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

Edition: October 2023

Agenda: General Discussion

Venue:

PineGrove Bromeliad Nursery 114 Pine Street Wardell 2477

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Study Group meets the third Thursday of each month

Next meeting November 16th 2023 at 11 a.m.

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Meeting 21st September 2023

The meeting was opened at approximately 11.00 am The 9 members were welcomed. Two apologies were received.

General Business

The fire ant issue was reviewed and it appears the message is being spread wide and clear that we don't want them in New South Wales. Thankfully our Group members acknowledge the importance of not bringing potted plants into NSW and are being very vigilant about their movement of plants. Bare root only even if plants are coming from outside the declared fire ant zones as one can never be too careful.

Spring has sprung and brought some unseasonally hot weather and with it some very blustery windy conditions. It's these winds that cause problems for our plants drying them faster than we can water them. Misting is the answer one grower has recommended. Have your misting watering system set up on an automated timer and have it come on every hour or couple of hours for only a few minutes at a time to help keep your plants hydrated. To maintain humidity keep trays of water about and keep gravel floors damp. Mulching garden beds helps a lot using either tea tree mulch, pine bark chips, leaf litter or even rice hulls, any mulch that will help maintain moisture in the garden is better than none. Most of our Bromeliads have their own water holding wells/vases which are best left with a little debris in them in these dire times to minimize evaporation rather than cleaning them out.

We say most but not all, there are the xerics, the ground dwelling terrestrials most commonly seen in our collections are Bromelia, Dyckia, Deuterochonia, Encholirium, Hechtia and Puya will all benefit from mulching. This wind will dry the soil out quickly so mulch is important. For your xerics use some decorative gravel, adding some stones and rocks around them can be very useful and attractive, giving a more natural look.

Many grey leaved Tillandsias may grow in what appears to be dry, wind swept arid areas but these locations are fed by mists/fogs which help hydrate them. As we are not experiencing these regular fog events it is important that we maintain a regular watering program to keep plants hydrated during these hot dry windy conditions we're experiencing. Watering your Tillandsias in the early morning helps, if it is more convenient, water in the early evening which will allow plants time to both absorb the moisture provided but dry out lessening their risk of rot.

Show, Tell and Ask!

After 12 plus years of putting this Newsletter together we're finding it harder and harder to put together informative articles on issues that haven't already been written about. It is up to members to ask questions and offer input at monthly meetings and even between meetings. This helps to give content and written answers to your queries in 'your' Newsletter. Also readers queries or corrections help too if you see something that needs clarification or you can add information to an article, let us know.

Over the past few months we've had discussions about methods of displaying our Tillandsias which has brought out a few innovative mounting methods and some not so new. These mounting methods are not specifically only Tillandsia related. Many of our 'other' Bromeliads especially those stoloniferous types can be adapted to some of the methods suggested.

Rope can be multifunctional, ropes made from natural fibres/materials such as cotton, sisal, coir, hemp, jute, and more are good for germinating seed on. The size of the rope you choose to use depends on what you have available, a thin piece of rope may need a small weight attached to its bottom end to help stop it from curling upwards. Personally I have used rope up to 150 mm thick (anchor rope from cargo ships), this size rope can be laid out on a bench and not only have Tillandsia seed placed on it but any other you wish to try. Give it a go, instead of washing berry type seed e.g. Neoregelia, Aechmea etc just squeeze the pods onto the rope and gently rub it in and water them. Plumose seed types e.g. Tillandsia, Vriesea etc with their coma hairs (tuft of hair on the seeds) catch easily on the natural fibre ropes. Gently rub the hairy seed onto the rope and mist spray regularly and wait. Growing seed is a slow process requiring much patience, hang the rope in a well lit, airy situation and don't forget to mist it.

Due to the availability of natural materials, natural ropes have a much longer history than their synthetic ropes, however synthetics will do the job.

Apart from setting seed on rope one can pry apart/unwind the strands to feed the stolon of any stoloniferous Bromeliads through, this will keep the base of the plant locked into position but you may need a second tie to hold the plant itself in a vertical position until it's established itself, set root and become self supportive. A screwdriver will help hold the strands apart while inserting the stolon through, the rope will lock tight on the stolon after the screwdriver is removed.

Hanging the rope - two turns of wire around the rope a short distance from the end, twist tightly with a pair of pliers, allow a reasonable extra length to fashion a hook for hanging. Add a fishing swivel to allow the rope or your basket to turn in the breeze to maintain even light level to all sides.

