



BROMELETTER

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Photo Front Cover

**Seeds of
Vriesea
phillipo coburgii**

**Photo
Larissa Victoria**

Hello everyone,

The bromeliad family has amazing diversity in colour, shape, habitat, reproduction and co-existence with animals in their environment, so there is an enormous amount to find out and learn. This issue is packed with information provided by some very knowledgeable members.

The International Bromeliad Society (BSI) committee have been working hard during COVID and after many hours has recently launched a New Bromeliad taxon list online. A great reference available online <https://bromeliad.nl/taxonList.php> Also the **BSI** is offering their **Electronic Online Membership** special rate of only **US\$15** for the first year, this means joining the BSI is now more affordable.

In April, Jan and Jon Townsend made the trip from Coffs Harbour to our meeting. Jan gave a fabulous talk on Aechmea orlandianas, one of her favourite bromeliads and brought along many for the sales table. If you missed out on getting one of her broms, they will be back at our May Show. **(photos right— the Townsends shadehouses and Jan's broms ready for her talk at our meeting)**

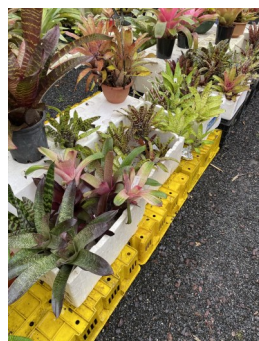
Our resident seed bank administrator (plus judge and photographer), Terry Davis, shares some of his immense knowledge and expertise about 'seeds'. So please have a go, just to appreciate both the difficulty and the joy of success of raising from seeds.

Get to know member Sarah Collins better, enjoy seeing her beautiful garden and use some of her great ideas in your patch. Sharing ideas is a great way to learn.

A number of our members are having significant health problems, so our thoughts and good wishes go to Bill Homer, John Noonan and Meryl Thomas.

I hope you enjoy reading this issue,

Larissa (Editor)



Life Members:

Allan Beard
Carolyn Bunnell
Terence Davis
Ron Farrugia
Ian Hook
Alan Mathew
Graham McFarlane
Kerry McNicol
Bill Morris
David Scott

MEMBER PROFILE - Sarah Collins

In Sarah's family there were many gardeners. Her mum and both grandmothers grew flowers and plants for enjoyment, both grandfathers were gardeners, and her maternal grandfather had a market garden.

On moving into her own apartment Sarah started getting into plants. She grew a number of 'Geisha Girl' plants and vines in large planters, to screen out noise and for privacy. When she moved into her own house, many of the potted plants were put straight into the ground where they have really taken off.



Sarah with the Neo. Waratah Red from Robyn Firth

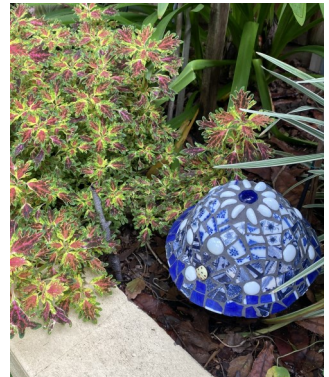
Neo. takemura
'Silverado' one of the
first broms from mum.



In 2008, Sarah inherited many plants when mum (Gwenda) and dad moved from Sydney to Port Stephens. Once settled into her new home, Gwenda started buying broms from local Port Stephens growers.

It was Sarah's mum who gave Sarah her first bromeliads from 2010, mostly were pups and included a Neo. takemura 'Silverado' obtained from a local grower which has finally pupped after 12 years!

To this day Sarah and her mum, share an interest in plants and Gwenda comes to our meetings when visiting Sydney, often taking home many broms.



contSarah Collins

Soon after, the parents of fellow BSA member Michelle Quinn took Sarah to the autumn BSA show in Burwood where she joined up. At her first BSA meeting she met Robyn Firth when Sarah wanted more information on a Neo. Waratah Red she was considering buying and as it turned out it was Robyn's plant.

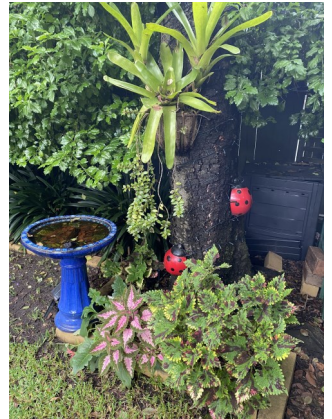
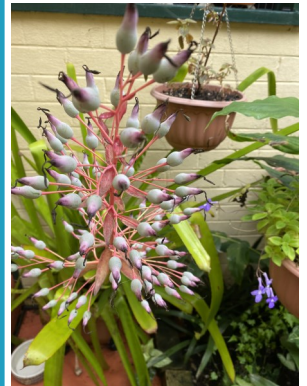
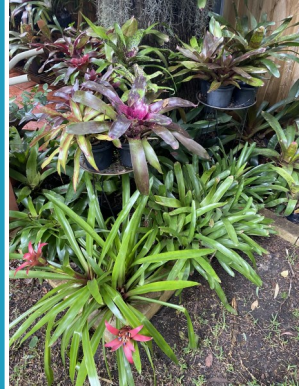
Sarah is the Head of Procurement at the ABC (no it's not recruitment or purchasing). Like many people during

