

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

Edition: January 2020

Agenda: General Discussion
Election of Officers

Venue: PineGrove Bromeliad Nursery
114 Pine Street Wardell 2477
Phone (02) 6683 4188

Study Group meets the third Thursday of each month

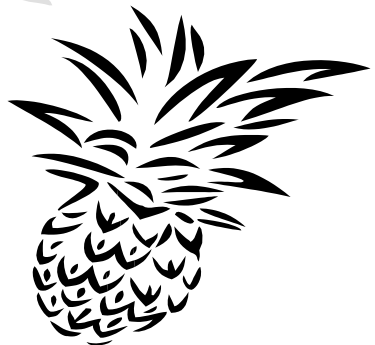
Next meeting 20th February 2020 at 11 a.m.

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Meeting 19th December 2019

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

General Business

Ross opened the meeting with Merry Christmas wishes to all.

This being the Christmas meeting there were no competitions or plants for **Show and Tell**, even though we did discuss some of the plants that had been set about as a Christmas display. (photo p.8)

Ross spoke about the rising cost of having the Newsletter printed and it was agreed by all that we should try and restrict the colour to three or four sheets an edition to reduce printing costs.

Drew advised that his series of nine articles on the Bromeliaceae family and genera were going to be put together as a booklet and sold to those interested with all proceeds to go to the FNCBSG. The booklet when complete, will be available in a printed or electronic form.

The Group discussed the continuing drought regards water shortage and water usage, the bushfires and loss of habitat. Many plants are bleached due to the scorching temperatures and loss of overhead protection from trees which seem to have dropped a greater amount of their leaf cover this season. Many Vrieseas are showing signs of quilling which seems to be a greater issue now due to the lack of humidity and strong hot dry winds. Our plants require good air flow and humidity so regular short bursts of misting will help keep moisture in the air and cool the plants. We are seeing more plants dying this season in some parts of the gardens which solely rely on rain. Growers who are on water restrictions are finding it difficult to keep plants alive but do feel their Bromeliads are faring better than other plants in their gardens. Ross mentioned that many nurseries were feeling the pinch and were selling off most of their plants because they don't have enough water for them.

It was suggested that in tough times like these we're experiencing that people should look around their neighbourhood to see what plants are doing well and put these plants in their gardens. This rule also applies to your Bromeliads, as much as we try, we can't grow everything in our given environment, so take note of which plants perform well for you and use them to their best advantage.

Show, Tell and Ask!

Quite often we see plants grace our competition and **Show and Tell** tables with some dubious titles. To keep our Newsletter as accurate as possible (oversights do happen) all plant names are checked for correct identification and spelling. For this we use the Bromeliad Cultivar Registry for hybrids and cultivars and for spelling of species names we refer to the New Bromeliad Taxon List, both web addresses (links) are on page 16 and are easy to use. When we come across a name like 'Pink Jaws' we get suspicious especially when there is a descriptor added e.g. 'pink'. *Neoregelia* 'Jaws' has been in our collections for over 20 years and has been quite a stable albomarginated plant, a quick BCR advanced search entering neoregelia into genus and jaws into name, we were offered only four possibilities none with 'pink' in the name. The plant we had in question was a good match to *Neo*. 'Jaws' which drew us to the conclusion that somebody decided their plant was more 'pink' than others growing in their collection. The added colour could be related to culture - grown in brighter light than others of the same type or even having less fertilizer than others causing a little stress. However, it doesn't make it different to any other 'Jaws' unless the colour becomes very stable under all growing conditions and makes the plant distinctly different and stand out and easily identifiable to all others. However, we feel that Keryn's *Neoregelia* 'Pink Jaws' brought along to our November meeting (photo FNCBSG December Newsletter) is in fact simply *Neoregelia* 'Jaws'.