Hanging baskets, not new, but can offer a wonderful display for those who are the 'non dividers' that prefer to grow their plants in large clumps. A large pot or basket full of vivid colourful flowering bromeliads can look spectacular when in full bloom. It is also quite noticeable the extra vigour plants get with pot culture as opposed to being mounted even of course if one fertilizes them regularly, the nutrient availability in potting mix is an added continuous boost to the plants. Try it out for yourself, pot one, mount one and check the difference in a year or so.

PVC, poly pipe/plastic drain pipe can be used in a multitude of different ways: Strawberry pots - drill holes with a hole saw at random positions for planting. Use a hair drier or heat/hot air gun to soften the poly pipe where you've cut the holes, wearing gloves gently manipulate the pipe and draw it forward to open the pocket. Alternatively cut slots with a hand saw, heat the slot, push the top side in and pull the lower side out to form a pocket. Affix an end cap to the bottom end of the pipe so that it can now hold your preferred potting mix/soil. Drill two or three evenly spaced holes a short distance down from the top of the pipe for your hanging attachments, wire, rope or chain.

Various sizes of PVC pipe can be cut into 20mm pieces or your preferred length, now you have rings. Drill holes for support wires/hangers and sit your plant in the ring. Hang in a well lit airy position.

It was with great appreciation that we received some feedback from readers this past month about their choice of mounts. One reader, Marilyn from Orlando, Florida, USA has used bedsprings from an old bed.

Painted in your choice of colours they can make a decorative centre piece on a table with a plant of any description set in it.

They can be used as singles or linked them as multi sets adding a mix of different plants in them. Fit them to a base board and attach a Tillandsia to it inside the spring plus one sitting in the top of the spring.

Photos by Ross Little







Michael Barfuss from Austria uses pumice bricks to mount Tillandsias on.





Pumice stone can be found on Australian beaches having drifted in on the tides. Rafts of pumice form when hot magma from volcanoes cools rapidly in water. Next time you're out walking along the beach keep an eye out for some.

Note: the salt will have to be leached out of it by soaking it in fresh water prior to use.

Pumice stone bricks are often sold as 'Grill Blocks' or 'Griddle Bricks'. It is reasonably soft and can be cut with a handsaw used for timber. No special drills for holes are required, it can be done with regular drill bits. Add wire hooks.



Kayelene sent in some photos this month of her Tillandsia craft workshop.





I've been creating a "Tillandsia Wheel" out of all things old, the wheel itself I found in an op shop.

I have used corks and bits of timber, but since our Groups August meeting discussion about various mounts, Clive (my handy husband) helped me wind spirals from wire to house some.



We used the horn of our old anvil that sits at the front door of our house to create the shape (photo attached).

Making use of corks and old wares.

A vintage condiments caddy with an array of Tillandsias on cork make a nice table centre piece.

Tillandsias in an old egg cup added to the table centre décor theme.

We've hung wire cages with Tillandsias on cork in them at the front door to give the appearance of lanterns.











Neoregelia 'Devroe' 1st Judges Choice Kayelene Guthrie



'Spring Bowl' 1st Decorative Debbie Smith





grown by Helen Clewett

Vriesea unregistered Dillings hybrid ◄ grown by Michelle Hartwell





Sincoraea albopicta (left) and 'Splash of Colour' (right) by Mitch Jones

Mitch gave an informative talk and demonstration on potting Cryptanthus. These plants are terrestrial, they do not grow as epiphytes in trees. They are best grown in pots or in the ground. For pot culture they require a good quality potting mix/soil with good drainage. Cryptanthus do not like to be dry for any extended period of time but they also don't like boggy conditions, keep the soil moist but not wet, slightly drier in winter. The pups when ready for removal almost fall off when touched. When potting push the base of offset directly into the mix/soil, you may find it just wants to jump right back out. Many terrestrials such as Cryptanthus, Dyckia, Hectia, Orthophytums etc have leaves that curl under tending to push the plant up and out of the pot.

There are several ways to solve this problem until roots are established: Use skewers as stakes to help hold it firmly in place.

A rubber band stretched over the plant and down under the pot is effective.

Use plastic coated wire as per rubber band (this a bit more gentle on the plant).

Mitch uses wire bent in 'u' shape pushed into the potting mix over the offset, use two if necessary to hold the plant in place until roots have established after about a month.