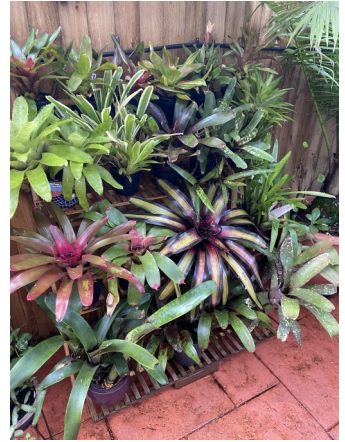


COVID restrictions she has been working from home so her garden, birds and cats have loved the extra attention. Going forward Sarah would prefer to be back in the office and has missed interacting with other staff and the creative vibe at the ABC. Amal and

Sarah met in 2008 when they worked in procurement at Sydney University and their shared interests cemented their friendship, with Sarah inviting Amal to a BSA meeting.

Sarah has maximised interest and impact in both her front (**bottom left**) and backyards in what are relatively small spaces and has used a number of clever ideas. She has a knack of repurposing items as plant containers or stands.



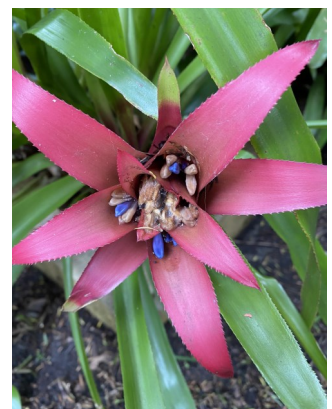


contSarah Collins

Sarah's two cats, Fudge and Darcy (both rescue cats) can access the outdoors at any time from the home office window into their 'cat enclosure', seen at the end of walkway in the top left photo. An idea that came from Amal. A beautiful Alc. Extensa, from Ray H, grows in the enclosure garden bed. (photo above middle)

On both sides of the side passageway leading to the cat enclosure Sarah grows a variety of veggies and herbs in pots and containers. (foreground of photo above left) There are stands for bromeliads (photo above right).

For a while Sarah's favourite broms were the bilbergias particularly the Bill. Hallelujah. These days she is enjoying neoregelias more. One of her weaknesses is that she can't throw out any potential plant whether its sickly, a cutting or a self seeder. Sarah is contemplating starting a plant library in the neighbourhood, a bit like the community libraries we have seen on the increase in the past few years.



contSarah Collins

Neo. 'Black Opal'



The undercover outdoor entertaining area is surrounded with interesting frames, ladders, hangers and shelving, all are beautifully maintained and filled with wonderful specimens particularly bromeliads.

The small lawn is easily maintained with a cordless electric mower.



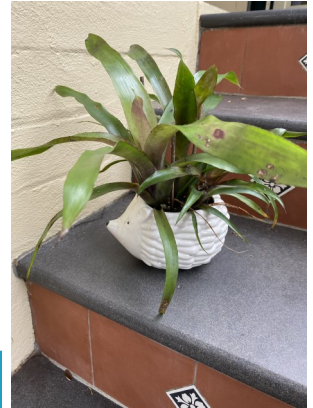
In a number of spots such as posts (above middle) and an old ladder (above left) Sarah uses a double pot system which makes removal and exchange of potted broms easy. The outer pot is screwed or wired in place, so providing stability, the potted brom is then placed inside, and then can easily be rotated or repositioned. In another section pizza trays (above right) tied to Kmart plant stands hold a number of pots (double pot system) all secured with cable ties.



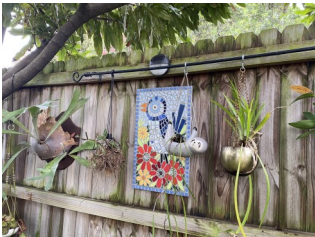
In addition to bromeliads, Sarah loves indoor plants, begonias, orchids and succulents as well as plants that are a little bit unusual.



Repurposed watering can with Vriesea.

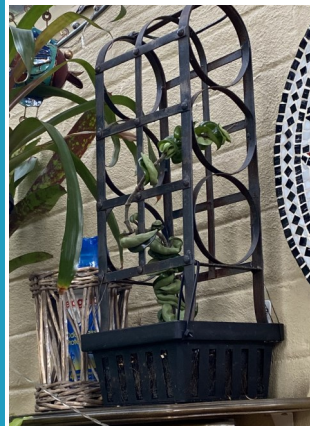


Neo. 'Purple Star' grown from seedling provided by Terry at BSA meeting.



Sarah's healthy plants and garden layout is a credit to her hard work and creativity, there is something interesting everywhere you look. Apart from her garden her other interests include:

- ◇ animals
- ◇ reading
- ◇ mosaics
- ◇ scuba-diving
- ◇ and MacGyvering solutions to problems around the home.



Hoya 'Indian Rope' in repurposed wine rack.

