



VOLUME LII

Third Quarter 2018



Committee Details

Barry Kable (07) 3824 5931 PRESIDENT John Olsen (07) 3856 0265 VICE PRESIDENT John Olsen TREASURER Alfonso Trudu SECRETARY COMMITTEE Pam Butler, John Williamson, Gilda Trudu, Fred Thomson, Tom Isaac, Joy Constantino, Maxim Wilson, Bruce Dunstan. DATABASE MANAGER John Williamson LIBRARIAN **Evelyn Rees** SHOW CONVENOR John Williamson John Olsen, Barbara Murray, Maxim Wilson **BROMELIACEAE EDITORS** Joy Constantino **BSQ WEBMASTER** Ruth Kimber & Bev Mulcahy FIELD DAY COORDINATORS Peter Ball SEED BANK COORDINATOR SUPPER STEWARDS Selga Boothby & Sharon Born Margaret Kraa & Lee Thornycroft PLANT SALES ASSISTANT SALES **Michelle Cameron** Fred Thomson, Denice McLean, Helen Moriarty COMPETITION STEWARDS NEWSLETTER COORDINATOR Maxim Wilson ASSISTANT SHOW CONVENER Peter Ball David Rees HALL COORDINATOR Lesley Gibbs **RAFFLE COORDINATOR** Amanda Meads **EXHIBITION COORDINATOR** Glenn Bernoth HISTORIAN

MONTHLY MEETINGS of the Society are held on the 3rd Thursday of each month except for December, at the Uniting Hall, 52 Merthyr Road, New Farm, Brisbane, commencing 7:30 pm. **ANNUAL GENERAL MEETING** is held immediately before the March Meeting

Front Cover: Tillandsia 'Olive'	By Margaret Paterson
Rear Cover: Guzmania lychnis	By: Bruce Dunstan

The Bromeliad Society of Queensland Inc., gives permission to all Bromeliad Societies to reprint articles in their journals provided <u>editor@bromsqueensland.com.au</u> is advised and proper acknowledgement is given to the original author and Bromeliaceae. This permission does not apply to any other person or organisation without the prior permission of the author. *Opinions expressed in this publication are those of the individual contributor and may not necessarily reflect the opinions of the Bromeliad Society of Queensland or of the Editor. Authors are responsible for the accuracy of the information in their articles.*

The Bromeliad Society of Queensland Inc.

P.O. Box 565, Fortitude Valley, Q 4006

www.bromsqueensland.com.au

Email: editor@bromsqueensland.com.au president@bromsqueensland.com.au publicity@bromsqueensland.com.au

CONTENTS

by Geoff Lawn, BSI Cultivar Registrar4
by Rob Murray5
THE PLANETA Seniors' "Lament" 10
by Les Higgins 2018 11
by Bruce Dunstan14
by Barbara Murray24
by Mulford B. Foster29

DO WE HAVE YOUR eMAIL? Moved? Send your amended details to <u>membership@bromsqueensland.com.au</u> so you get our electronic communications. Phone numbers are also helpful.

MIDHURST BROMELIAD NURSERY	M.J PATERSON
SPECIALIST GROWERS OF	212 Sandy Creek Road, Gympie Q 4570
TILLANDSIA SEEDLINGS	A large range of Bromeliads for sale
Hard grown to suit All Australian	especially our own hybrid Neoregelias,
Conditions.	Tillandsias, Cryptanthus and Vrieseas
Wholesale and Mail Order Only	Call in but please phone first
	T: (07)5482 3308
Write for a free price list of Tillandsia	
and other genera to:	Also available Bromeliad Hybrids.
MIDHURST BROMELIAD NURSERY	"For My Own Satisfaction" Book 1: neos.
P.O. BOX 612, HURSTBRIDGE, VIC 3099	Books available on line at
T: (03) 9718 2887	www.bromeliad-hybrids.com
E : Midhurst@netspace.net.au	

Tillandsia 'Olive'

by Geoff Lawn, BSI Cultivar Registrar

In August 2018, a new cultivar, a hybrid of *T. jalisco- monticola* x *xerographica* (?) was registered by Grant Paterson on behalf of the seed raiser, Margaret Paterson, who named it T. 'Olive' in honour of Olive Trevor, renowned plants woman and Patron of the Bromeliad Society of Queensland Inc.



The mature, large rosette is approximately 45cm. diameter x 60cm. high in spike. Attributes of both parents are evident in the rosette and erect inflorescence. The many recurving, relatively-narrow, scurfed, silvery grey-green leaves taper to a point and are tinted pale pink in strong light.

T. 'Olive' differs from similar hybrids such as T. 'Silver Queen' by having fewer branches in the coral red-stemmed inflorescence. Each ovoid-shaped, greenish yellow paddle, up to 15cm. long, is much more inflated and bears a red margin to each bract, making for a distinctive and extremely attractive inflorescence with lavender, tubular flowers.

This clone was grown from seed given to Margaret Paterson by Olive Trevor in 1992 from her Olive Branch nursery stock in Brisbane. The seed was an accidental birds-n-bees cross in 1991 with seed collected from *T. jalisco-monticola* which was growing in close proximity to several *T. xerographica*. The first flowering of the progeny occurred in 2012, 20 years after sowing the seed.

by Rob Murray

Preparing Your Plants for a Show

Getting the Best Out of a Plant

In my last article, I discussed what judges were looking for in relation to judging plants presented for competitions. The other side of the story is where you come in. You are the one who selects the plant to place on the competition table. So, what do you look for? What makes a good plant? When should you start preparing?



At this point, I would mention that making your first entry into the competition is the hardest step. As a society, we need you to enter plants to make our shows a success – the more plants entered the better our presentation to the public. Entering that first plant and receiving the reward of having it judged may be the start of a budding career in showing.

What to look for

Any plant can be made to look reasonable with some special care and attention as it is prepared for the competition table. However, starting early and selecting a good plant can help.

A healthy pup that is symmetrical and has the start of good colour is a good starting point. Look at the mother for an indication of how the plant may grow and look as it matures. Naturally, it may not turn out exactly as the mother, but you will have some idea of what to expect. So, the lesson from this is to start early. By starting early, you can work on several plants ensuring that they have optimum growing conditions – light, air circulation, water and fertiliser. As the plants grow, you may be able to cull some as they do not perform as expected.

When potting up initially, use your preferred mix with a small amount of fertiliser and ensure that you have positioned the pup centrally in the pot. A note here is that you should ensure that the pot is a size that will not look out of place for the mature plant. Later, we'll discuss how this can be managed.

Growing the plant

Select an area of your shadehouse where the plant will grow that has the best conditions you can provide. You want the plant to have plenty of room as it matures so leaves do not bend or become damaged as they spread. Try not to have them touching other plants.

Good air circulation is important as this stops the spread of disease – especially scale. Circulation also reduces the growth of mould which can mark leaves as they grow.

Watering the plant is important as this can impact on growth patterns. Throughout the year, the amount of water used will vary. In summer, and some of the winter months when the winds are dry, more water will be required. Lack of water may cause the tips of the leaves to dry off and cause some damage to the plant.

Fertiliser is a challenge and getting it 'Just Right' is important to ensure that your plant doesn't show growth spurts resulting from varying amounts of fertiliser. If there is too much fertiliser, the leaves will look long and strappy. As a plant matures, all leaves should look the same producing a good conformation and symmetry. Generally, some fertiliser when potting up initially should suffice. Some growers do add small amounts progressively to the soil or foliar fertilise as plants mature. Fertiliser may also impact on colour.

