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

Edition: March 2020

Agenda: General Discussion

Venue: PineGrove Bromeliad Nursery

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Study Group meets the third Thursday of each month

Next meeting 16th April 2020 at 11 a.m.

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Meeting 20th February 2020

The meeting was opened at approximately 11.00 am The 13 members present were welcomed. A total of one apology was received.

General Business

Ross welcomed the 13 members present on a fine but steamy day.

Last year Keryn and Dave brought along a plant tagged as *Tillandsia* 'Red Ken'. Having reviewed that plant and the *Tillandsia* 'Red Ken' that they displayed last month, Ross was of the view that Keryn and Dave's two plants were the same one and incorrectly named. The correct identification is *Tillandsia flabellata*. *Tillandsia* 'Red Ken' is a distinctly different plant of unknown parentage named after Ken Woods in Sydney. Correct spelling is *Tillandsia* 'Redken'

Everyone was reminded to check their plant names before bringing them to our meetings, if possible. The taxon list is the best way to check species names for correct spelling and the BCR is best for cultivars. Doing this not only helps your editors but doing your own research also helps you learn more about your own plants. As Derek Butcher often says: "never trust the name on a label".

Vale: Dennis Collis, Dennis was one of our founding members who attended our inaugural meeting in November 2008. He attended meetings for many years always quick with a joke and a large smile. He will always be remembered.

Ross mentioned that the New Zealand Bromeliad Conference 'Kiwi Broms' will be held in Auckland in April 2021. Members were asked that if they would like to go to let Ross know at the next meeting so that we can make the necessary arrangements, particularly if participants want to bring plants back from N.Z.

Register online, it's easy!..Go to **www.bsnz.org** click on the 'Kiwi Broms' logo, fill out your details and pay via credit card with the secure 'Trybooking' service.

Bookings for partners are also available for the BBQ buffet dinner, banquet and garden tours, plus optional Friday night dinner (details to be advised).

Details for \$120 single day registrations will be made available around mid 2020.

Please refer to the website or printed registration form for further details, or email us at **kiwibroms@bsnz.org** with any queries.

"You don't want to miss it!...Get ready to have a great time in Auckland!" Follow us on Facebook - join 'Kiwi Broms 2021' group

Show, Tell and Ask!

John Crawford brought in a number of plants for show and tell: John's *Tillandsia morreana* is a fine specimen showing off its blue petals is the mother (seed parent) for Pamela Koide-Hyatt's hybrid *Tillandsia* 'Samantha'. The father (pollen parent) is *Tillandsia kalmbacheri* that has yellow-green petals.

His next plant on show was *Tillandsia* 'Marron' which he was hoping to get seed from appears to be not self-fertile, it flowered for eight days and then the leaves changed from yellow and dark red/maroon to green.

Another plant shown by John was *Wallisia* 'Duvalii' (was *Tillandsia lindenii* refer: FNCBSG Newsletter Nov. 2016) which he had trouble getting to flower and pup. He moved it higher in the shade house so that it got more sun, and gave it lots of water. The plant now flowers prodigiously with blue, fragrant flowers, and he has no trouble getting pups from it. John has also potted some *Wallisia* 'Duvalii' with water crystals in the potting mix and they are flourishing. This is a plant that john finds needs more water than a Neoregelia to get it to flower and pup.

John also had a *Wallisia cyanea* which he showed the Group. He has found that this plant grows better when they are packed together tightly in a pot and will produce many pink flowers.

John's last plant was *Wallisia* Triflor' which is another member of the *Wallisia cyanea* group. This has a tristichous or three sided inflorescence. John has found that the *Wallisia cyanea* group of plants do best in good sunlight – not under shrubs, and need frequent watering. In habitat they grow in full sun and get watered from fogs every night.

Kaylene asked about white spots on one of her Alcantareas. This means that the plant needs fertiliser, as the white spots indicate that the Alcantarea is feeding on itself. A liquid fertiliser like Power Feed was recommended but any liquid fertiliser (e.g. Thrive) should do the trick. Recommended concentration for Power Feed is 1ml per litre of water, however a little more per litre wont hurt as the water held in the leaf axils will dilute the fertiliser even more. It is important to pick your time during the day when you fertilise as you do not want drops of water on the leaves during the hot part of the day as this will burn the plant.