Warning: Buyer beware of sellers adding descriptors to sell another plant that you will think "I haven't got that one" so must buy only to find it's not different to what you already have. Also be mindful of buying plants from outside your area e.g. north Queensland if you live in Sydney as the size and colour of the plants will differ greatly to those already growing in your area giving the appearance of being something different to what you already have. To save doubling up on your purchases keep a notebook of your collection and buy by name not always by appearance. Most people have internet connection on their mobile phones these days so there are no excuses for purchase errors other than "I really liked it so I bought it".

John gave a brief report about the study that he and Drew are conducting on the use of Benzylaminopurine (BAP), and distributed the results sheets up to day 20. However, it is far too early in the study to start drawing any conclusions from the results. John and Drew plan to run the study for 100 days.

The Group then had a wonderful lunch with everyone contributing.

After lunch the annual trophies were presented to the winners, results p.16.

Fragrance in Bromeliads Greg Payne - BSI Journal Vol.44 (6) 1994

Awhile back I was asked about how one locates fragrant tillandsias. I responded that there was no one complete source, that sources were scattered across the country and, in my experience, there wasn't even a good list of what to look for. Although true, I was not comfortable with that response. There had to be a better answer.

There's good news and bad news. First, we'll dispense with the latter. Fragrance among bromeliads can be considered a novelty, with probably fewer than 1 percent of the species falling into this category. There are, however, more fragrant Tillandsia species than in any other genus, which is good news as they are generally more available and more practical for collecting. Among these tillandsias, the xerophytic species tend to possess the stronger fragrances.

My exposure to fragrant tillandsias was the highlight of my first bromeliad show. Apart from the fantastic shapes and colors, those fragrances made a strong impression. I started a want list culling likely candidates from shows and references in magazines, books, and catalogs. The desired plants were slow to come by. So slow that fragrance eventually took a back seat to choices of shape and color. Whenever I saw a bromeliad I liked, I would ask if it was fragrant. It rarely was, of course, but another plant, which was fragrant, was sometimes suggested. There were easier hobbies but I persisted. The want list grew faster than the list of those found.

Serendipity factored in a few plants I bought simply on account of their shape. It was more than a pleasant surprise when I discovered the fragrant blooms. One, Tillandsia scaligera, which was not on my list, I acquired at the 1992 BSI World Conference from California Gardens. A couple of Catopsis species proved to be very fragrant. They were among miscellaneous, unidentified Mexican species from Pamela Koide of Bird Rock Tropicals. An otherwise unassuming plant with a fragrant bloom can become a quiet charmer.

Since we are thinking about a poorly defined subject, let me offer my observations about methods of pollination and fragrance. Most bromeliads are pollinated by birds. These plants produce larger amounts of nectar and have no fragrance. Their colors are shades of red and orange. The remaining bromeliads are pollinated by moths, bees or butterflies, and a few other insects. Among these are the fragrant bromeliads whose colors tend to be paler: whites, yellows, and yellowish orange, lavenders, olives, and browns. Moth-pollinated species are nocturnal bloomers having larger blooms and a fragrance that is strongest from dusk to dawn. Those pollinated by bees and butterflies and the like have

smaller flowers but also may possess the more intense fragrance. Among these, the xerophytic tillandsias are well represented.

Although the appeal of fragrance is universally observed, an individual's measure of it remains colored, in no small way, by personal preference. Our sense of smell is inextricably influenced in the present by environmental factors, sentiment, matters at hand, etc. More subtly, it becomes linked to memories elicited: things tied to a prior time, place, and emotion. We do not have the same olfactory references. What is enjoyable to one, might bring nausea to another. It seems a stretch that the same nose that savors an eye-smarting slice of limburger cheese can appreciate the bouquet of a rose. Apart from such extremes, we have varying delights within that range. Unlike the quantitative traits of color or sepal characteristics, the description of a fragrance remains a personal observation and can be related only in general terms. Personal preference is hard to judge.

The English language holds us at a slight disadvantage as well. It is easier to describe an unpleasant odor than a pleasant one. Unpleasant adjectives far outnumber pleasant ones. Disagreeable odors can be a source of humor and practical jokes, of derision, or even an indicator of ill health. Pleasant odors, on the other hand, connote ease and well-being and are just pleasant—unless overbearing, and then they stink.