Having the right amount of light in your growing area is also important as this will impact on growth and colour. Not enough light may see a strappy plant as it reaches for light. They will most probably also be greener and not coloured to perfection. Varying the shade cloth can assist. There is plenty of discussion on what is the right level of shade and colour. Most of us will have one growing area and so we should observe our plants and manage in the environment we have. We can adjust light by adding extra shadecloth during the hotter months for example.

Plant Preparation

Now, we are at the pointy end and the show is only a short period away. We need to make final preparations.

Cleaning

Depending on the type of plant you are working on, you may need a good set of gloves, some arm protectors or just your plain hands. Some of the big ones do bite and scratch so prevention is better than pain and scratches.

A good set of tweezers is helpful (I use long ones from the pet shop that are used for feeding reptiles). This makes it easy to remove any trapped leaves or other debris. Once this has been done, a good hose will remove those final bits.

I also find a number of different sized bottle brushes help clean those hard to get areas. A small kitchen sponge is also useful for those hard to move spots. In some areas, algae builds up on the leaves around the tank and this requires a little extra work. Don't rub too hard as it may damage the leaves.

You need to take care when washing to ensure that you are not removing any scurf. Hosing will generally clean off the dirt but not damage the scurf which will reappear after the leaf has dried. Scrubbing too hard will result in bare spots and so points may be taken off during judging.

Any of the lower leaves that are dead, damaged or too long should be removed. Be careful not to take too many off as this will detract from the symmetry of the plant overall.

I find it useful to let a plant dry out after the initial wash and then check it again once it is dry. Sure enough, there will most probably be a spot somewhere that I've missed.

Potting

The plant has been growing in the pot for some time and so the pot will most probably look tired and dirty from exposure to the environment. Transferring the plant to a new pot provides a good opportunity to enhance presentation. Remember that this should be a standard pot and not a decorative container. Black is a good choice of colour.

This re-potting allows the plant to be placed in the 'Just Right' size pot and then centrally within it. You can also place the plant a little lower in the mix if you have removed a large number of leaves. This helps with balance for presentation. Don't plant it too low though. Make sure that the plant sits firmly in the pot as this is a point judges will check.

Once you have potted the plant up a good wipe over the pot will make it sparkle again. Remove any debris.

If your pot is not seriously damaged, then a wipe with a cloth with some vegetable oil will help restore some of its shine.

Leaf Trimming

Unless your plant has been totally enclosed in a perfect environment, you will most probably find some damage to the leaves. You can remove some of this by trimming the leaves. Judges will notice this and so taking care not to trim too many leaves is important.

When deciding what to trim, take a good look at your plant and try to envisage the overall impact of the trimming you are thinking of doing. You goal is not to change the overall natural shape of a leaf and the plant's confirmation.

The most common areas considered for trimming are browned tips, grasshopper damage or a broken leaf. Making a decision to cut or not is tricky and might do more harm than good. Remember judges do take into account what has been done to enhance a plant so don't overdo the work. It might be better to leave a damaged leaf in place.

Final Check

Place the plant on a small table or a Lazy Susan so you can view it from all sides. Check it over for spots and marks and do a final clean.

Conduct a check for diseases such as scale or fly speck. Check that there is no algae or water in the tank. (You can remove water just before you transport the plant to the show.)

If necessary, add some top dressing to the pot to make it neat and clean.

Make sure that you have a nametag in the pot. Check for correct spelling of the name or the formula.

As a quick check, compare your plant with the various areas that the judges will be looking at in the show.



Categories in Point Scale	Maximum Points Allocated	
	Blooming Plants	Foliage Plants
Cultural perfection	30	30
Conformation of plant(s) including inflorescence	20	30
Colour and marking of plant(s) excluding inflorescence	20	30
Inflorescence: size, quality, quantity, colour	20	-
Maturity of plant(s)	10	10
Total	100	100

A simple check:

- Does the plant look healthy and bright?
- Are the leaves clean and look appropriate in relation to sheen and scurf?
- Are the colours as they should be?
- Is the plant symmetrical?
- Does it fit into the category I am entering blooming or foliage? Is it mature?
- Is the pot clean?

If you can tick all the boxes, then you should have a plant that is suitable for showing.

Getting the plant to the show

You spent months or years growing the plant, hours preparing it and now you have to transport it to the show. Take care to pack it carefully as you don't want any damage to leaves during the trip.

I find it useful to have a cardboard carton to place plants in to protect them. You can purchase protective paper sleeves but for most of us a box will serve the purpose.

It always helps to take along a small selection of cleaning equipment and some extra mix in case of damage during transit.

The final step

All the work has been done and you are at the show. There are two other points that require your action.

Prior to arriving at the show, you should have completed the competition entry form to the best of your ability. If you are not sure, leave it until you arrive and then seek advice from one of the stewards or another member. You will also be required to add a competition label to your pot as there should be no indication of your name on the plant.

Finally, make sure you arrive in plenty of time to meet the competition entry closing time. Once you have entered you plant, you can relax but the stewards and judges then commence their work. Plants are checked by the stewards, entries made into the show database and plants placed on the tables. Judges then commence their work.

THE OLIVE BRANCH	BRISBANE BROMELIAD CENTRE
232 Canvey Road, Ferny Grove Q 4053	34 Hauton Road, Morayfield Q 4506
Specialising in hybrid Vrieseas, Aechmeas, Variegated Neoregelias Skotak Hybrids, Aussie Dream and varieties, and other quality Bromeliads	Aechmeas, Vrieseas, Guzmanias, Neoregelias, Nidularium & Tillandsias and rarer species and hybrids
	Phone BARBARA and LORRAINE
Phone (07) 3351 1203	(07)5433 0303
VISITORS WELCOME BY APPOINTMENT	VISITORS by APPOINTMENT

HOW THE 'GREY BEARDS' HAVE DESTROYED THE PLANET...A Senior's 'Lament'

Checking out at the supermarket, the young cashier suggested to the much older woman that she should bring her own grocery bags because plastic bags weren't good for the environment.

The woman apologized and explained, 'We didn't have this "green thing" back in my earlier days.' The young cashier responded, 'That's our problem today - your generation did not care enough to save our environment for future generations.' She was right our generation didn't have the "green thing" in its day.

Back then, we returned milk bottles, lemonade bottles and beer bottles to the shop. The shop sent them back to the plant to be washed and sterilized and refilled, so it could use the same bottles over and over. They really were recycled.

But we didn't have the "green thing" back in our day.

Grocery shops bagged our groceries in brown paper bags, that we re-used for numerous things. Most memorable, besides household bags for rubbish, was the use of brown paper bags as book covers for our schoolbooks. This was to ensure that public property (the books provided for our use by the school), was not defaced by our scribbling. Then we were able to personalize our books on the brown paper bags.

But that young lady is right; we didn't have the "green thing" back in our day.

Back then, we had one radio or TV in the house - not a TV in every room - and the TV had a small screen the size of a big handkerchief (remember them?), not a screen the size of Scotland in the kitchen. We blended and stirred by hand because we didn't have electric machines to do everything for us. When we packaged a fragile item to send in the mail, we used wadded up old newspapers to cushion it, not Styrofoam or plastic bubble wrap. Back then, we didn't fire up an engine and burn petrol just to cut the lawn. We pushed the mower that ran on human power. We exercised by working so we didn't need to go to a health club to run on treadmills that operate on electricity.

But she's right; we didn't have the "green thing" back then.

We drank from a tap or fountain when we were thirsty instead of using a cup or a plastic bottle every time we had a drink of water. We refilled writing pens with ink instead of buying a new pen, and we replaced the razor blades in a razor instead of throwing away the whole razor just because the blade got dull.