He makes a potting mix of coco pith, vermiculite, perlite, pine bark, crushed sandstone, carbonised rice hulls and zeolite, after potting dust with diamatatious earth. Keep moist but not wet.



John Catlan said of Cryptanthus in his book 'Bromeliads Under the Mango Tree': "Sometimes Cryptanthus pups will not stay in the soil and just keep popping out, which makes it very difficult to strike roots. Whether mice or men knock them out of the soil, it is your problem and you have to solve it."

John said "there is only one cause for the leaves to be folding back down onto the soil and to eventually form a tight ball and that is - lack of humidity."

Therefore it's important to keep your growing area damp to maintain humidity. Dehydrated pups can be rehydrated by soaking them in a bucket of water over night, after soaking place them in a large pot or on a tray with a wet substrate e.g. wet potting mix or sphagnum moss until the leaves straighten out sufficiently to enable potting.

Rice Hulls - Carbonised for My Bromeliad Culture by Mitch Jones

Carbonised rice hulls are made from the incomplete or partial burning of the rice hull/husk (fibrous outer layer of the rice seed) to carbonise it (make it go black).



The process I use at Duck Creek is filling up a steel garbage bin with the rice hulls and putting it in the bonfire or fire pit, stirring occasionally to ensure the hulls are carbonised. Once all are black, I pour a bucket of water into the full bin to stop the process of burning and allow it to cool down over night with lid tightly sealed.

Warning:

Carbonising rice hulls is dangerous, the gases can catch alight at any point in time while you're roasting them at 600to 1000° celsius on a continuous fire and coals.

Carbonised rice hulls are excellent at improving soil and potting mix structure, water retention, balancing pH and a good source of fertilizer - phosphorous (P),

potassium (K), calcium (Ca), magnesium (Mg) and micronutrients which are vital to growing healthy strong disease and pest free plants with stable growth.

Potted genus I use the carbonised rice hulls on in my collection are Alcantarea, Cryptanthus, Hohenbergia, Puya, xHohenmea, xPuckia and xVriecantarea.

Further to the above it is an essential ingredient in my seed raising mix for my Alcantarea hybrids, xeric bromeliad seedlings e.g. Puya, Deuterochonia, Dyckia and Bromelia. The carbonised rice hulls give the young plants an excellent start to life with the essential nutrients and moisture they require.



Add rice hulls as required to increase water retention properties of your potting mix to your desired level.

Hybridizing - Reflected Upon by

by Mitch Jones

Holding back and letting things go... don't do it unless there is a chance of a result you would like and cull if it doesn't work.

As the market place is swamped with look-a-likes, people trying to recreate the already created... where's the unique stuff?

What happened to the species on the verge of extinction?...the seed growers are only concentrating on hybrids.

The Metaverse has become 'identification central' of home gardeners causing a plague of problems regarding mislabelling which is making a catastrophic mess.

A system full of genetically muddled things that have pretty much reverted back to one parent's gene pool.

One has to ask what is the goal or where is their sense of achievement?

What's happened to systematic labelling? ... seed collected from a hybrid does not take the name of the parent, it is a new cross/hybrid.

Where are the pictures of flowers, spikes and the rest to identify and ascertain if your pollinating worked? Non existent ... is there any responsibility left?

Complexities of the spectrum and a realisation that it feels good culling the collection and seedlings down instead of hoarding and creating a mountain of mess. I have a sense of a healthy beneficial achievement creating something unique and not a replica whilst cultivating the species to keep them alive...

So sit back, reflect and look around ... look at what has already been created, consider what could I try and achieve that is significantly different to what is available within the marketplace now. Do I want to just copy somebody else's work or do I want to create something unique that is mine. I want my own.

A few Snippets from: Bromeliads under the Mango Tree.

by John Catlan

Watering at Midday in Summer (ref. page 20)

I would like to lay to rest what I believe is a misconception on watering: Don't water bromeliads in the middle of the day because you will burn or cook them. Well I've watered kids, dogs and myself - it cools us down and the evaporation cools us down even more. With bromeliads it relieves a stressful situation. The only plant I can bring to mind that turns to mush when watered in the middle of the day is lettuce. This may explain the origin of this piece of misinformation.

After Winter - Pups, Placement and Watering. (ref. page 57)

Once winter has gone and summer is on its way, it's time to pot up those pups. Remember there is nothing wrong with potting three or four pups of the same plant to a pot so at flowering time a massed display can be looked forward to.