Consider the foregoing and compound this muddle with bloom times and variables of humidity, temperature, and wind, which affect the perceived fragrance. Add to this the thoroughness exhibited by the taxonomist and we have some idea for the casual information on fragrance among bromeliads.

Not all bromeliad odors are equally engaging. Should you want a plant with a meaner air, consider *Billbergia horrida* whose scent has been compared to urea. Another charmer is *Vriesea jonghii*, Werner Rauh has likened its bouquet to opossum. Some of the not-so-fragrant dyckias remind me of a snout full of backroad dust. The fragrant neos are intriguing, but their delicate scent must compete with the algae present in the cup. The nose is quick to note the spiny edged leaves.

My list began with three plants, it now contains more than forty. Knowing what to look for helps immensely. With a bit of research, one might limit selections by size, flower color, or even requirements of culture, which range from xerophytic to terrestrial, full sun to shade. Nearly half of these plants are readily available, but perhaps not all from the same source. Some suppliers annotate their lists for fragrance. With a sharp eye and a list you may be in for a welcome surprise at your local plant table or nursery.

The next time the question about fragrant tillandsias arises, I will be better prepared. Meanwhile, for an added dimension to this esoteric pursuit, keep those olfactories prepared. You never know what a visit to the greenhouse or show might reveal.

Partial Listing of Fragrant Bromeliads (1994)

| | | |
|---------------------------------|---------------------------------|----------------------------------|
| <i>Tillandsia arhiza</i> | <i>Tillandsia peiranoi</i> | <i>Cryptanthus odoratissimus</i> |
| <i>Tillandsia bandensis</i> | <i>Tillandsia polycarpa</i> | <i>Dyckia chlorosticta</i> |
| <i>Tillandsia crocata</i> | <i>Tillandsia purpurea</i> | <i>Dyckia odorata</i> |
| <i>Tillandsia cyanea</i> | <i>Tillandsia reichenbachii</i> | |
| <i>Tillandsia diaguitensis</i> | <i>Tillandsia scaligera</i> | <i>Neoregelia chlorosticta</i> |
| <i>Tillandsia disticha</i> | <i>Tillandsia straminea</i> | <i>Neoregelia laevis</i> |
| <i>Tillandsia dodsonii</i> | <i>Tillandsia streptocarpa</i> | <i>Neoregelia olens</i> |
| <i>Tillandsia duratii</i> | <i>Tillandsia usneoides</i> | <i>Neoregelia oligantha</i> |
| <i>Tillandsia dyeriana</i> | <i>Tillandsia venusta</i> | |
| <i>Tillandsia hamaleana</i> | <i>Tillandsia yuncharaensis</i> | <i>Vriesea fenestralis</i> |
| <i>Tillandsia kurt-horstii</i> | <i>Tillandsia xiphioides</i> | <i>Vriesea fragrans</i> |
| <i>Tillandsia mallemontii</i> | | <i>Vriesea cylindrata</i> |
| <i>Tillandsia monadelpha</i> | <i>Aechmea cylindrata</i> | <i>Vriesea gigantea</i> |
| <i>Tillandsia myosura</i> | <i>Aechmea purpureorosea</i> | <i>Vriesea racinae</i> |
| <i>Tillandsia narthecioides</i> | <i>Catopsis nutans</i> | <i>Vriesea regina</i> |
| <i>Tillandsia palacea</i> | <i>Catopsis wangerinii</i> | |

Note: *Till. polycarpa* = from Barry and Yvette Fisher from Los Angeles. The name is not found in Luther's binomial list or Kiffs Tillandsia checklist. It resembles *Till. reichenbachii*, *palacea* etc. but remains distinctive.

Eds note: some genus and species names have changed since 1994: *Till. cyanea* = *Wallisia cyanea*, *Till. kurt-horstii* = *Till. graomogolensis*, *Vriesea regina* = *Alcantarea regina*.