But we didn't have the "green thing" back then.

Back then, people took the bus and kids rode their bikes to school or walked instead of turning their Mums into a 24-hour taxi service in the family's \$70,000 People Carrier which cost the same as a whole house did before the "green thing." We had one electrical outlet in a room, not an entire bank of sockets to power a dozen appliances and we didn't need a computerized gadget to receive a signal beamed from satellites 23,000 miles out in space in order to find the nearest pub!

But isn't it sad that the current generation laments how wasteful we old folks were just because we didn't have the "green thing" back then?

[Ed: Livia Doidge was taken by this and forwarded it to me. This magazine is hungry for content so if you see something you think should be shared in Bromeliaceae send it in.

The above is an interesting rant about the way things were. It does however raise the question as to whether we seniors have simply fallen in with trends and now are ourselves just as wasteful as this crop of youngsters.]

Development of Pest Control

by Les Higgins

(From FNCBSG August 2018 issue)

In ancient times, an angry God sent plagues of pests. Hitting the pests with sticks or crushing them was the only defence (still in use). An alternative was to placate the God with prayer or animal or human sacrifice (useless). Pest control has gradually developed. Oils and emulsions were the safest and most advanced pesticides available pre-1945. Magazines published various oil recipes that optimistically claimed to overwhelm a pest's respiration system of minute diameter passageways. (Insects have no lungs and therefore don't breathe).

Oil's mode of action is to smother and it takes many hours to kill a pest. Oils have considerable disadvantages:

- They clog the stomates causing leaf fall.
- Not all the pest population is exterminated.
- Resting eggs are invariably immune.
- Regular resprays are necessary.
- With bromeliads there is an additional problem, the beautiful lattice work of the tricomes (scurf) becomes congested.

Oil recipes are occasionally revived. Don't be deceived – OIL IS BAD FOR BROMELIADS. The most effective insect control is chemical penetration of the cuticle of insects and mites to destroy the nervous system. The insect's nervous system is allied to the cuticle. The primary ganglia (primitive brain) in the head controls the antenna and eyes. A double cord connects from the primary ganglia through the three thorax segments and then continues with a single cord into the abdomen. The locust (grasshopper) has a sub-oesophagus ganglion functioning as mouth control. Ganglias and nerve networks that are in every section of head, thorax and abdomen are amalgamated. The ganglia in every individual section must be killed otherwise that section has the potential to continue functioning. A most distressing sight is to see a caterpillar, dead in parts, walking on its pro-legs. This occurs regardless of whether oils or chemicals are used.

World War 2 was anticipated to start where World War 1 finished. The writer went to school carrying a gas mask in a cardboard box. Gas warfare is the foundation of modern agricultural poisons. Only the LD50 of the operator prevents the same fate as inflicted on the pest. (LD50

is the Lethal Dose killing 50% of the test mammals, measured in milligrams to kill kilograms of body weight). The vaporising characteristics of pesticides mandate the wearing of overalls and a gas-mask.

Many pesticides are low LD50. Some animal experiments are inaccurate. The early Rogor 40 tested on dogs gave an LD50 of 250. It was presumed that a 50% chance of killing a 70 kilo person is 250 x 70 =17.5 kg. However, following a murder case (1960's?) it was learnt that human tolerance to the then Rogor 40 is 3mg.

Plant cuticle is a hydrocarbon substance. The advent of the scanning electron microscope revealed an E.C. stripped the hydrocarbon wax cuticle. The naked plant becomes subject to sun-burn, increased water needs and has greater visibility to pests. Plants, unlike animals, never repair damage - they continue growing or die. Pesticides can be a stomach poison, a blanket, a systemic, a penetrant. The chemical can mimic the plants cytoplasm to become a growth stimulant or growth suppressant. Before purchasing a pesticide always consider not only price but the active ingredient, its concentration, carrier, LD50 and the host plant. Use short life poisons of highest LD50.

Never use a pesticide if the temperature is approaching or above 30°C - the result will be a viral like effect on the host plant. For bromeliads a very suitable insecticide is Congard[®] *a.i.* The old adage is 'Spray when bees are not active'. Effective pest control is to spray when pests are feeding. Caterpillars never stop eating. Slugs and snails are most prominent overnight. For locusts/grasshoppers eating bromeliad leaves, the time to spray is late evening. Bees are flower foragers, they are active early in the day and retire early. Therefore, in the vicinity of flowers use short life insecticides in late evening.

Australia would cease to be a food exporter if Greenies' ranting caused pesticides to be banned. However, don't be influenced by the Chemical Manufacturer's propaganda. In small scale bromeliad culture, pest control can be achieved without oils and minimum/no use of chemicals. Diatomaceous Earth kills by contacting insects such as ants, scale (as crawlers), mealy bug and cockroach. Potassium silica (pH12) as a fortnightly foliar spray throughout the growing season stiffens the sieve tubes preventing the penetration of insect mouth parts including those of hard scale. Diseases have been developed as pest control: Green mould[®] for locust control and Dipel[®] to kill caterpillar.

Biological Control is useless in shade house and glass house culture. Predators need a consistent food supply and that necessitates breeding pests to maintain the predator. In fruit orchard culture the technique is to spray selective poison on one quarter of the area to reduce either pest or predator consequently maintaining a balance. One absolute NO-NO is to dump infested plants and potting mix on the garden or compost heap. Ants will rescue soft scale, mealy bug, soil and root mealy bug. Once ants have established a haven for these insects it is a source of constant reinfestation. Boil, bake or micro-wave all infested soil before dumping.

Portea Taxonomy

by B Murray

TAXONLIST BROMELIACEAE 12/09/2018
PORTEA Brongniart ex C.Koch (8) Portea alatisepala Philcox Portea filifera L.B.Sm. Portea fosteriana L.B.Sm. Portea gardneri Baker => Portea petropolitana var. poettigii Portea glaziovii Baker => Portea petropolitana var. petropolitana Portea grandiflora Philcox Portea kermesina, Brongniart ex C.Koch Portea legrelliana (Baker) Nicholson => Aechmea recurvata var. recurvata Portea legrelliana (Baker) Nicholson => Aechmea recurvata var. recurvata Portea nana Leme & H.Luthed Portea noettigii (Wawra) Mez => Portea petropolitana var. poettigii Portea orthopoda (Baker) Coffani-Nunes & Wanderley => Portea EXCLUDED TAXA
Portea <u>petropolitana</u> var. extensa <u>L.B.Sm</u> ,
Portea <u>petropolitana</u> (Wawra) Mez
Portea petropolitana var. noettigii (Wawa) L.B.Sm. Portea pickelii A.Lima & L.B.Sm. => Canistrum pickelii Portea silveirae Mez. Portea tillandeisides (Basel) Nichelen => Aashmoo reguruata var. ortaissii
<i>Portea <u>tillandsjoides</u> (</i> Regel) Nicholson => <u>Aechmea recurvata var. ortgiesii</u>

Whilst researching the article on Portea, it was frustrating to note that there were very few references on the topic. Most of the few articles and snippets I read were sparse on detail but often referred to the confusion associated with the placing of plants within this genus.

Portea and Aechmea were always closely linked in taxonomy. Generally, Portea leaves are all

rosette shaped, serrulate (small curved spines) and taller with stiffer leaves.

In 1891 Carl Mez used pollen as a factor in his taxonomic system and created the Gravisia genus. Portea pollen fitted into this key but differed slightly. In 1970 Dr Lyman Smith moved Gravisia into Aechmea. In 1991 the Gravisia complex was again recognised by Read and Luther as the Aechmea/Gravisia complex. In 2007 Leme and Siqueira added more plants to the Gravisia complex. They moved *Portea leptantha* to Aechmea.