Ross reminded everyone that Bromeliads will only take up what fertiliser they need, so you can't over fertilise them – unless your concentration level is too high or you fertilise them too frequently. Fertilise weekly, weakly. In their natural habitat Bromeliads are fertilised from leaf litter, frog and various other animal and bird droppings e.g. monkeys and the humming birds.

Helen's Tillandsia that she had for identification was *Tillandsia* 'Laurie', which has yellow to white petals. This was an unidentified plant found growing in the collection of Laurie Mountford hence the name.

From the BCR: ?hybridist, possible natural hybrid, circulating in Australia, parents assumed to be brachycaulos x schiedeana. Name given to plants in Australia. See also 'Starburst' for name given to plants in Florida.

In keeping with our back to basics start to the year, Ross next showed how to remove pups from three plants.

Coral had a clump of *Aechmea organensis* which had several large pups on it. Ross explained that these pups were easy to remove because they were on longish stolons. Each pup was cut using secateurs cutting as close to the mum as possible following the line of the mother plant. Once a pup had been removed the stolon can be cut back further if it is too long for potting. The longer stolons are useful for when tying plants into trees. To prevent disease getting in at the cut mark it is best to sprinkle cinnamon over it or leave to heal for a few days.

If the pup is too hard to remove with secateurs it can be cut using a saw. A gyprock saw available at the hardware store is ideal. Sometimes it is easier to remove the plant from the pot, clean around the base of the plant to be able to clearly see the pups attachment point for cutting. For large plants that are more difficult to access the base of e.g. *Aechmea blanchetiana* etc, try using a pair of long handled loppers.

Alternatively, with *Aechmea organensis*, remove it from the pot leaving all the root growth intact, clean all the soil away and wash it in a bucket of water if needed. Once it is clean attach it to the fork of a tree, securing it with a suitable tie, like old stockings. If the old mix isn't removed it dries, falls away and the tie becomes loose making it more difficult for the plant to attach its roots to the tree.

Drew brought in a *Tillandsia rodrigueziana* which had eight pups on it ready for pups to be removed. To remove each of these pups you feel where the pup is attached to the mother, and simply cut them off with a knife following the line of the mother, and as close to the mother as possible. A sturdy knife with a curved blade is ideal.

Ross then showed the Group *Vriesea elata* which is an upper pupper. However, if you keep repotting this plant every 15 months it will develop a stem and then you will see pups develop along the stem below the foliage. This usually occurs after about eight to nine generations. When repotting *Vriesea elata* put it in a larger pot and you may have to cut some of the root base off to get it to sit deep enough into the pot.

The pot that contained *Vriesea elata* also contained a common thin stemmed weed that is deep rooted called *Phyllanthus tenellus*. Great care needs to be taken when trying to remove this weed as it flowers above the leaves and develops seed there, as can be seen in the photograph below.

Phyllanthus tenellus

compiled by Drew Maywald

Gently, Gently Does it with this Weed:

I am sure that many Bromeliad enthusiasts will have come across a weed called *Phyllanthus tenellus*. Pronounced fil-lan-thus ten-ell-us, this is a long, stalked weed (in the Euphorbiaceae family).





This weed is an erect summer annual that typically produces a single, erect stem 600 to 800 mm in height, with short fruiting branches. It grows abundantly in the garden and in pots and has been known to grow through weed mat. The example in the photo on the left is only 200 mm tall.

Flowers are greenish-white and round green fruit is produced predominantly on the undersides of the lateral branches (but also on the upper sides of the branches), in the axils of the leaves on short stalks, as shown in the photograph on the left.

Seeds are forcefully expelled short distances from the plant when ripe, and this can also occur if you brush against it or pull it out it out too vigorously.

There is one main tap root which can be quite long when the plant is quite tall, making it difficult to pull out. When you pull out the mature plants there is a good chance that you could trigger it to expel seeds up to a metre from it, hence the title of this article.

Commonly called Mascarene Island Leaf Flower, or leaf flower for short, it comes from the Mascarene Islands in the Indian Ocean near Madagascar.

Emerged plants should be hand weeded as soon as it is seen to prevent seed production and spread, as this abundant weed starts to produce flowers and

seeds when it is less than 100 mm tall. Do not put mature plants in your mulch or you will have weed problems for many years.



There is another weed in the same family called *Phyllanthus urinaria*, which looks the same as *Phyllanthus tenellus* except it tends to be bushier with many branches. *Phyllanthus urinaria* is considered a weed all over the world and has been declared a noxious weed in some states in the US. This is a very prolific seed producer and like *Ph. tenellus* it produces flowers and seeds at the leaf axils and will spread them in a similar manner. It too is commonly called leaf flower, but is also known by the names: chambers bitter, gripe weed, stone breaker and shatter stone.