NARELLE and GREG AIZELWOOD

JUDGING SCHOOL



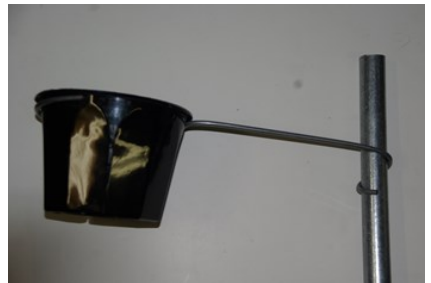
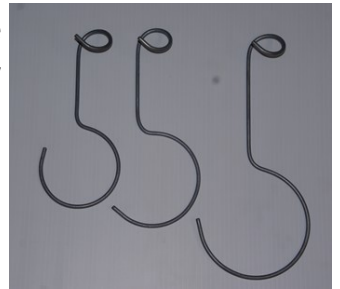
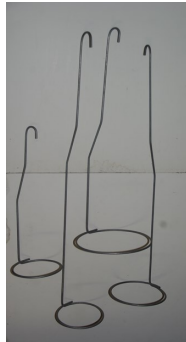
Our judging school will take place over 6 weekends, over a period of 3 years and be run by Narelle Aizlewood from QLD, starting 11-12 th June 2022.

Undertaking this course is a great opportunity, so if you are interested contact Kerry on 0439 998 049 **ASAP** as only a few places remain.

PLACE YOUR ORDERS

Greg Aizlewood will be speaking at our June meeting and also bringing his brom plant stands and attachments (photos below). For more details about these, email your request to larissavictoria@hotmail.com. Printed information sheets will also be available from Larissa at the May show. Greg prefers members to pre-

order as this will enable him to work out how many stands to bring. So don't miss out!



MONTHLY TRADING ACCOUNT REPORTS

for February and March 2022—Maureen Johns

Opening Balance 01/02/2022	\$ 13,275.78
Add Income	\$ 1,389.26
Less Expenses	\$ 1,395.81
Closing Balance 28/02/2022	\$13,269.23

Opening Balance 01/03/2022	\$ 13,269.23
Add Income	\$ 1,123.12
Less Expenses	\$ 513.10
Closing Balance 31/03/2022	\$ 13,879.25

March Meeting - Show and Tell

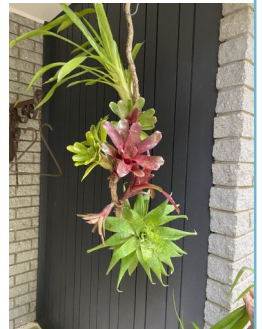
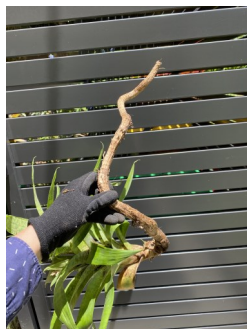
Alan Evans (Warril Evan's son) brought in a bare rooted *Canistrum aurantiacum* which he purchased online. He is keeping it bare rooted so he can transport it back home when he returns to QLD. The vibrant yellow seed head will turn black as the seeds ripen. This brom has more brittle leaves than many bromeliads and is one that struggles in Sydney winters, so if you're growing this one make sure to protect it during the colder months.



Allan Beard - brought in a *Vriesea elata* for confirmation of identification.



Larissa Victoria brought in two *Goudea ospinae*, these can be fussy to flower, Kerry stated she's only had a few flower over the decades she has been growing. The flowering *Goudea ospinae* has beautiful yellow flowers, these came out after the emergence of the pups down the bottom of the tall stem. This is a brom where the parent plant doesn't die off so grows a very long and often torturous stem. The second rootless *Goudea* was found trailing along the ground in a older garden, the original stem was even longer. Larissa chose to hang it and with time the crown has turned upwards and sent out many new leaves. Larissa has taken similar pieces and planted the stem with other epiphytic bromeliads and left as a hanging arrangement. Alternatively the stem of the flowering specimen can be cut off and planted.



Show and Tell cont

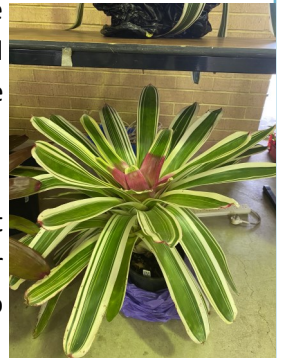
It's been raining almost daily since November and members have noted these changes in their broms with the prolonged rainy weather.

- ◇ General loss of colour in many broms.
- ◇ General loss of compact growth in many broms.
- ◇ *Neo*. 'Shell Dance' and Goudeas have done very well.
- ◇ Minis are growing too big.
- ◇ Formation of more aerial roots than normal. Some broms have even sent out their soil roots out of the pot and over the side.



Kerry McNicol demonstrated the difference in growth patterns produced in different sun/light positions in the same broms.

Neo. 'Dr Geoffrey Block', grown on south facing verandah with no direct sunlight = longer strappy leaves, slower growth, slight decrease in colour. (photo left) *Neo*. Dr Geoffrey Block usually gets



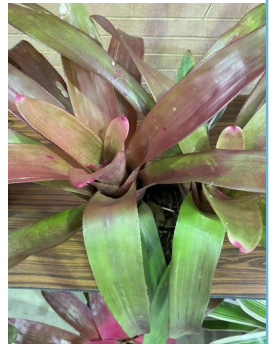
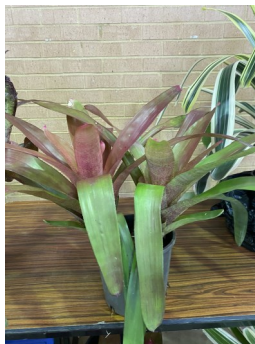
pink tips when about to flower. Kerry rather likes this difference in form so leaves it where it is, however this would not do well in a competition as it hasn't grown true to form.