In 2015 a DNA Study strongly supports a Portea/Gravisia complex. (There are four different groups within this complex. The fourth group was Portea and 3 Aechmea *-bahiana, marauensis and rubrolilacina.*

Reference: Wisnev, M. Distinguishing Aechmea and Portea, Part 1and 2. San Fernando Valley Bromeliad Society, Dec 2015/Jan 2016 Newsletter.

WILDFIRE GARDEN BROMELIAD NURSERY	FOREST DRIVE NURSERY
ALCANTAREAS FOLIAGE VRIESEAS	Specialising in species and varieties mostly from imported stock.
NEOREGELIAS & OTHER GENERA VISITORS WELCOME BY APPOINTMENT	Tillandsias to Titillate even the most discerning fanciers.
Cheryl Basic 1560 Yandina-Coolum Rd, Yandina, 4561 Ph: 07 5472 8827 Mob: 0403 193 069 wildfiregarden@westnet.com.au	Beautiful Vrieseas (incl Silver species), Guzmanias, Aechmeas, Neoregelias, etc.
	Visitors welcome but please phone first T: 02 66554130 E: <u>ptristra@bigpond.net.au</u>

Southwestern Colombia is open for visitors

by Bruce Dunstan

Photos by the author. (brucedunstan@hotkey.net.au)

This May I had the pleasure to travel with Carla Black and Angel Rodriguez to Nariño in southern Colombia. Last year we were in NW Ecuador looking across the river into Colombia, wondering what might be growing there. This year we had a look around and found some interesting plants.

Nariño department has had its issues with security in the past few decades and travelling there hasn't been recommended. With the peace agreement, times have changed and we had only positive experiences in the time we spent there.

The main road that heads down from the high mountain city of Pasto to the coast at Tumaco

is really the only road you can take to experience various elevations, a requisite for seeing plenty of different species. I spent a lot of time on Google Earth and looking at local maps for different roads to get out and about on. Once on the ground we realised that the routes I had found on those maps are really only tracks for horses or motorcycles.

Our Colombian nature travel bible, *Birdwatching in Colombia* mentioned three different forested protected areas accessible from the road, and so we did our best to make contact prior to visiting. The highest at 1850m is La Planada Reserve. Thankfully we were able to make contact, with only a slight misunderstanding. We learned at the last minute there's a new road and we didn't have to walk in 6km with all our gear! We ended up staying for three



comfortable nights, although the cold shower at that elevation meant you had to get in and out quick while you were still warm from the walking – as we did on their many trails.

La Planada means the plain in Spanish and refers to a large flat area within the reserve that sits at around 1800m. Around this are some steeper ridges that proved to be rich in more plants.

As we drove into the reserve centre I was already trying to get out of the moving car as we had driven past what I thought were red Guzmanias and also flowering *Guzmania caricifolia* growing alongside the entry road.

After booking in with our Awá hosts I ducked back outside and discovered what I thought were Guzmanias were in fact Pitcairnia lutyneiorum. A red flowered species with bracts that was red described from this locality back in the early 80s. Also growing at the 1850m elevation of the lodge were Guzmania testudinis a species we saw growing across the border last year at similar elevation.



Guzmania caricifolia, La Planada

We took a long walk down to the river at the back of the reserve, down to below 1600m, and saw flowering plants of *Guzmania wittmackii* with orange bracts and yellow flowers.



Left: *Guzmania wittmackii, La Planada*

Also spotted in flower along the track were the orange flowered *Pitcairnia bakeri* and the white flowered *Pitcairnia brongartniana*. Growing close to the creek was *Pitcairnia derooseii*

an attractive plant with orange red bracts and orange flowers. This plant was growing epiphytically up a tree to 2m before it produced flowers.

Over the next couple of days we walked other trails around the reserve. Walking higher we found more plants of *Guzmania caricifolia* that had inflorescences on them. Sadly, there were no actual flowers open. The flowers themselves are huge for Guzmania - more than 40mm across and a green yellow colour. The bracts and sepals made up for being bright yellow and red respectively. Quite an attractant for their pollinating hummingbirds. Also spotted were *Guzmania scherzerianum*. The Colombian plants of this species appear different to the ones we've encountered in Panama with more green on the bracts and being slightly smaller than the Panamanian ones encountered.

Whilst walking down hill at around 2000m from one of the higher spots in La Planada, that looks out over the river valley that the main road down to Tumaco follows, we came across a yellow Aechmea with white flowers. The grey green foliage had noticeable petioles and reminded me of *A. tayoensis* albeit a bit smaller. This plant was probably only 1.0-1.2m across. We took plenty of images and our guides were happy to bring the flowering plant back to the lodge to plant it in the surrounding gardens. We spotted another 3 individuals as we walked back down toward the lodge so it appears to be locally common. After posting images to Flora Pix we discovered this plant is a new Ronnbergia and has also been photographed by Alexander Hirtz across the border in NW Ecuador but remains undescribed for the moment.

Our next stop was down the hill at the Río Ñambí Reserve near the town of Altaquer. This



reserve is at 1200 -1400m in wet forest averaging 7m of rainfall a year. We spent the day with a guide walking the main trail that had been paved with small tree trunks, keeping us out of the mud, but they were on the slippery side. On the walk in we saw Guzmania testudinis again as well as Guzmania graminifolia, in flower covering a large tree with its long caulescent stems. We had also spotted this species last year near Lita in Esmeraldas, NW Ecuador. In flower alongside the slippery path was Pitcairnia spectabilis a large Pitcairnia with pink rachised spikes of greenish yellow flowers more than 1.5m tall holding 50-70 flowers.

Left: Pitcairnia spectabilis

Further along the trail we came across *Pitcairnia elongata* and as the name suggests it certainly has a long inflorescence up to 2m long hanging down from a large epipyhytic plant. The red bracts that surround the yellow flowers were very bright in the forest no doubt to attract humming birds for pollination. I noticed young buds that were yet to flower were covered in mucilaginous slime no doubt to protect them from damage before they could produce their flowers.

Right: Pitcairnia elongata

Closer to the creek where we would turn around to begin the walk out of the reserve we came across one of the most fantastically patterned Guzmanias I have ever encountered. The plants



themselves were more than 1.2m across with heavy dark bands 40mm across laid over a green plant. The effect is incredibly ornamental and reminiscent of the stripes on *Vriesea hieroglyphica*. As I was looking at the sterile plants I thought they reminded me of *G. pseudospectabilis* that we have seen previously around Colombia and Ecuador. Jeffrey Kent, on seeing the images thought these striped plants was more likely to be *G. danielii* and the yellow form of this species. On all matters Guzmania I'm more than happy to defer to Jeffrey's years of fieldwork, 50 trips in 30 years although I know he has well and truly added to that record recently as Colombia becomes a safer destination. Hopefully one day someone



will photograph these large heavily striped Guzmanias in flower.

Left: Patterned leaf Guzmania (possibly *G. danielli*) On the walk out of the reserve we came across another caulescent Guzmania from the old genus Sodiroa. This plant was larger than graminifolia and had thinner leaves than caricifolia. Without flowers we will never know but as we travel these areas we seem to be seeing more of this intriguing group of Guzmanias.



We stayed four nights in Altaquer in the boarding-house accommodations run by the reserves administrator's mother. We were one big happy family, with easy access to their little grocery shop in the front including the beer fridge. What could be better!