I cannot remember not ever having leaf flower in my garden as it looks quite harmless. I used to pull it out with great gusto, but since being made aware of its properties and looking at it closely, it's gently, gently all the way.

Vriesea elata (Baker) L.B. Smith

This elegant *Vriesea*, growing as an epiphyte in the rainforests of Colombia,

may be found in various locations ranging in altitudes from 3800 to 7500 feet.

It is a large plant, as its name implies, with an inflorescence reaching up to 3 feet and green, strap-shaped leaves measuring 2½ to 3 feet in length and 2 inches broad at the middle. The foliage is thin, flexible, and subglabrous.

Vriesea elata was first named by Baker in 1888, who classified it as a tillandsia, as did Mez, and it was not until 1955 that it was rightly put into the genus Vriesea by: Dr. Lyman B. Smith.

Although it is rarely found in collections, it has been brought home by collectors and is listed in the trade.

Reprinted from: BSI Journal 1978 V28(2) p.96





Tillandsia caput-medusa grown by Keryn Simpson



The 'Beautiful' the 'New' the 'Ugly' shown by John Crawford



John Crawford brought along for **Show and Tell** some examples of the *Wallisia cyanea* group, one previously *Till. lindenii*, the other *Wallisia* 'Triflor', John explained its name is for its tristichous (3 sided) inflorescence.



Tillandsia 'Bob's Amigo'
1st Open and Judges Choice
John Crawford



x*Wallfussia* 'Creation'
1st Tillandsioideae John Crawford



'I Love a Sunburnt Country' 1st Decorative Keryn Simpson



Neoregelia 'Red Macaw'
1st Novice Michelle Hartwell
and receiving her
2019 Judges Choice Medal





Neoregelia 'Ice White River' grown by Coral McAteer



Neoregelia 'Aussie Red Tiger' grown by Keryn Simpson



'Salt and Pepper' - *Neo*. 'Pepper' shown by Drew Maywald



Billbergia 'Darth Vader' grown by Drew Maywald



Billbergia 'Blue Moon' unreg. grown by Dave Boudier

Photos by: Ross Little

Tillandsia brachycaulos

Vriesea sucrei grown by Drew Maywald



Tillandsia 'Rigby' grown by Helen Clewett



grown by Gary McAteer

Tillandsia 'Halley's Comet' grown by Dave Boudier

Tillandsia mooreana L. B. Smith, Phytologia **20:** 167. 1970; nomen nov.

The name is in honor of Harold E. Moore, Ir.

The name is in honor of Harold E. Moore, Jr.

Distribution - Epiphytic, 900-1800 m alt, Mexico.

Note: This taxon is difficult to identify in the wild. It shares the same locality and climatic conditions as *Till. kalmbacheri*. The only striking difference is in the colour of the petals where *Till. kalmbacheri* is green and *Till. mooreana* is violet/purple.





Tillandsia mooreana grown by John Crawford note: violet/purple petals

Tillandsia kalmbacheri photo: Butcher files note: green petals

Tillandsia kalmbacheri Matuda.

Tillandsia kalmbacheri was described and the name validly published by Eizi Matuda in 1974.

This *Till. kalmbacheri* photographed by Ross Little in Oaxaca, Mexico in 2018 was seen growing on trees at around 1500 mtrs altitude. This stunning plant was voted "best plant on the trip". However there still seems to be much confusion about the differences between these two plants other than petal colour.



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xWallfussia 'Creation'

compiled by Drew Maywald

Originally called *Tillandsia* 'Creation', *xWallfussia* 'Creation' is a fantastic bigeneric Bromeliad hybrid, which is a cross between the rare species *Barfussia platyrhachis* (the seed or female parent) and *Wallisia cyanea* (the pollen or male parent). This beautiful plant was developed by the Bak nursery in Holland for its commercial potential.

There are around 80 leaves on *xWallfussia* 'Creation'. The dark green leaves are about 450 mm long and 45 mm wide at the base, and they form a dense *Wallisia cyanea* type rosette.

The triangular, tapered leaves are quite brittle and once bent they fold down into a permanent drooping effect. Because of this brittleness *xWallfussia* 'Creation' never reached the commercial potential the Bak nursery was hoping for.