If you are going to move bromeliads to a much brighter position this year, spring time is about the latest time so the plants can become acclimatized to brighter conditions. If the plants do burn do not worry, if the plant is suitable for bright conditions its pups will acclimatize.

In very dry conditions the air lacks moisture content. If your plant has no dew on them at daybreak they will need a minimum of light watering that day, early is best. While the humidity is very low keep the water up to the plants. Early in the morning check your plants. Find out which areas receive more dew than others. The areas that have less or no dew will always require more watering. Also check after very light rain and see if the plants are actually wet.

Humidity, Pups and Seedlings. (ref. page 51)

With general propagation and handling of seedlings, if you pick the right time your success rate will be much better. When you watch the news, you will notice sometimes they mention the percent of humidity for the day. These percentages are worked out at 9am and 3pm - as the temperature rises through the day so the percentage of humidity drops. Cuttings and seedlings stress out with the sudden drop of humidity.

Bromeliad pup growth rate is much faster when attached to mother and when they are taken off they need protection for the first few weeks to settle down, they are softer and they need time to harden up. As a pup, they are also positioned on the mother where they are protected from adverse conditions low humidity, winds and excessive sun.

Cuttings and seedlings need protection when being handled, nurseries use misting systems to increase humidity and stop transplanted seedlings and cuttings stressing out from dehydration. You may not have a misting system but you can get around the problem. When the weather forecast promises rain for a few days start potting seedlings. Your success rate should be one hundred percent, as the humidity from the rain will reduce the stress.

The worst time to pot up seedlings is during hot dry weather because management of the humidity levels is difficult. Potting up delicate seedlings during low humidity days after 8.00am leads to stress and death.

Growing on Bromeliad Seedlings (ref. page 20)

I am always intrigued by the inconsistency of people's understanding of growing bromeliad seed and seedlings. They clearly understand that seed should not dry out or they will die. The same principal applies to seedlings that have been transplanted into their next container. The moisture level of the soil and the humidity level surrounding the seedlings are critical - not too wet for long periods or they cannot breathe, or too dry they dehydrate.

The next inconsistency is even more puzzling. Very rarely will you find anyone who does not understand that bromeliad seed is sown on the surface of the seed-raising medium. However when they pot up the seedling, it is buried so the growth eye is below the surface of the soil. This is responsible for most deaths. The growth eye should be level with the surface, or better still just above it. If the seedlings do not stand up place three or four bamboo skewers around them.

Is the First Pup the Best? (ref. page 55)

In pineapples the stem of the pineapple accumulates stored up energy ready for flowering, this requires relatively instant energy. I assume Neoregelias could do the same but to a lesser extent as the proportion of the Neoregelia plant stem to pineapple plant stem and the requirements of the finished product. The Neoregelia bract is smaller than the pineapple bract.

The readily available fertilizer from the decomposing bacteria and the actual fertilizer is being dissolved in the water and sucked up by the plant and used up rapidly in extension and bract growth.

During this stage the new pups are mere pimples on mothers butt. Once all this is completed by 1st December (a nominal date), the fertilizer has only three destinations. Firstly seed production if any, secondly pup production and thirdly (and least important) maintaining mother.

The leaves only have a finite life expectancy but a poor nutrient supply means mother will suck nutrients from her lower leaves to honour her commitments. This hastens the demise of mother.

What happens if mother runs out of energy/fertilizer in producing the first one/ two pups and cannot replace energy/fertilizer because it is not readily available and it has fed off the lower leaves, these cannot now function at peak efficiency? It means the quality in the first generation pups may be better than that of the second generation. By maintaining mother plants in good condition will result in pups having better quality of nutrients, faster pup production and more pups faster. The discrepancy in nutrient levels would be less. "Is the first pup best ?" Probably YES but not necessarily so.

Open Popular Vote

1st	Helen Clewett	Aechmea 'Red Bands'
2nd	Mitch Jones	Sincoraea albopicta
3rd	Kayelene Guthrie	Neoregelia 'Devroe'

<u>Tillandsioideae</u>

1st	Keryn Simpson	Tillandsia botteri
2nd	Helen Clewett	Tillandsia hammeri

Decorative

1st Debbie Smith 'Spring Bowl'

Judges Choice

1st Kayelene Guthrie Neoregelia 'Devroe'

Web Links for Checking Correct Identification and Spelling ?

Bromeliad Cultivar Register (BCR): <u>http://registry.bsi.org/</u> 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 : <u>https://bromeliad.nl/taxonlist/</u> 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.