From our comfortable home base, the next day we visited La Nutria Reserve, an Awá Indian reserve named after their river otter, close to the town of El Diviso. This region is very famous for the number

of plants that have been described in this area. We spent another day walking the forest, at about 700m elevation, with local guides who pointed out plants that had meaning in their culture. As we got away from the road and the trees got bigger, we saw plenty of *Pitcairnia spectabilis* and at this locality the plants had maroon reversed foliage, which was very attractive along with a darker rachis on the flower spikes with more *P. bakeri*. Also spotted in flower were tree loads of *Guzmania scherzeriana*, *G. rosea* and the large multibranched spikes of *Guzmania regalis*. This species was also spotted near Lita in Ecuador last year. As the name suggests it is a regal sight in the forest.



Left: G scherzeriana

The highlight of the walk proved to be a flowering Pitcairnia with 1m long pink bracted inflorescence. The flowers on this plant were at the top of the pink bracted inflorescences well above where they would have been amongst the coloured bracts on *P. stevensoniana or P. elongata*. We busily took plenty of images, as it wasn't something I recognised from the recorded species file I carry with me in the field. Hopefully someone who collects botanical specimens will get there in May to get this plant into a herbarium and further study.

As we wandered out and back up the steep hill I found a Lemeltonia that had finished flowering. On the other side of the highway we spotted what may prove to be another Guzmania species. Sadly, it was after lunch and the rain was in full intensity making photography virtually impossible. I had Angel holding his and my umbrella above me as I made futile attempts to photograph the plant which was probably 7m above the ground growing on tree trunk. The plant had plicate foliage adapted to survive heavy rain and had an upright red spike with yellow sepals. Sadly, it wasn't in flower and my images were terrible but enough to raise hope in taxonomists that it might be something new. Another plant that will need more fieldwork in the future.

Our third day in the area took us for a drive from Junín towards Barbacoas. Many interesting plants have been catalogued on this route, and there are still some patches of forest, especially where the paved road runs through the Pro-Aves Reserve El Pangan. We didn't get to visit the reserve, but the roadside was fascinating. We were warned against even taking photos by a passing motorist and sometime reserve ranger! We calmed his fears and were happy to know that the forest is well cared-for. Beyond this zone, the area is heavily intervened, and we were fortunate to walk through another patch of forest ringing an active logging operation. Starting at the top end of the road we were able to spot Guzmania kraenzliniana and G. kressii two species we have seen elsewhere in Colombia, but they were growing much lower here at 1000m although I was struck by how wet the forest was and how much moss and epiphytes dripped from the trees. Alongside the road we spotted a red flowered Pitcairnia that had two strange black horned protuberances from its red sepals. Ronnbergia morreniana with its spotted foliage was also spotted growing in the roadside cuttings. This plant has fantastic foliage often being a bright light green in high light covered in purple spots, sadly no purple flowers to be seen. As we drove below the town of Buena Vista and a quick stop for coffee we saw a huge flowering Guzmania hollinense. This individual had purple bracts on a massively tall inflo well over 2m tall. I've seen them with purple foliage on previous trips but this purple bracted individual is a first for me. We ended up turning around at 424m elevation at the logging operation as we weren't really seeing anything different and we needed to get back up what was a really rough rocky road. Where we turned around Carla and I went into the forest for a last look and found a couple of golden frogs which for me was a first as well as what may be a new Cochliostema species an ornamental genus of 2 known species within the family Commelinaceae. The large trees we walked through were loaded in patterned leafed forms of Guzmania musaica, sadly not flowering but they looked fantastic with their patterned foliage forming large colonies on the large trees.

Following our first days' successes in Nariño we had some time left in our two-week trip and felt that we should climb back over the Andes and drop down into the Amazonian drainage in Putumayo. This meant a full day's drive up and over to the mountain town of Sibundoy at 2200m. We saw masses of flowering *Tillandsia humboldtiana* as we crested the mountain range and began our descent into Sibundoy. These Tillandsia have long arching red inflorescences that measure up to 0.5m in length so really stand out from the green roadside forest. Also spotted were *Pitcairnia lehmannii* and *Racinea tetrantha*.

We bundled up in blankets on the porch of the hostel and settled in for another cold evening. We had clear skies and the stars were amazing. We heliconia hunters weren't prepared for the chilly high elevations!

The next day we began our drive to Mocoa along one of the steepest roads I have travelled down into the Amazon basin. The side slope is so steep that the road is just barely one lane wide, with frequent turn-outs, and frequent backing up when meeting oncoming traffic. Along the way at the higher elevations we spotted *Pitcairnia brunescens, Tillandsia schimperiana* and what may have been *Guzmania kressii* or *Guzmania squarrosa*. The plants were on trees alongside the road but were impossible to get to due to the steep slope. While waiting for some trucks to manoeuvre around each other on the skinny road we spotted a red brocket deer standing motionless on a scree fall happily watching us as we waited to get moving again.

In the large trees alongside the road we then spotted lots of a Tillandsia with pink multi branched spikes. The consensus from experts is that these are a species described in 1927 but likely these individuals were the first photographed. Something that has proved common with Colombian plants finally getting rediscovered after their initial description. In the trees alongside the *T. reversa* we saw the bright yellow-branched inflorescences of *Guzmania hirtzii* making a fantastic show.

Further down the hill we noticed another Guzmania flowering that had branched globular spikes absolutely loaded in mucilaginous slime with the yellow flowers poking through the protective layer of slime.





This is likely another new plant from discussions with Jose Manzanares about it.

Above: T reversa

Left: *Guzmania sp nova* between Sibundoy and Mocoa

After losing more altitude we came across a plant I had seen years ago on the FCBS site that really excited me. It is a Mezobromelia that looks close to *capituligera*. It has a large upright spike to 1m tall with red bracts and yellow sepals and flowers. Photos were taken and when I posted it to Flora Pix later that night we discovered it is also likely a new species of Mezobromelia.

Colombia continues to amaze at the diversity in plants that are easily spotted alongside the road, which makes finding them so easy and comfortable, rather than slogging through the forest for days at a time, although that has its own attractions too.

Mocoa was the location for a terrible tragedy 14 months before our visit and Carla was there 48 hours before they had a disastrous landslide that killed more than 250 people in the pre-



dawn after torrential rain caused massive landslides. We drove past fields of rocks some larger than cars or even small houses that had come down the hill and devastated suburban areas. Where we stayed our host was up at 4 AM radioing the river heights after a night of heavy rainfall. Angel told us that the flowing river is a good sign as a reduction in flow can signal a slide has blocked the flow potentially causing a dam that could break and cause an even larger slide. The protection of the forest surrounding the town has become a priority since the disaster. On a brighter note we were privileged to see a magnificent flowering example of *Aechmea manzanaresiana* in full flower on the drive into the accommodation our guide from Sibundoy had suggested for us. A member of the Platyaechmea group *A. manzanaresiana* has a large dark orange red inflorescence that glowed in amongst the green of the surrounding forest. That evening, at 750m, we were happy to be back in our own habitat.

The next day we sat around in the morning waiting for the rain to ease. It was wet season after all. By lunchtime we decided we were going to have to head off and get wet to see anything or we wouldn't get the chance. We walked on what was allegedly an ancient Incan path. To us it looked more like a logging track, anyway we slowly gained altitude in what was nice forest albeit wet with the constant rain and roaring creeks and rivers tumbling down the steep terrain. We spotted *Aechmea penduliflora* in flower in the trees.

Leaving Mocoa and heading towards Pitolito we saw some nice clumps of flowering *Tillandsia heterandera* growing on trees in a disturbed area. The plants were still pre flowering but had large branched pink spikes forming. This road really deserves a closer look one day. Sadly, we had our return deadline looming and as we drove past trees loaded in bromeliads I had no idea what I was looking at.