The 450 mm tall erect inflorescence emerges from the centre of the plant and is very stunning with its many spreading branches, which form into pink to rosy pink paddle-like bloom stalks that contain up to 35 flowers each.



During anthesis, or flowering, the leaves become striated with maroon. Like *Wallisia cyanea*, it produces violet blue flowers on the paddles with each one lasting several days.

xWallfussia 'Creation' prefers strong light but will also handle diffused light. However, the leaves lose some of their maroon striation during flowering if the light is too diffused. I treat mine like I do my Tillandsias, watering it regularly so that there is always water in the cup. This water should be changed regularly. *xWallfussia* 'Creation' will produce a number of offshoots or pups after blooming. The pups should grow and bloom within 12 months.

Standing at least 600 mm above the top of its pot *xWallfussia* 'Creation' is a wonderful addition to any Bromeliad collection, and its brilliant inflorescence makes it a much commented on feature in my garden.

Bromeliaceae - A Layman's Guide Part 6

Compiled by Drew Maywald 2019

The Pitcairnioideae Genera

Pronounced pit-cairn-ee-oy'dee-ee, the Pitcairnioideae comprise the terrestrial subfamily of the Bromeliaceae with over 1,000 species in 6 genera. Unlike the many epiphytes (air plants) and lithophytes (grow on rocks but get their nutrients from the atmosphere), which make up the rest of the family, with a few exceptions, all of the members of this subfamily are either terrestrial (require soil) or saxicolous (grow on rocks). Common to arid and high-altitude regions, this subfamily has species occurring in Mexico, Central America, the West Indies and throughout much of South America.

Most Pitcairnioideae leaves are fleshy with heavy spines on the edges, and resemble agave. Their blooms contain dry capsules with small, naked (wingless) or appendaged (winged) seeds, never plumose. Like most plants, and unlike most other bromeliads, this group has developed a root system to gather water and nutrients. Similarly, not all Pitcairnioideae leaves grow an effective cup to catch water as is seen in the other families. Leaf trichomes are present in the Pitcairnioideae, but are not effective in gathering nutrients; the trichomes, however, can be sufficiently thick so as to provide a frost barrier essential to its survival.

Deuterocohnia: pronounced doo-ter-o-co'nee-a, Deuterocohnia is closely allied to the Puya, and is not commonly seen in cultivation. Deuterocohnia, was named by Mez in 1894 to honour Ferdinand Julius Cohn (Jewish botanist and bacteriologist), with the preface Greek word 'deuter' (or 'deutero' meaning "second" (or second Cohnia) as the name Cohnia had already been used to describe an orchid.

Plants once described as belonging to the genus Abromeitiella have been reevaluated and reclassified within Deuterocohnia following modern DNA analysis.

As of October 2019, there are 16 species discovered and few in cultivation. They are drought resistant and found growing in adverse conditions on the rocky slopes of the Andean range. *Deuterocohnia meziana* is unique among bromeliads as its 1.8 m inflorescence continues to flower from the same scape for six to eight years!

The genus is comprised of a few generally mat-forming succulents from Argentina and Bolivia. They are rosette-forming terrestrial bromeliads with heavily spined leaf margins. The flowers are on a short inflorescence and are green and inconspicuous. They range in size from the tiny *Deuterocohnia brevifolia* which is only a few centimetres across, to huge plants with broad leaves.

The plants need full sun to light shade. Deuterocohnia are very drought tolerant

but do best with average water during spring and summer. They do not like to have water on their leaves in cold weather, so limit the watering during winter. Deuterocohnia will suffer from root rot if over watered in poor draining soils.

Deuterocohnia can be propagated by removing the rosettes and re-potting them. This is a perennial Bromeliad that forms an interesting ground cover. It grows slowly by dividing into a tight cushion-shaped colony, with the older stems forming a water retaining humus in the interior of the mound. In its native environments, it is watered perhaps only twice a year, obtaining most of its moisture from the air. It also obtains extra moisture from ocean fogs that roll in.

Deuterocohnia is a nice plant for small-scale groundcover in rock, cactus or succulent gardens. They need to be grown in well-drained humus rich soil with added pebbles, perlite, hardwood bark or other materials to facilitate drainage. Keep them in bright light or part sun and water moderately in spring and summer letting it dry between waterings. Limit the watering during winter. Deuterocohnia are probably one of the cold hardiest of the Bromeliads, but detesting wet on its foliage, can prove difficult to keep outside.