Pop-Up Shade House

by Drew Maywald

I have a number of raised garden beds in my garden that I use predominantly to grow vegetables. During the hot summer months, I find that it is too hot for the vegies to survive, so I decided to give them a covering of shade cloth to increase their productivity. I wanted a structure that could be removed quickly and easily.



After much thought and deliberation, I decided to make a semi-circular tunnel structure out of PVA electric conduit tubing. The 20mm diameter conduit comes in 4 mtr lengths and is relatively inexpensive at around \$3.25 a length.

I found that I could curve a 6 mtr length of PVA conduit easily to cover the 3.5mtr width of the garden area. I drove in some steel star pickets on each side of the area and attached the conduit to the pickets by drilling a hole through the conduit and fixing it to the picket with large cable ties, which I got from the local cheap shop for a lot less than at the hardware store.

To stabilize the structure, I ran lengths of conduit along the length of the shade house, fixed with cable ties. I used the female end of each length of pipe to join them together without gluing them.



My good friend John Crawford gave me some used shade cloth and he sewed seams around each side of the shade cloth to stop it from unraveling. John is an expert "seamstress" on his portable industrial sewing machine. I then draped the shade cloth over the structure so that I would get maximum shade coverage from the hot afternoon sun. The shade cloth was fixed to the pipe frame using cable ties.

I am very happy with the finished result of my pop-up shade house, and while I have only put one width of shade cloth over it, as that is all I require, I could easily cover the whole tunnel to make it completely enclosed. It is more than

2 mtrs high so it is easy to walk under and access the garden beds. I suspect that as my collection of Bromeliads grows, there will be less room for vegies!

Interestingly, I have now made a second such structure for my neighbor. This pop-up tunnel is covered with bird netting to keep the possums from eating her herbs and vegetables, and is made the same way as my shade tunnel.

The strong winds (40 knots) we experienced recently have had no effect on either of my 'pop-ups', and at a cost of less than \$60 for pipe and cable ties the pop-up shade house is good for my bank account.

Ed: I wonder how long it will take for some of Drew's Bromeliads to sneak in under the vegie cover.





Back:- Ross Gary Coral Steve Trish Sue Dave Drew
 Front:- Debbie Shirley Helen Keryn



FNCBSG Christmas party display with *Vrieslandsia* 'Inca Chief' standing tall with *Neoregelia* 'White River' to give the white Christmas look in the front.

The 2019 FNCBSG NSW Trophy and Shield Winners



John Crawford
 2019 Champion
 Open
 Tillandsioideae
 Decorative



Drew Maywald
 2019 Champion
 Novice



Gary McAteer
 awarded
 Life Member



Keryn Simpson
 John Crawford
 Drew Maywald
 Michelle Hartwell
 (absent)
 Four equal points
 winners
 2019 Judges Choice
 Champion.

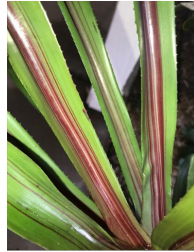


Aechmea 'Red Ribbon'

by Drew Maywald

Aechmea 'Red Ribbon' is an M. Foster cultivar of *Aechmea racinae* x *victoriana* var. *discolour*, originating from Florida in the USA. A sport of *Aechmea* 'Foster's Favorite', prior to 1955, it is a grand plant with shiny, lacquered, strapping green leaves around 500mm long.

The centre of each of the smooth leaves has numerous thin, perfectly straight, red pencil lines running lengthwise, on top and under sides of the leaf, so that the red lines resemble a ribbon of red up to 15 mm wide. The leaves are around 25 mm wide at the base widening to 40 mm near the tip. The margins of each leaf have small spines 5 mm apart and less than 1 mm deep.

