archived continuously over the last 40 years by BSI Honorary Trustee, Derek Butcher and his wife Margaret. This lifetime of work includes many rare and habitat photos, botanical drawings, historical paintings, herbarium scans, original protologue scans, distribution maps, comparison tables, identification keys, botanical and discussion articles - and much more. There is also an MS Word document containing a transcript the official botanical description for every species, often followed by discussion notes and other information. Many of these descriptions have been meticulously translated into English by the Butchers from the original Latin and other languages.

These files are available for all BSI Members to access for personal or educational purposes, or bromeliad society use and publications, provided reference is given to the BSD and appropriate credit is given to the photographer or author.

Open Popular Vote

1st Jennifer Laurie Billbergia 'Talbot Cherry Maple' unreg.

2nd John Crawford Billbergia 'Hallelujah'

3rd Mitch Jones Guzmania 'Dawn' variegated
3rd Keryn Simpson Aechmea warasii var. intermedia

3rd Michelle Hartwell Neoregelia 'Burgundy'

Tillandsioideae

1st Gary McAteer *Tillandsia bulbosa*1st John Crawford *Tillandsia '*Bob's Amigo'
2nd Keryn Simpson *Tillandsia ionantha*

Decorative

1st John Crawford 'Bromeliad for World Bee Day'

Judges Choice

1st Jennifer Laurie *Billbergia* 'Talbot Cherry Maple' unreg.

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.

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.