Neo. 'Rosy Morn' - Gets a dark pink flush in the centre pre flowering.

The one grown in shade has bleached colouring, (x2 photos right) whereas the one grown in a sunnier position (photo left) has good colouring



and would be a much better competition entry.





Billbergia 'Hallelujah' loves to grow as a clump and is best left to do so. The problem with this as an entry, is while broms on one side of the pot have developed a good colour, (photo left), the broms on the other side are too green. If aiming at competition entry you need to rotate the pot regularly so colouring is uniform. At



this back of this pot where the broms are very green, (photo right) you must introduce to light / sun source gradually.

Nina Woodcock brought in the neoregelia which she had stabbed at the side as she described in her article pg 10 in Issue 1, 2022, to stimulate pupping.

Remember other ways to promote pup formation include:-

- a. Remove the inflorescence (flower stalk)
- b. Stab through centre or meristem

Nina also showed a bromeliad that she has growing in water. So can her brom do this, won't the water make it susceptible to crown rot? See article on crown rot page 23. Additionally Nina brought in some neoregelias, just because they were lovely, and that's the point of this 'Just for Show Table', it provides us an opportunity to admire more broms.

We would like to welcome our recent bromeliad enthusiasts.

Warwick Varley

Glenda Snow and her daughter Claudia



FOR YOUR diary - 2022

May 14th & 15th—Autumn show

Saturday 9-4 pm

Sunday 10-3 pm

June 11th—Federation Building - speaker Greg Aizlewood

Preparing your Plants for Show Competitions - talk by Terry Davis.

First Terry showed us the products he uses for his potting mix.

1. Coir from Bunnings – he soaks x3 times to get rid of impurities.
2. Coir soil also from Bunnings, a finer version of the above.
3. Perlite from Australian Native Landscape
4. Polystyrene bean bag balls.

Terry showed samples of potting mix comprising of items 1,2,3 and 1,2,3 and 4, to demonstrate the different feel and drainage capabilities of each mix.

1. Select the best plants you have.
2. Ensure they are free from visible pests, diseases and visitors (eg frogs).
3. Clean up the plant.
4. Make sure the pot is clean.
5. Repot if necessary - ensure to centre the brom in the pot.
6. Only use pots that are black, green or terracotta, remember a pot cannot add or detract from the brom.
7. Take out any hangers and skewers.
8. To hose out the debris cover base of soil with large cloth, this retains the potting mix, tip upside down then very gently hose in between the leaves.
9. Remove remnant rubbish from between the leaves with long forceps. (available at sales table, near pots)
11. With a cloth covered thin stick (Terry uses a flat aluminium stick) clean between the leaves for spider webs and algae.
12. Remove weeds and moss from the soil around brom, as having any other plant growing in the pot instantly disqualifies your entry.
13. Consider trimming leaves instead of removing - only trim leaves if damaged, leave trimming until last day, and be sure not to destroy symmetry.
14. Trim damaged leaves into an identical leaf shape by using a template. Terry makes his templates from old venetian blinds. Cut the leaf from both top and sides, using a sharp blade like a scalpel to get a clean finish.
15. Seal cut edge with chap stick, so the cut edges don't brown.
16. Cover any brom base that is exposed with extra soil/ bark chips.
17. Transport your brom with care, support the pot so leaves, stem or flowers don't get bruised or broken.

April Meeting - Jan Townsend

Aechmea orlandiana its Cultivars and some Hybrids

- ◆ Endemic to Brazil.
- ◆ Described by J Smith in 1941, so one of the early collected species.
- ◆ 40 cm tall orange bracts, yellow flowers.
- ◆ Epiphytic growth.
- ◆ Good root system, which wrap around a tree (hold fast).
- ◆ Banding underneath- green /purple.

The orlandianas have been a favourite of Jan's from the beginning of her 'bromeliad journey', and in her talk she showed many slides including the following.

Aech. orlandiana ssp belloii - When grown in high light it is a bright green and has very black fingertips. Has thick leathery leaves.

Aech. 'Ensign' - is a cultivar with pink mottling, and often produces uneven marinated pups. It originated as seedlings and in 1965 it was a rare and expensive brom with pups costing \$750.



Aech. 'Black Beauty' - has spiny, heavily marbled leaves. (photo left)

Aech. 'Pygmy' - a small plant, originated in QLD, grows well in really bright light. Jan grows hers up high in shadehouse.

Aech. 'Snowflake' - has lovely cream/white foliage when grown in strong light. You need to get the light right, otherwise it quickly goes very green. Originated in Hawaii in 1987.

Aech. orlandiana 'Lily's Pink' - an unregistered, tall upright brom, grows to 40 cm, leaves are thinner with very pretty pink colour, all banding seen on underside. Easy to grow, a vigorous grower.

Aech. 'Cherry Smash' - Jan got this one from Cheryl Basic. A larger plant, upright funnel form brom, very hardy, takes a lot of sun.