Dyckia: pronounced dyc'ea, this genus was named by Schultes in 1830 to honour the Prince and Earl of Salm Reifferscheid-Dyck (1773–1861), a Prussian botanist, botanical artist and horticulturist, and an authority on succulents.

Dyckias, with stiff and thorny leaves, prefer rocky and/or sunny areas and have a natural tendency to clump leading to thick, large mats. Considered to be among the more ancient lineage of bromeliads, they are endemic to arid and high-altitude regions of Brazil and the Central part of South America.

As of October 2019, there are 175 different species of Dyckia with many more cultivars. Each species of Dyckia is unique, but there are several characteristics that apply to most Dyckias, which make them standout from other bromeliads.

They prefer sunny and rocky terrain up to about 6,000 feet in elevation. Some Dyckias are saxicolous meaning they live attached directly to rocks. However, most are terrestrial, growing in the ground. Another unique characteristic of the Dyckia is its ability to survive cold temperatures. Nearly all bromeliads cannot tolerate frost. However, many Dyckia can survive temperatures that drop below freezing. They won't survive through harsh northern winters, but they can survive in outdoor gardens in a few climate zones that won't support most other bromeliads.

Dyckias are often confused with succulents because they look and play the part. They have stiff leathery leaves and are very drought tolerant, but unlike true succulents they cannot store their own water internally. They simply respond to periods of stress, such as dry weather conditions, by going dormant.

Dyckias typically have long narrow leaves. Almost all Dyckias have sharp spines

or hooks around the margins of each leaf. Dyckias can be found in shades of red, green, yellow and silver. Many of the plants appear to have a beautiful silver flocking on the spines and edges of the leaf. The leaves form a tight rosette that often curves down around itself, and they can drape beautifully over the sides of containers. They range in size from just a few millimetres across to about a metre wide. Many of the plants within the genus have tall flower spikes that tower above the foliage. The flower spikes often produce only very small flowers in oranges, reds and yellows.

Unlike most other bromeliads, Dyckias can flower seasonally. Dyckias have a lateral inflorescence meaning, a Dyckias inflorescence emerges from an axilary bud rather than a terminal a bud. This allows a Dyckia to continue to grow after they flower and even have the ability to flower again. A Dyckia planted from seed can take up to three years to reach maturity and bloom.

Dyckias, have extensive root systems and require containers that are at least as large as the plant itself. Dyckias will usually grow into the size of the pot where it is planted.

Some Dyckias produce pups or offsets which is common among bromeliads. Other species don't produce pups, but divide at the head. When planted in the ground, Dyckias can make thick ground cover. When grown in a pot, Dyckias will eventually need to be separated and replanted. Always use gloves and wear long sleeve shirts when handling sharp Dyckias.

Dyckias can survive drought conditions but do not thrive in them. During the growing season – spring and summer – they require plenty of water. When they become too dry they will first stop growing and then wilt. They recover quickly once watered. Use fertiliser to encourage growth during the spring and summer. Stop fertilising and allow the plant to dry more between watering during the winter months.

Dyckias enjoy full sun. They can also tolerate lower light levels, but it may change the colour of the leaves. While actively growing, the plants need regular water to produce happy plants. The soil should not be soggy but evenly moist at all times. Use a saucer under potted plants to keep the roots from sitting in water but allow for evaporation and consistent humidity.

In winter, when growth is dormant, you may reduce the amount of water by half. Fertilise from spring to autumn with a half strength liquid plant food. The plants set seed readily when flowers are present and these germinate quickly. However, they also freely hybridised and the species resulting from the seed may not represent the parent. There are very few cautions or surprises with Dyckia bromeliad care. They are unfussy, hardy little plants that thrive even in slightly neglectful conditions.

—: continued next month

Novice Popular Vote

1st Michelle Hartwell Neoregelia 'Red Macaw'

2nd ------3rd ------

Open Popular Vote

1stJohn CrawfordTillandsia 'Bob's Amigo'2ndKeryn SimpsonNeoregelia 'Aussie Red Tiger'3rdCoral McAteerNeoregelia 'Ice White River'

Tillandsioideae

1stJohn CrawfordxWallfussia 'Creation'2ndGary McAteerTillandsia brachycaulos3rdKeryn SimpsonTillandsia caput-medusa

Decorative

1st Keryn Simpson 'Love a Sunburnt Country'

Judges Choice

1st John Crawford Tillandsia 'Bob's Amigo'

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: http://botu07.bio.uu.nl/bcg/taxonList.php 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, 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.