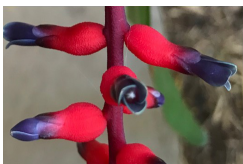


Aechmea 'Red Ribbon' is a wonderful looking plant that grows to about 600 mm tall in a rather tubular flaring shape. The leaves overlap giving the appearance of an upright urn.

I have two *Aechmea* 'Red Ribbon's' which I acquired from John Crawford, and both are in hanging pots in partial shade from the palm trees and the Jacaranda tree in my garden. They get very little attention apart from being fertilised with a weak liquid fertiliser mix consist-

ing of Power Feed and worm tea every now and then. *Aechmea* 'Red Ribbon' requires little water and with their outstanding colourful leaves, I have found it easy to grow, and a plant that produces a number of true to form pups.

The pendent inflorescence originates from the centre of the plant on a single, long thin peduncle. The berries of the inflorescence are a beautiful fiery red colour (red with a hint of orange) with each berry having a dark blue/purple tip extending down 3mm from the top of the berry.



The small flowers do not open very far. When the flower opens, the tip of each petal has a band of bright green around the margins, revealing the white stamen inside. However, after a few days this band of bright green turns to white.



This is a stylish *Aechmea* and with its lustrous, shiny leaves, and their numerous fine red lines, is a great plant to have in any collection.

Plea for Articles and Photos

by Ross Little

The editors are always in need of fresh articles for YOUR Newsletter. Yes we can and do reprint older articles that we consider relevant and in response to a topic or question raised and discussed at our Meetings. In other words the older article is a written answer to your questions for your later reference. General topic articles are often of interest to readers who may have a similar issue to Drew's 'Pop-up Shade House' article, needing that bit of extra temporary shade protection for their plants, their question has been answered. We're not writers either but with a little collaboration between the editors we'll tidy your writings up if required, add your photos and hopefully it all reads well and looks great.

Photographs for the Newsletter or for your article: NO, I'm not a photographer either!! I wouldn't know one f-stop to another or what it means (google helps if you need to know). I use an old Kodak point and press digital camera and leave it on auto mostly, I turn the flash OFF and I turn the dial to the flower thingy (close-up), this is my setting for nearly all the photos I include in this Newsletter. I don't try and compose photos (get them exactly right first go), I start in close, look at the screen to see that the shot is how I would like to see it on the page, not diagonal in the screen or with bits chopped off too much. I then step back about 50mm and repeat this step four to six times at least depending on the subject, one of those shots is going to be in focus (fingers crossed). Repeat steps 1 to 6 if necessary. The best photo gets selected, cropped if required and added where necessary. YOU don't need to do this, send us your photos and let us select and crop as required. Use a neutral toned drop sheet to cut out any unnecessary background, it's the subject we want to see (not the background). A black sheet used as a back drop can make a flower stand out really well.



Out of focus, taken too close.



Several steps back, we get a sharper image.



Cropped for publication.

Bromeliaceae – A Layman's Guide Part 3 continued:

Tillandsia: pronounced *till-and's-ee'a*, this genus, is the largest in the family with 745 species, most of which are epiphytic (air plants). Tillandsia was named in 1737 by Linnaeus after a Swedish physician, Elias Tillands. Tillandsia also has the greatest range in size from 12 mm (1/2 an inch) to 3.5 metres (14 feet). Tillandsia are native to the forests, mountains and deserts of northern Mexico and south-eastern United States, Mesoamerica, the Andes and the Caribbean to mid Argentina.

Their leaves, more or less silvery in colour, are covered with small protrusions called trichomes, which are specialised cells capable of rapidly absorbing water that gathers on them. They are commonly known as air plants because of their natural propensity to cling wherever conditions permit: telephone wires, tree branches, bark, bare rocks, etc. Their light seeds and a silky parachute facilitate this spread.

Some are aerophytes, (a plant that derives moisture and nutrients from the air and rain, usually growing on another plant, but not parasitic to it), which have a minimal root system and often grow on shifting desert soil. Due to the epiphytic way of life of the plants the peculiarity arises that these bulbs do not lie in the ground, but hang in the air on branches. They are not parasitic as they gather all of their own nutrients and water and cause no harm to their host plants. Spanish Moss exemplifies the name air plant as you can see it dangling from telephone wires and tree branches.