Aech. 'Snow White' - upright form, banding is patchy, has sharp teeth. Needs very bright light to keep the white colour. Unregistered.

HYBRIDS

Bellsign = Beloi x Ensign. Patchy under banding, top very plain, open rosette, full sun, good in garden, has hybrid vigour. No finger tips.

Aech. 'Bert' = *A. orlandiana* x *A. Bert*. Upright, tall, vigorous grower. Dense Inflorescence red bracts - very hardy but rarely seen. Happy in full sun. Loves growing in amongst rocks (gets heat). *A. Bert* variegated- is probably a sport.

Aech. 'Beliza' = *A. orlandiana* x *A. fulgens* discolor - grow in low light to get the discolour- rich dark. Red/maroon shiny leaves. Hummel around 1979. Don't like the cold. Grows these down low, not high.

Aech. 'Mirlo' - *Aech. Victoriana* v discolor x *Aech. orlandiana*. Discolour, soft leaf, grow low.

Xquesmea Arden's Gem - *Quesnelia* Arden's Gem x *Aech. Orlandiana*.

Jan found the orlandianas tend to jump out of the pot, so they did better grown on styrofoam, and fed heavily. Jan uses High N slow release, which she found produces vigorous growth with better support in pots, lots of pups BUT loss of colour. Feeds old mums (osmocote ok to use) to encourage luscious growth approx large teaspoon.

From top right across to bottom to right -
Aech. orlandiana Olly's Pink; Snowflake; Rainbow; Bert;
 Ensign; Pickaninny



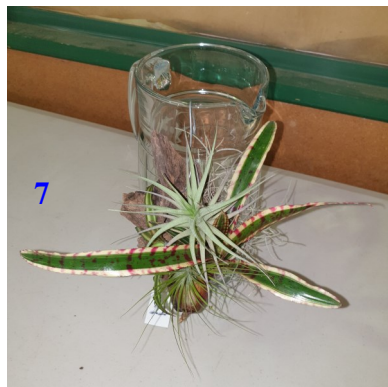
Plant of the Month Competition March

Open Judge's Choice

1st	<i>Neo.</i> 'Wild Rabbit' (photo no 1)	Kerry McNicol
2nd	<i>Till.</i> 'Eric Knoblock' (photo no 2)	Helga Nitschke
3rd	<i>Neo.</i> 'Whim' (photo no 3)	Kerry McNicol

Member's Choice

1st	<i>Neo.</i> 'Whim' (photo no 3)	Kerry McNicol
2nd	<i>Till.</i> 'Eric Knoblock' (photo no 2)	Helga Nitschke
3rd	<i>Neo.</i> 'Wild Rabbit' (photo no 1)	Kerry McNicol



Novice Judge's Choice

1st	<i>Neo. 'Lorena Lector' (photo 4)</i>	Nina Woodcock
2nd	<i>Neo. 'Touch the Heart' (photo no 5)</i>	Nina Woodcock
3rd	<i>Tillandsia mallemonitii (photo no 6)</i>	Ian Hook

Novice Member's Choice

1st	<i>Neo. 'Lorena Lector' (photo 4)</i>	Nina Woodcock
2nd	<i>Tillandsia mallemonitii (photo no 6)</i>	Ian Hook
3rd	<i>Neo. 'Touch the Heart' (photo no 5)</i>	Nina Woodcock

Margaret Draddy Artistic Competition

1st	<i>'Hanging Around' (photo no 7)</i>	Nina Woodcock
2ns	<i>'We Have Lift Off' (photo no 8)</i>	Ian Hook



4



8

Summary on *Aechmea orlandianas*

- Prefer epiphytically growth.
- Like air movement - use loose medium, add scoria or polystyrene.
- Feed roots heavily with slow release, this will strengthen and add vigour to the plant and pups, but you will lose colour initially.
- Have 'hold fast' roots.
- Feeding initiates multiple pup production.
- Very bright light gives brighter coloured leaves.
- Once fertiliser runs out - colours come back.

Growing Bromeliads from Seed

By Terry Davis

Growing bromeliads from seed is not a quick proposition and a lot of time and patience is required. Also it must be kept in the context of where you are growing the plants and at what latitude and altitude, for me I am growing in western Sydney 33° 47'S 51m above sea level,



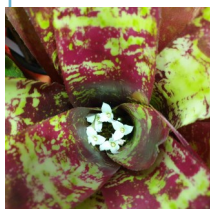
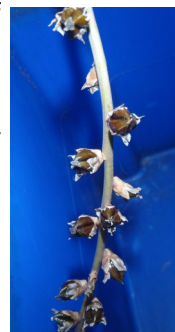
this is normally a lot dryer than the coast and the temperatures are colder in winter and a lot hotter in summer. The fastest bromeliads I have grown to maturity are dyckias and this can be achieved in about 4 – 6 years depending on the species or hybrid and which of the species are in the mix of a hybrid. Others such as tillandsias can be quite variable in the time to grow a reasonable sized plant and can be quite a lot longer until they first flower, an example from my earliest attempts was *Tillandsia duratii* with seed purchased in December 2005, the seed germinated in January 2006 and had reached 1cm by January 2008. Although seedlings grow slowly at first once they get larger they grow exceptionally well and increase in size relatively quickly and some of the seedlings have reached a reasonable size in 2020. That's only fifteen years but have not reached maturity and flowered as yet in 2022. There are three main types of

bromeliads that are commonly grown from seed and each group have different seeds that require different growing and seed raising methods. Only the well known and commonly grown genera are mentioned but are not the only ones that can be grown from seed that is if you can get the seed for these.