We did stop occasionally as I couldn't pass some plants that were in flower. One we stopped for turned out to be potentially *Tillandsia archeri* a closely related plant to *Tillandsia turneri*, a higher elevation species we have seen in other regions but the *archeri* has more distinct branches. Oh the joys of taxonomy!

We drove through Huila state and then back into Cuaca and started to gain more elevation, as we were to cross the range through the Purace National Park. This high elevation has a lot of preserved elfin cloud forest that is crossed by a dirt road and the high volumes of trucks meant that progress was slow. A terrible thing when there was a timeline that we had to meet but by the same token it allowed us to peruse the vegetation closely resulting in me stopping the car when I spotted something in flower. Racing out and as quickly as I could shooting 10 quick images then jumping back in to the car and getting going before we were overtaken by a slower truck.

Outside the park we stopped for *Guzmania multiflora* with bright orange flower spikes and what appeared to be yellow sepals. Within the Park we stopped and photographed *Guzmania lychnis* a plant I have seen previously in central Colombia again at high elevations. A stunning red inflorescence with white flowers held above steel grey foliage, truly an architectural plant but likely never to make it into cultivation due to its high elevation growing conditions.

We then stopped and snapped flowering individuals of what might be Guzmania gracilior with purplish brown bracts and yellow sepals on a thin upright spike to 700mm tall. Growing pretty well alongside them were Guzmania bakeri again another species with tall upright thin flower spikes this time to 1m or more of red orange bracts. We also spotted G. squarrosa in flower. This high elevation forest would make a great place to spend a couple of days exploring one day as we only saw what was just alongside the roadside. I'm betting there would be plenty of Tapir and spectacled bear roaming this strange high elevation cloud forest. We then gained more altitude and popped out into real paramo with the strange Espeletias from the Family Asteraceae. From then on we found ourselves on paved roads that turned into toll highways and we were certainly back in civilization.

Above: G. lynchnis Below: G. bakeri



A quick stop for lunch at a restaurant recommended by a local taxi driver, which has the best Sancocho, meat and vegetable soup of the trip, those cab drivers know where the best food is to be had, we were at the airport and ready to head home. Only a 1.5 hour flight for Carla and Angel, although then a 7 hour car trip and for me 21 hours in the air and lots of time between flights but a 20min car ride and home at 11:30PM and work the next day at 6:30AM. As we were spending our last couple of days driving around southern Colombia we have already made a plan for next year. 7m of annual rain weren't quite enough, next year we are headed back to the pluvial forests where they can receive 13m or rain per year in Chocó.



Author with *Ronnbergia sp nova, G hirtzii*

Portea

by Barbara Murray

The spectacular flowering Portea genus currently has eight species (TaxonList2018) indigenous along the Atlantic coastal region in Brazil from Rio de Janeiro north to Bahia. It was discovered as early as 1826 in Brazil, but it wasn't until 1856 when K. Koch first described the genus, and then in 1885 named the genus after Dr Marius Porte, a 19th-century French naturalist who was cultivating Portea species for introduction into society. Dr Porte died in 1866 in Manilla whilst on a collection expedition for the National Museum of Natural History. Mulford Foster (1888-1978) also collected Portea species during his extensive travelling.

Portea mainly grow terrestrially in full sun on rocks or sandy formations along the coastal regions. Some may grow epiphytically. They tend to be robust plants, medium to large size, with attractive foliage, broad and stiff, edged with large, sharp spines. They thrive in strong light, preferring a well-lit to part shade position rather than hot sun. Their long-lasting summer inflorescences are extremely decorative reaching up to 1.2m in height. The colours are delicate in shades of lavender and pink changing to dark purple berries.

Portea perform well in South East Queensland. All plants in this genus need bright light and warm conditions in a well-drained growing mix. Just give them space. They are hardy plants that need to be grown outside as they grow large and clump prolifically. They can be grown in large pots in the garden. They do not need much water in winter or they may rot in the cold temperatures. High humidity in summer is best so keep water in their tanks and water when the soil is dry to the touch. Feed in the growing season if they are in pots. They do pup prolifically and will soon fill up the pot or the garden as the flowered plants do not die away quickly and soon many generations in varying growth stages are grouped together.

Many of these species are remarkably ornamental in both foliage and inflorescence and provide excellent landscaping possibilities. The flowering is usually finished by early summer but the dramatic transition to berry continues to add interest and colour.

WILDFIRE GARDEN BROMELIAD NURSERY	FOREST DRIVE NURSERY
ALCANTAREAS FOLIAGE VRIESEAS	Specialising in species and varieties mostly from imported stock.
NEOREGELIAS & OTHER GENERA VISITORS WELCOME BY APPOINTMENT	Tillandsias to Titillate even the most
Cheryl Basic 1560 Yandina-Coolum Rd, Yandina, 4561 Ph: 07 5472 8827 Mob: 0403 193 069	discerning fanciers.
	Beautiful Vrieseas (incl Silver species), Guzmanias, Aechmeas, Neoregelias, etc.
	Visitors welcome but please phone first
wildfiregarden@westnet.com.au	T: 02 66554130 E: <u>ptristra@bigpond.net.au</u>



Portea alatisepala according to Derek Butcher has an interesting history. First the plant was discovered and collected in 1977 but was not named until 1991. He writes: 'One would think the herbarium specimen was somewhat tattered after this time! Meanwhile in 1986 Elton Leme had a photograph in the BSI Journal of a Portea silveirae which was later thought to be Aechmea grandibracteata and then considered be the long awaited Portea alatisepala.' to (Bromeliads in Australia). This species grows well in shade or filtered sun. It has olive green leaves which develop reddish highlights when grown in more sun. Heavy sharp black spines are finely scaled on both sides of the leaves. The flower spike is erect or slightly leaning and extends above the foliage. The

inflorescence is hot pink and the flower petals are vivid blue. It flowers in autumn. *P* alatisepala is native to Bahia state, growing at sea level. (*Photo B. Murray*)

Portea filifera was discovered in Bahia in 1939. The leaves are dark green and the plant is around a metre high without the cylindrical inflorescence. (*Could not find a clear photo.*)



Portea fosteriana Photo by J. Kent BSI Journal 1978 V28(4) p 192



Portea grandiflora Photo Bromeliad CD ex Butcher - Eric Gouda

Portea fosteriana. Collected in 1939, it is a large plant found growing 550 metres up in Espirito Santo state. About a dozen brownish green leaves are armed with conspicuous dark spines along the edge. The flowering plant may reach a height of 1.2metres. The inflorescence is bright red. This is smaller and more compact than *Portea petropolitana*.

Portea grandiflora is native to Itacare in Bahia State. It is a large plant. The inflorescence reaches 50cm. tall. The club shaped inflorescence is shocking pink with lavender flowers and rises high above the foliage. It blooms in late spring.