Tillandsia have naturally been established in diverse environments such as equatorial tropical rain forests, high elevation Andes mountains, rock dwelling (saxicolous) regions, and Louisiana swamps, such as Spanish Moss (*Tillandsia usneoides*), a species that grows atop tree limbs. But there are also species that live on rocks and also house roofs and even telephone wires.

The green species with their claim to a cool-humid climate, live more in the shade, terrestrial or in the lower levels of the forests. In contrast, almost all the grey species live in precipitation-poor areas with high humidity. They prefer the full sun and can therefore be found in the upper floors of the woods, on rocks or (rarely) on the ground. Many of the grey species are epiphytes.

Tillandsias, like other bromeliads, can multiply through pollination and seed formation. Since Tillandsias are not self-fertile, the pollen must come from another plant of the same species. Tillandsias can take many years to flower. Generally, the thinner-leafed varieties grow in rainy areas and the thick-leafed varieties in areas more subject to drought. Most species absorb moisture and nutrients through the leaves from rain, dew, dust, decaying leaves and insect matter, aided by the trichomes. The amount of light required depends on the species;

overall, air plants with silver dusting and stiff foliage will require more sunlight than air plants with softer foliage. They generally need a strong light. In summer outside, however, they prefer the light shade of a tree at the hottest hours.

Like most bromeliads Tillandsia only flower once. Often before they flower some of the leaves, called bracts, may turn a bright colour such as pink or red. A Tillandsia flower will usually last for a long time, but after the flower is spent the plant will die. Before the plant dies it will produce pups.

Needs for light, temperature and water can vary greatly between species of Tillandsia. Some are more adapted to arid climates while others prefer humid environments. None are frost tolerant, but many will tolerate high temperatures.

A general rule is that plants with thin leaves thrive in rainy or humid areas while plants with thick leaves thrive in drier climates. It very significant to the plant's health that once mounted your Tillandsia receives enough water. It is a misconception that misting your plant will provide enough water to survive. While many Tillandsias are very drought tolerant they will go dormant and not thrive if they are not watered properly.

Unlike many other plants Tillandsias take up carbon dioxide at night. Most plants open their stomata on their leaves to gather carbon dioxide during the day. The process of photosynthesis uses sunlight to change carbon dioxide into energy. However, this can result in a loss of precious amounts of water. In order to avoid this loss of water Tillandsias have adapted to open their stomata at night to prevent evaporation during daylight heat. If the plant is watered in the evening or at night it will not have time to dry before the stomata open. The water will block the stomata and over time cause the plant to suffocate. Therefore, the best time of day to water a Tillandsia is in the early morning. This will give the plants plenty of time to dry out before they increase their intake of carbon dioxide

Tillandsias can be mounted to any number of surfaces; wood, cork bark, sea-shells and rocks are a few good examples. Rough surfaces work particularly well. Any waterproof glue can be used as well as wire or even staples to attach the plant to the host surface. Hot glue can be used, but because water causes hot glue to break down it will need to be replaced eventually. Do not use anything that has copper in it for a mount or attachment such as treated wood or wire. Copper can cause significant damage to bromeliads. You can cut away roots that are in the way of a proper mount without causing any damage. Tillandsias can even be placed on rocks in a pot. However, be careful when you are watering a plant mounted this way because the roots must not stay wet. If they sit in water they will rot causing damage to the whole plant.