The first group is Pitcairnioideae and the commonly grown plants are Dyckias, Hectias and Puyas.

These plants produce winged seeds and the best and most successful method that I have used to germinate and grow them is to use a deep take-away container and lid rectangular or round depends on how many seedlings you want. I cut small slots in the edge of the container for drainage (see photo) half fill the container with a good potting mix with a balanced fertilizer, water the mix well (then place the container with the lid loosely on top and wrap inside a plastic bag and microwave for a couple of minutes (depends on the microwaves power, size of the container/s and the number inside a plastic bag) heat until the potting mix is nice and hot to restrict pathogen growth. When the container is well cooled (usually the next day) remove the container and lid from the plastic bag sow the seeds onto the potting mix, I normally use a pair of small forceps (tweezers) trying to space the seeds to allow them to grow for some time without needing to space the seedlings more than is necessary and mist spray the seeds with a spray bottle and then put the lid tightly onto the container, check every few days to ensure the seeds and mix has not dried too much but don't remove the lid unless it needs to be watered. This method is well suited to seed from the Bromelioideae group also. Dyckia seed can germinate within a week, the



first signs are of a root growing out of the seed and then the root growing down into the potting mix and the plant growing out later.

The second group is the Bromelioideae containing some of the well known genera Neoregelia, Aechmea, Billbergia, Canistropsis, Canistrum, Nidularium, Quesnelias, Orthophytum etc.

These have a fleshy fruits containing seeds within a gelatinous material that needs to be washed off and the seeds dried before sowing and can be sown in a similar manner to dyckia seeds but every few days if drying occurs and the seed is sprayed and the plants begin to grow, if the mix was suitably sanitised no algae should grow, as the plants get larger it is advisable to remove the lid overnight to allow the small plants to harden, plants that are kept with the lid on can sometimes be overcome with algae growing over the mix as they take longer to mature.



The third group is the Tillandsioideae that obviously contains Tillandsias as well as Alcantareas, Vrieseas, Guzmanias, Pseudalcantareas etc. This group is normally identified by the plumose seeds that are produced. Remember that all bromeliads have a three compartmented seed pods that are most notable with Tillandsioideae, and Pitcairnioideae. With tillandsias as the external pods splits open when mature and dry and expels small seeds on a parachute that resemble that of thistle or dandelion seed. The most success that I have had with this group is to grow Alcantareas, Vrieseas, Guzmaineas, Pseudalcantareas into a container of the good potting mix as with dyckias and neoregelias etc.



Over the years I have tried growing some tillandsia seed on a piece of Styrofoam with the seed tied onto it with fishing line and this has also been successful, although it is not easy to remove the small seedling as the roots grow into and through the Styrofoam. The most success and easiest methods for me with Tillandsias is to have their seeds either placed on a piece of flyscreen mesh or for some such as most plants of diaphoranthema subgroup germinate better and grow better when grown on a rolled up piece of shade-cloth with the seeds spread out over the material and held in place with nylon fishing line wrapped around the seed to hold it in place.. In practice I place the seeds between two layers of flyscreen, mostly to prevent the seed blowing away or to stop birds using the soft downy material for nest lining as has happened on many occasions.

The seeds of this group have a varied viability life. Alcantarea seed can be viable for over a year and some who grow these suggest that seed that is nearing the end of its viability increases the possibility of variegated seedlings. Vriesea, pseudalcantarea seeds are somewhere in between that of alcantareas and tillandsias. Tillandsia seed being at the lesser end is viable in general is so for only six to twelve weeks. Therefore it is advisable to sow the seed of this group as soon as you can.



It is essential that the seeds of the Tillandsioideae group are regularly misted, this is especially true for tillandsia seeds grown on shade cloth or fly-screen, for if allowed

to dry out for a prolonged period the seed in the very early stages will die, so if you are unable to mist frequently throughout the day and particularly in hot weather then a safer method is to use a Styrofoam box without holes in the bottom (a broccoli box or similar) place several wire rods across the box to support some wire mesh that the flyscreen and seeds are placed on, some water is placed in the bottom of the box that will maintain humidity throughout the day and a sheet of glass is used to cover the box. The box needs to be placed in a somewhat shaded place in the growing area, late in the afternoon and at night the glass sheet can be partly or totally removed allowing the plants to have good air circulation, then the seed/seedlings can be misted in the morning and the glass replaced before going off to work.

To collect seed for each of the different types, firstly seeds of Pitcairnioideae have the distinct three compartmented pod containing the winged seeds that splits open when the pod is ripe and dries to release the seed, if harvesting seed from the likes of Dyckia when the first pod bursts open it is normally safe to collect the following three or four pods that should ripen within days, this seed when the pod opens in the house or under cover is simply collected and allowed to dry out, this process can be continued until you have sufficient seed or a paper bag placed over the seed heads. When I am collecting seed for a desirable dyckia species, I will remove the flower stems of all other dyckias that are maturing so that cross pollination can't occur thus producing possible hybrids.