Portea kermesina Collected from the Amazonian forests of Columbia, this species was originally named *Aechmea colombiana*, but was reclassified. It is quite cold sensitive and needs dappled light. Medium sized with leaves forming a loose wide opened rosette, this plant is considered small enough to be grown indoors in a pot. Rigid green leaves with dark spotting and edged with small curved spines are slightly longer than the inflorescence. In botany kermesina is an Arabic word meaning carmine (a vivid red colour) and this is the dramatic colour of its club like inflorescence with light blue flowers. It flowers in winter. (*Photo B. Murray*)





Portea nana This is the smallest plant in the Portea genus. It is closely related to Portea kermesina differing in its stoloniferous habit and smaller size. Portea nana comes from a mountainous region about 500 to 600m high, growing on the higher branches of the tallest trees of the forest, and subject to dense fog. The leaves are yellow becoming greener, with spines along the edges. The inflorescence is cylindrical with

pink flowers and lavender and white petals. (Photo ex D Butcher CD)

Portea petropolitana This species was named after the mountain ranges near the Brazilian city of Petropolis, situated in Rio de Janeiro state, where it was discovered. It was also collected from Vitoria in Espirito Santo state. Twelve dark green heavily spined leaves form a stiff rosette about a metre tall. An inflorescence of blue and pink with white lavender petals and light orange ovaries adds another metre to the plant. It grows well in almost full sun conditions, multiplying readily to become a beautiful grouping with long-lasting flowers in a few years. It is loath to flower until a clump is formed, but flowering can be hastened by under-potting. (*Photo ex D Butcher CD*)





Portea petropolitana var extensa in Alma Park Zoo, Brisbane photo by Ian Hook

Portea petropolitana var. extensa This plant was collected from a mangrove swamp in Espirito Santa state. It was mass growing on the roots of mangroves above high tide. This species is very similar to Portea petropolitana but with a longer, more open inflorescence. It is probably the most open of all the species. It grows to a metre tall with the narrow pale yellowish green leaf blades forming a dense compact rosette. The leaves are not as rigid as other Porteas and spines smaller the are and browner. The flower spray adds a

metre to the plant. This plant is considered most delicate and graceful with its coral red spray with lavender petals and apple green ovaries which in time turn to dark purple berries.

Portea petropolitana var. noettigii This variety is considered to have a more beautiful inflorescence and more intense colour than variety *extensa*.



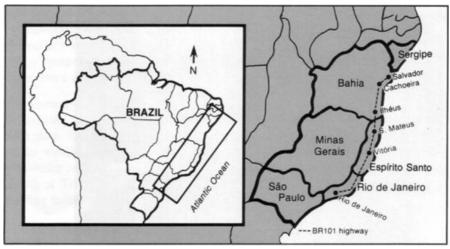
Portea petropolitana var. noettigii Photo ex D Butcher CD on Bromeliads



Portea silveirae

Photo Elton Leme Published in Journal of The Bromeliad Society V36(6) Nov-Dec 1986

Portea silveirae This plant is found within Bahia, Espirito Santo and Minas Gerais states. It was named after A. da Silveira who discovered the species in Minas Gerais state around the 1900s. It has narrow yellowish green leaves with a long dense attractive spike.



BSI Journal 1986 V36(6)

Bibliography

Butcher, D. Bromeliads in Australia <u>www.bromeliad.org.au/pictures/Aechmea/rubrolilacina.htm</u>) TaxonList. <u>http://botu07.bio.uu.nl/bcg/taxonList.php</u>

Mulford B Foster. The Pleasing Porteas. The Bromeliad Society Bulletin Vol VI November December 1956 No 6

Victoria Padilla. The Colorful Bromeliads Their Infinite Variety. 1981 The Bromeliad Society

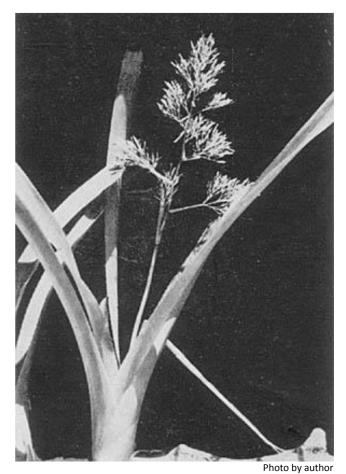
The Pleasing Porteas

Reprinted from The Bromeliad Society Bulletin Vol VI November December 1956 No 6

Some of the plants that we now call Porteas have had a rather varied 'name calling' career. Exclusively Brazilian there are only five recognized species and two varieties. Outstandingly decorative some of them should be much better known horticulturally, and since this is the one hundredth anniversary year of the genus, we feel it is fitting that plant fanciers become more familiar with its history.

The first plant to be called a Portea was found in Bahia, Brazil by Blanchet. It was botanically described by C. Koch in Ind. Sem. Hort. Berol. for 1856 and therein named *Portea kermesiana*.

The genus was named for Dr. Marius Porte of Paris for he was the first person to introduce this plant into cultivation in 1885. So far as we know there is now no living material under cultivation of this species and there seems to be no record of anyone having collected it



Portea leptantha Harms

again since Blanchet. Dr. Porte was a naturalist who lived in Brazil from 1834 to 1859 where he worked in the fields of palaeontology, conchology, ethnology and botany; he also made an outstanding medical contribution in his humanitarian service during the cholera epidemic in Bahia, Brazil. (Biog. notes from Revue Hort. 1870 p. 230 by Houllet.)

To confuse the botanical history of the genus Portea a little more, we find that Gardner collected a plant in the state of Minas Geraes about 1840 but it must have laid in the herbarium, unnoticed, for forty-nine years, as it was not identified until 1889 at which time it was named *Portea Gardneri* Baker. Although this plant was, no doubt, the first Portea ever to be found, it was not the first to be named.

The Princes Sachsen-Coburg found this same species (of Gardner's collection) during their famous botanical expedition to Brazil in 1879. It was named and published (nine years before Gardner's specimen came to light) as *Aechmea Noettigii* Wawra in *Oesterr. Bot. Zeitschr.* XXX 1880. (Wawra was the botanist on the Sachsen-Coburg expedition.) Later, in 1892, Baker renamed this plant as *Aechmea microthyrsa;* then, in the same year, reconsidered its validity and put it in another genus, naming it *Streptocalyx orthopoda*. In the same year Carl Mez, in trying to clarify the confusions, renamed it again and placed it in the genus *Portea*, returning

for the species name to that of Wawra, when he named it Ae. *Noettigii*. The Mez description of *Portea Noettigii* was published in *Martius Flora of Brazil* III. 3. (1892) 296.

But, this was not the final decision (!) Fifty-one years later, in 1943, it received its latest, and we hope its final name, of *Portea petropolitana* var. *noettigii* (Wawra) L. B. Smith because Dr. Smith considers it only a varietal form of the *Portea petropolitana*.

The original type species of *Portea petropolitana* (Wawra) Mez (first described by Wawra as *Aechmea petropolitana* in 1880) is now listed as *Portea petropolitana* var. *petropolitana* to indicate (according to the new nomenclatural rules) that it was the first one of this species to be named.

This species is now blooming profusely in the garden at the Bromelario in Orlando, Florida and is pictured in accompanying photo.



Photo by author Portea petropolitana var. petropolitana (Wawra) Mez

The author found this species in 1939 growing in the littoral within a few hundred feet of the Atlantic Ocean, in full sun and sand, in the state of Espirito Santo as well as in the interior.

It is a very robust plant. The stiff rosette of prominently spined leaves form a plant which often reaches from three to four feet in height when in bloom. The flower head is a rather compact, much-branched cylindrical panicle about twelve to eighteen inches long and continues to produce flowers from mid-October until January. The delicate white-lavender petals are held tightly in a cup of strongly spined sepals which are united at their bases and are barely distinct from the ovary. Sepals and ovary are a delicate pink-orange in colour. This lovely combination holds a lavender pistil emerging just above the barely open tube of lingulate petals. Each petal holds two nectar scales at their base. Unlike most bromeliads the old inflorescences do not decay and fall away after they have ceased to show any life, but, instead they persist for three and four years; they cannot be pulled out but must be cut off if

removal is desired. However, they are not unattractive and actually make a dried arrangement in between the annual flowering periods. It is a lovely addition to any tropical garden.