With the number of beautiful, unique species and the versatility in methods for mounting there is no limit to what you can create with Tillandsia plants. They are

a fun addition to any collection and can be easy to care for when you follow a few simple rules:

- A general rule for starting with common species is morning sun till lunchtime.
- Always water your plants thoroughly in the morning a couple of times a week in spring and autumn.
- Do not let them sit in water for long periods of time.
- Provide adequate amounts of light
- Apply liquid fertilizer during the warmer months to speed growth and encourage flowering and, in turn, multiplication.
- Many people fertilize their Tillandsias weekly, weakly.
- Provide them with as much air movement as possible.
- Air movement and the right sun/shade aspect are both essential.
- Tillandsias are happiest outside, but they can be grown indoors where they'll need bright light, air movement and a regular watering regime. Without either of one of these three they'll be temporary indoor plants only.

Vriesea

Pronounced *vree-see-uh*, Vrieseas are an epiphytic genus, named in 1843 by Lindley in honour of Willem de Vriese a Dutch botanist/physician (1806-1862). Vrieseas are widespread over Mexico, Central America, South America and the West Indies, with 227 species in the genus.

Containing some of the largest bromeliads these tropical plants harbour a wide variety of insect fauna. In the wild, frogs may go through their whole life cycle in a Vriesea. This genus is closely related to Guzmania. Both Guzmania and Vriesea have dry capsules that split open to release parachute like seeds similar to the Dandelion. Most Vriesea are epiphytes and grow soil-less on trees. They have no roots but have special hold fasts that do not take in any nutrients. All nutrients are taken in through the centre "tank" made by a rosette of leaves.

Vrieseas are very adaptable to a wide range of light. They will thrive in shaded areas as well as areas with bright indirect sunlight. Vrieseas are more tolerant of dense shade than other common bromeliads. The more sunlight a Vriesea receives, the more humidity it will need to avoid scorching the leaves. Vriesea foliage will also become more brilliant in colour when exposed to more light. Moderate temperatures are preferred by Vrieseas, but they can withstand a range of low and high temperatures from just above freezing to 33°C for a short period of time. They will not survive a hard freeze.

Vrieseas typically have long, broad, flat leaves. They are smooth and do not feature any spikes or points. The foliage ranges in colour from light green to purplish red. Many varieties have variegation or banding on the leaves.

Most Vrieseas form a rosette with their leaves that create a central tank. Vriesea flower spikes are often tall, broad, and coloured with shades of brilliant red, yellow, and orange, and are long lasting.

Like many bromeliads, Vrieseas are primarily epiphytic so they take in water and nutrients through the central tank. Their roots act merely as anchors to hold the plant in a potting medium or on a substrate such as a slab of wood. Vrieseas can be fertilized using a slightly acidic fertilizer diluted to a quarter of the recommended strength or less.

Vrieseas are easily susceptible to crown rot. If the potting medium they are planted in remains soggy or moist, the roots will rot and ultimately destroy the plant. It is important to make sure the tank of the Vriesea remains wet, but not the potting medium. It is also necessary to flush the tank with fresh water regularly. You can increase the humidity of the plant by misting it with a spray bottle.

Werauhia

Pronounced *wear-ow-hee'a* this genus is named for Werner Rauh, a German botanist (1913–2000). Based on molecular evidence, a number of species previously classified within other Bromeliad genera, especially Vriesea and Tillandsia, have been placed in Werauhia instead. The genus contains 93 species.

References:

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- Booth, Celeste, "Getting to Know the Tillandsia Bromeliad". Bromeliads.info Plant Care.
- Dearing, Melanie, "Getting to Know Vriesea". Bromeliads.info Plant Care.
- Russel, at The Niche Nursery Thirroul "Alcantarea – Propagation by Division.
- Reid, Georgina and Dunstan, Bruce, "How to Grow air Plants (Tillandsia spp)"

Compiled by Drew Maywald October 2019

Novice Popular Vote

1st Drew Maywald Novice Champion 2019

Open Popular Vote

1st John Crawford Open Champion 2019

Decorative

1st John Crawford Decorative Champion 2019

Tillandsioideae

1st John Crawford Tillandsioideae Champion 2019

Judges Choice

1st Keryn Simpson
Drew Maywald
John Crawford
Michelle Hartwell } Judges Choice Champions 2019

Life Membership Badge: Gary McAteer

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.