For members of the Bromelioideae group seed pods change colour when ripening for Neoregelias the ripe seed pods usually turn white when ripe then go from white to light brown as the pods start to deteriorate, Aechmea pods can turn black when the seed ripens and can then be harvested. It is similar for others in this group upon ripening. When the pods are ripe it is just a matter of squeezing the ripe pods into a container of water to separate and remove the sticky substance around the seeds, I assume that the gel around the seeds contains an enzyme that prevents the seeds germinating before they are free from the pods and able to be washed away by rain to germinate



away from the mother plant (this process is probably similar to tomatoes and watermelons etc that won't germinate until washed and dried out.) Once the seeds have been washed thoroughly they can be dried on a piece of paper towel and when dried can either be sown straight away or stored to be used later or shared with other growers. When the seedlings have produced a couple of leaves they can be fertilized with a weak solution of liquid fertilizer that can be added to the spray bottle.

It is usually noticeable that the pods of tillandsias are ripening when the pods begin to turn from a bright green to a brownish green colour, these pods can be removed from the plant and placed inside the house away from draughts until they open and the seeds can be removed or if under a cover in your growing area a paper bag can be placed over the seed heads to collect the seeds as the pods burst. Just remember not to water the bags while waiting.

When storing seeds, it is essential that the seed is dry and then the seed can be placed in a small paper satchel with the name of the parent, date of collection and if from another source from whom it was from and that each is placed inside a sealed plastic jar (such as a clean plastic peanut butter jar with a plastic lid and yes it matters how it is kept and then it should be placed into the refrigerator at around 40 deg C, this will ensure the seed remains viable for the maximum time, I have not tried to compare this method with seeds and container placed into a freezer.

Growing the seedlings on, remembering that this can take some or many years, it is easier for the Pitcairnioideae and Bromelioideae types and just requires putting the small plants into seedling trays or containers with potting mix that allow the plants more room to grow until they are large enough to pot into the normal mix you use.

Tillandsias on the other hand can either be placed in seed trays for those that grow better in an open potting mix, such as *Tillandsia complantata*, *Tillandsia deppeana*, *Tillandsia multicaulis* etc but for those that grow better mounted on a substrate of cork bark, timber or suspended on monofilament line or bonsai wire can be placed in a basket made from plastic gutter guard mesh lined with fly-screen mesh to stop them falling through while they are small or the same made into a cylinder with fly-screen stapled over the outside with slits cut into the fly-screen between the holes in the at intervals to accommodate the growing plants until they are large enough to be glued onto wooden or cork mounts etc,. this method affords excellent air circulation around the plants.

VALE - Alan Matthew



It is with sadness that we learned of Alan's passing away on Monday 18th April 2022. Alan battled cancer for the past 6 years with little complaint and made great efforts to continue to attend our meetings. He was a wonderful supporter of the society and our treasurer for a number of years until his health prevented him from continuing.

After being awarded **LIFE MEMBERSHIP** at our last AGM, Alan wrote "a short note to thank you for the honour given to me at the last AGM..... I don't know if I deserved this but accept it humbly....I feel stupidly proud and really chuffed to receive this honour"

A man of many interests, Alan loved bird watching, travel, cricket, old movies, bridge, horse riding, hiking and bromeliads. His favourite bromeliads were neoregelias and vrieseas, particularly those with coloured and variegated leaves.

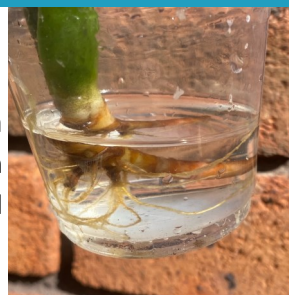
Crown Rot in Bromeliads - by Nina Woodcock

Crown rot isn't caused by excessive amounts of water. Rot is caused by the presence of naturally occurring bacteria and or fungus that break down leaf matter and thrive in oxygen deprived environments. Rain water is oxygenated but stagnant water tends to be low in oxygen.

An example of crown rot causing fungus is **Phytophthora cinnamomi**. It lives in most soils but thrives in moist stagnant conditions when oxygen content is low.

Anti-fungal treatments also target beneficial fungus such as Trichoderma that thrives in oxygen rich environments and keeps many pathogenic fungi in check. To avoid crown rot use a free draining potting mix such as orchid bark mixed with perlite to keep oxygen present in the soil. Rain water draws water and oxygen through a free draining mix therefore excessive watering shouldn't be the cause of crown rot. However, at low temperatures fungal pathogens become more active, water holds less oxygen and plants are dormant which is why rot is more likely to occur in winter. Keeping plants in a bright undercover position during winter will help deter fungal pathogen growth.