Another variety is also most attractive. *Portea petropolitana* var. *extensa* L. B. Smith (see p. 88 this issue; also on cover of Brom. Bul. Vol. 1, No. 2, March-April 1952) is perhaps the most graceful and delicate of all the Porteas. We first discovered it in a mangrove swamp area near the sea at Victoria in Espirito Santo, Brazil. It was growing in masses attached to the mangrove roots barely four feet above the high tide mark. The first plants we saw were not in flower and little did we realize what a beautiful bromeliad this was until we later found plants in flower growing on rocks near the inland bays of the littoral.

The light yellow-green leaves of this variety are not as stiff as those of the other Portea species and, although the leaf margin spines are large and jet black, they are really not very stout. With a charming open spray of flowers of lavender petals and apple green ovaries, this variety *extensa* is one of the most attractive additions to a bromeliad collection or garden that one could wish for.

Early in spring this plant brings forth a spray of delicate flower buds, each on a long pedicle that day by day continue to grow larger and more colourful. A month later the flowers, now ready to show their lavender petals, a few each day, continue to bloom for at least two months. Gradually the fruits enlarge and as they grow heavier the spray, now three feet high, nods gracefully above the narrow leaves and it remains a conversation piece until December when the berries will turn a dark purple. Rarely have they produced seeds unless they have been pollinated by hand or by the humming birds, although the fruits will be full size and solid whether it is with or without seeds. They have a pleasant sweet fruity odour and taste when crushed.

Portea leptantha Harms was discovered by B. Pickel in Pernambuco in 1929. Harms describes the colour of the flower as brick red. (*Note: This plant is now Aechmea leptantha Ed*)

The author collected this species in 1948 in the states of Paraiba and Pernambuco; a fine specimen of this plant has been in flower the greater part of this past summer (1956) in our Florida garden. The petals are yellow and the ovary orange-yellow. So far as we can ascertain this species has never been in cultivation before. The plant reaches a height of four feet and as shown in the accompanying photo the inflorescence is corymbose (composed of clusters) and each cluster contains many flowers on small branches. The individual plants have eight to twelve lingulate (tongue shape) stiff leaves with spiny margins and a stout terminal spine. They were growing on rocks in large clusters in full sun.

Portea filifera L. B. Smith was discovered in Bahia by Racine and me in June 1939. This was the first Portea that we had ever seen, and, incidentally, it is the least attractive, from a decorative standpoint, of any of the species in the genus. The stiff, dark green leaves reach a length of three feet but the inflorescence which is subdense and cylindrical, contain many small flowers.

Portea silveirae Mez was named for its discoverer A. A. da Silveira who found this species in Minas Gerais about 1900. The plant is a very rugged one similar to *P. petropolitana* var. *petropolitana*. The dense spike of flowers with reddish-lavender petals is a very decorative one and the writer took this species in both Espirito Santo as well as Minas Gerais in 1939 and 1940.

All of the species of Porteas bear their flowers on thin stems or pedicels and they have very small thin flower bracts at their bases but the colourful primary bracts at the base of each branch and all along the scape are quite ample.

New Registrations

Photos and Notes extracted from The BSI Bromeliad Cultivar Register



(V Milky Way' x V 'Forrest')

All original hybrids done in 2010-2011 and just released.

2018 Competition Results to August 2018

(Top 6 in each Section shown)

Section	Grower	Popular Vote Aggregate	Mini Show Aggregate
Advanced	Barbara McCune	25	70
	Ron Jell	36	27
	Bruce Dunstan	10	23
	Barry Kable	7	
	M Cameron	5	
	Peter Paroz	1	
Intermediate	Livia Doidge	14	32
	Maxim Wilson	10	18
	Pam Butler		15
	Jenny Ittensohn	5	8
	Fred Thomson	21	7
	Dorothy Andreason	12	
	Greg Aizlewood	11	6
Novice	Alfonso Trudu	43	93
	Gilda Trudu	22	63
	Jenny Brittain	7	
	Steve Molnar	5	9
	Cameron Smith	5	
	Judy Whitehorne	4	
Decorative	Ron Jell	19	
	Barbara McCune	14	
	Alfonso Trudu	9	1
	Janet Richter	6	1
	Karen Kiddey	5	
	Livia Doidge	5	

CALENDAR OF EVENTS 2018

Monthly Meetings commence with plant sales from 6:45pm. Information/Practical sessions at 7pm.

Presentations then commence at 7:30 PM.

AGM is held prior to March meeting.

Meetings are held at Uniting Church, Merthyr Road, New Farm on third Thursday each month except December.

July	19 July
August	16 August
September Meeting	20 September
October meeting	18 October
November Meeting	15 November
Tillandsia Study group	Nov, Jan dates tba
Spring Show	3-4 November at Belmont Shooting Centre, Old Cleveland Rd, Belmont
Christmas Party	6 December – Easts Rugby league Club

Plant of the month List for 2018-2019

September	Billbergia
October	My Favourite Bromeliad
November	Neoregelia, Nidularium

2019 (to be confirmed January 2019)

January	Aechmea
February	Tillandsia
April	Dyckia, Hechtia, Orthophytum
May	Alcantarea
June	Vriesea

COMPETITION SCHEDULE

Note: Each member may enter up to 3 plants in each class at a Mini Show and up to 3 plants for Popular Vote.

Jan - MINI SHOW

Class 1 – Bromelioideae not listed elsewhere in Schedule, species & Hybrids (Acanthostachys, Ananas, Androlepis, Araeococcus, Bromelia, Canistropsis, Canistrum, Edmundoa, Fascicularia, Hohenbergia, Hohenbergiopsis, Neoglaziovia, Nidularium, Ochagavia, Orthophytum, Portea, Quesnelia, Ursulaea, Wittrockia) Class 2 – Guzmania species & hybrids

Class 3 – Pitcairnia species & hybrids

Class 4 - any other flowering bromeliad species & hybrids

Feb & Mar POPULAR VOTE – any genus species & hybrids + novelty bromeliad display

April - MINI SHOW

Class 1 – Bromelioideae not listed elsewhere in Schedule, species & hybrids

(Acanthostachys, Ananas, Androlepis, Araeococcus, Bromelia, Canistropsis, Canistrum, Edmundoa, Fascicularia, Hohenbergia, Hohenbergiopsis, Neoglaziovia, Nidularium, Ochagavia, Orthophytum, Portea, Quesnelia, Ursulaea, Wittrockia)

Class 2 – Guzmania species & hybrids

Class 3 – Pitcairnia species & hybrids

Class 4 - any other flowering bromeliad species & hybrids

May & June POPULAR VOTE – any genus species & hybrids + novelty bromeliad display

July - MINI SHOW

Class 1 – Billbergia

Class 2 – Tillandsioideae not listed elsewhere in Schedule, species & hybrids

(Alcantarea, Catopsis, Mezobromelia, Racinaea, Werauhia)

Class 3 – Neoregelia up to 200mm diameter when mature, species & hybrids

Class 4 - any other flowering bromeliad species & hybrids

Aug & Sept POPULAR VOTE – any genus species & hybrids + novelty bromeliad display

October - MINI SHOW

Class 1 – Neoregelia over 200mm diameter when mature, species & hybrids

Class 2 – Tillandsia species & hybrids

Class 3 – Pitcairnioideae not listed elsewhere in Schedule, species & hybrids (Brocchinioideae, Lindmanioideae, Hechtia, Puya, Navioideae, Deuterocohnia, Encholirium, Fosterella)

Class 4 - any other flowering bromeliad species & hybrids

November - POPULAR VOTE – any genus species & hybrids + novelty bromeliad display



Guzmania lychnis