Further reading: **How to Identify 4 Common Bromeliad Diseases - Bromeliads.info**
http://www.bromeliad.org.au/news/FNCBSG-18_02.pdf



Neo growing happily in water

Plant of the Month Competition April

Open Judge's Choice

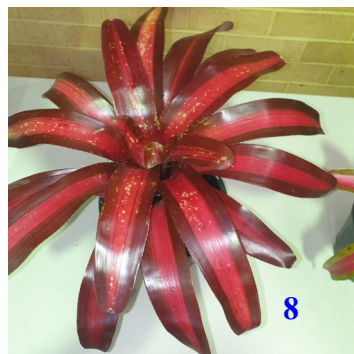
1st	<i>Tillandsia complanata</i> (photo no 1)	Harold Kuan
2nd	<i>Tillandsia</i> 'Imbrogio' (photo no 2)	Kerry McNicol
3rd	<i>Tillandsia streptophyla</i> (photo no 3)	Harold Kuan

Member's Choice

= 1st	<i>Tillandsia</i> 'Imbrogio' (photo no 2)	Kerry McNicol
	<i>Tillandsia streptophyla</i> (photo no 3)	Harold Kuan
= 2nd	<i>Tillandsia complanata</i> (photo no 1)	Harold Kuan
	<i>Vriesea</i> 'Astrid' (photo no 11)	Harold Kuan
3rd	<i>Tillandsia</i> unknown (photo no 4)	Helga Nitschke



1



2



3



4

Novice Judge's Choice

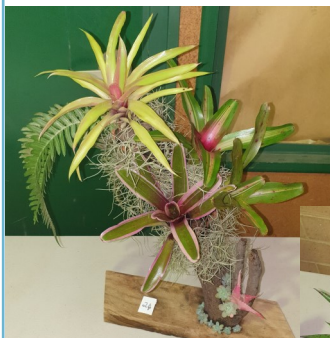
1st	<i>Vriesea luberesii</i> (photo 5)	Amal Eid
2nd	<i>Neoregelia</i> 'Samsara' (photo no 6)	Amal Eid
3rd	<i>Vriesea</i> 'Snake Gully' (photo no 7)	Mark Belot

Novice Member's Choice

= 1st	<i>Vriesea luberesii</i> (photo 5)	Amal Eid
	<i>Vriesea</i> 'Snake Gully' (photo no 7)	Mark Belot
	<i>Neoregelia</i> 'Pimiento' (photo no 8)	Amal Eid
2nd	<i>Neoregelia</i> 'Samsara' (photo no 6)	Amal Eid

Margaret Draddy Artistic Competition

1st	'Happy Easter' (photo no 9)	Janet Kuan
2nd	'Fireworks' (photo no 10)	Anna Ernst

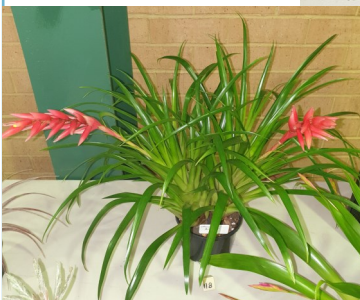


10

7



5



11

9





Astrid Bradshaw's
Aech. fasciata



OVERDUE

2022 Membership fees are now **well** overdue, so don't miss out on member benefits.

Membership forms are on our website or in Issue no 10, 2021

SEED BANK

If you have seed to donate please contact Terry .

Below is the list of seeds in our Seed Bank.

<i>Neoregelia kautskii</i>	5.10.19	Terry Davis
<i>Al. imperialis rubra</i>	15.10.19	Terry Davis
<i>Pseudalcantarea viridiflora</i> (red under leaf)	23.10.19	Terry Davis
<i>Tillandsia fasciculata</i>	28.5.20	Steve Molnar
<i>Tillandsia setacea</i>	22.5.20	Steve Molnar
<i>Tillandsia ionantha</i> (Mexico)	7.5.21	Greg Aizlewood
<i>Tillandsia streptocarpa</i>	18.5.21	Greg Aizlewood
<i>Tillandsia fasciculata</i> (yel/green multispikes)	7.6.21	Greg Aizlewood
<i>Pseudalcantarea viridiflora</i>	22.10.21	Kerry McNicol

formally *Tillandsia viridiflora*

<i>Tillandsia tricolor</i>	11.11.21 and 17.11.21	Terry Davis
<i>Tillandsia utriculata</i>	22.10.21	Gordon Slack
<i>Tillandsia heterophylla</i> -	8.11.21	Gordon Slack

not easy ex M.Kellett Plant

<i>Tillandsia tricolor</i>	1.2.22	Carolyn Bunnell
<i>Tillandsia juncea</i>	1.2.22	Werner Raff
<i>Tillandsia leiboldiana</i> (purple bracts)	4.4.22	Kerry McNicol
<i>Tillandsia tectorum</i> limited amount each	18.4.22	Terry Davis

\$50¢ per packet (plus postage) Members or \$1 per packet (plus postage) for all other
Contact **Terry Davis (02) 9636 6114 or 0439 343 809**

LITERATURE for Sale

<http://www.bromeliad.org.au/Contacts/BSALibrarian.htm>

TITLE	AUTHOR	PRICE
Bromeliads for the Contemporary Garden	Andrew Steens	\$20.00
Bromeliads: A Cultural Manual (Rev. ed. 2007)	BSI	\$ 6.00
Bromeliad Hybrids 1: Neoregelias	Margaret Paterson	\$25.00
Bromeliads Under the Mango Tree	John Catlan	\$10.00
Bromeliad Cultivation Notes	Lyn Hudson	\$10.00
Growing Bromeliads – 3rd Ed. by BSA IS BACK!		\$20.00 (member price)

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