Bromeliaceae

VOLUME XLIII - No. 2 - MAR/APR 2009

The Bromeliad Society of Queensland Inc.

P. O. Box 565, Fortitude Valley
Queensland, Australia 4006,
Home Page www.bromsqueensland.com

OFFICERS	
PRESIDENT	Olive Trevor (07) 3351 1203
VICE PRESIDENT	Anne McBurnie
PAST PRESIDENT	Bob Reilly (07) 3870 8029
SECRETARY	Chris Coulthard
TREASURER	Glenn Bernoth (07) 4661 3 634
BROMELIACEAE EDITOR	Ross Stenhouse
SHOW ORGANISER	Bob Cross
COMMITTEE	Greg Aizlewood, Bruce Dunstan, Barry Kable, Arnold James,Viv Duncan, David Rees
MEMBERSHIP SECRETARY	Roy Pugh (07) 3263 5057
SEED BANK CO-ORDINATOR	Doug Parkinson (07) 5497 5220
AUDITOR	Anna Harris Accounting Services
SALES AREA CASHIER	Norma Poole
FIELD DAY CO-ORDINATOR	Ruth Kimber & Bev Mulcahy
LIBRARIAN	Evelyn Rees
ASSISTANT SHOW ORGANISER	Phil Beard
SUPPER STEWARDS	Nev Ryan, Barry Genn
PLANT SALES	Pat Barlow
	Phil James
COMPETITION STEWARDS	Dorothy Cutcliffe, Arnold James
CHIEF COMPETITION STEWARD	Gwen Parkinson
HOSTESS	Ross Stenhouse
BSQ WEBMASTER	Grace Goode OAM
LIFE MEMBERS	Peter Paroz, Michael O'Dea

Editors Email Address: rossjanstenhouse@hotmail.com

Front Cover:	*Quesnelia 'Tim Plowman'*	Photo by Ross Stenhouse
Rear Cover :	David Rees Floral Display	Photo by Ross Stenhouse

Contents

Note from the Editor's Desk

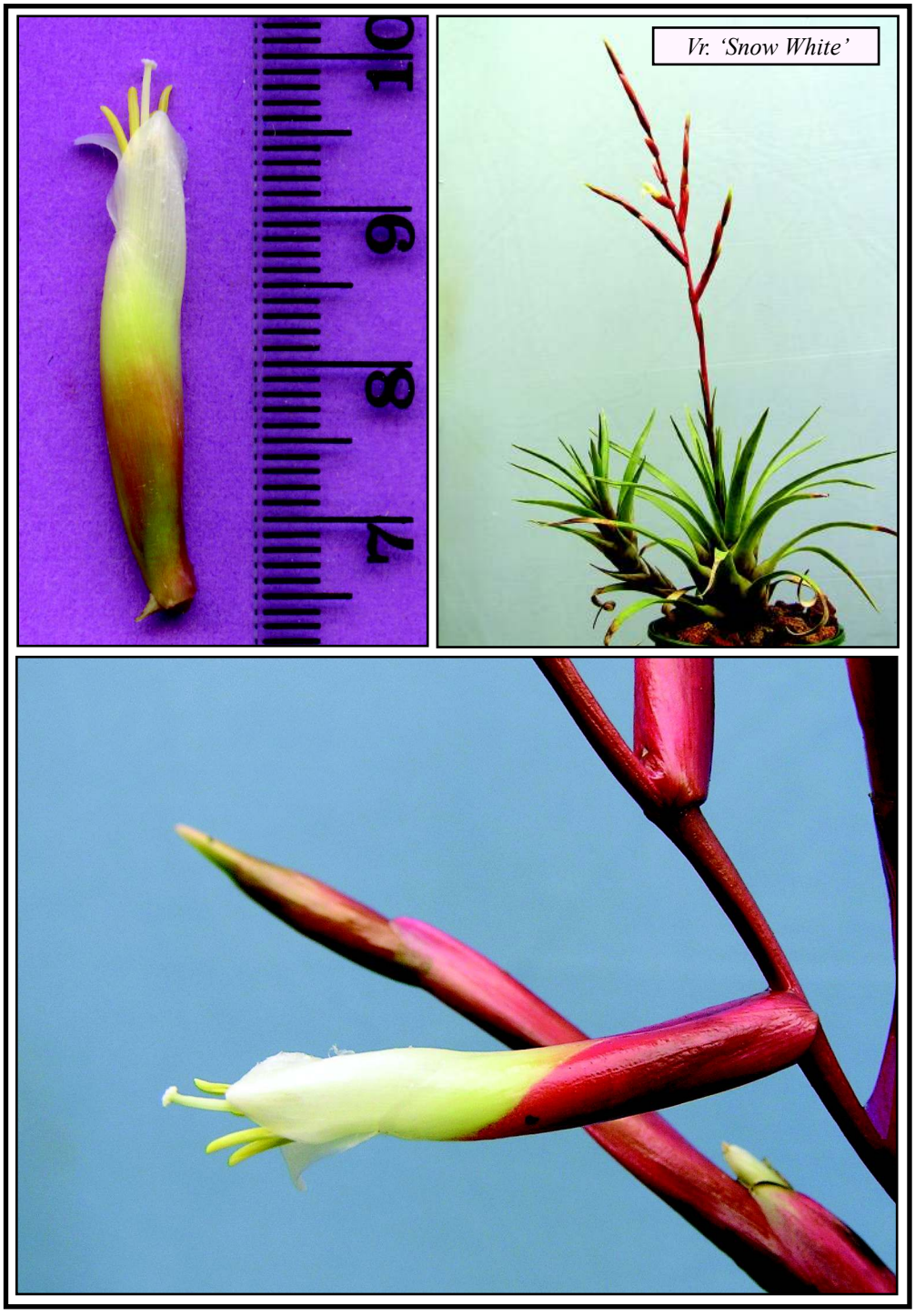
Most members are unaware of the value that the Society's web site serves to the wider bromeliad loving community. It's not flash, it's usually up to date and it contains PDF copies of most of the editions of this journal for which I was the editor.

During the month of April the figures for down loads of 19 editions of Bromeliaceae came to a total 6361, March 5206, February 6065, and for January the figures for the period were 7207. That's almost 25.000 copies in four months., While other pages on the site get hits, readers have learnt to visit the site every couple of months for the next edition of Bromeliaceae. With those figures I feel rewarded for the big effort that goes into each edition, likewise I think the authors who contribute to Bromeliaceae can feel likewise rewarded in that their articles are widely read.

The Quesnelia shown on the front cover was awarded 'Champion Bromeliad' at the recent Autumn Show. It was grown by member, Cheryl Basic. When I photographed the floral display prepared by member, David Rees, I was greatly impressed by the beauty of both the layout David had used and by the actual bracts and flowers in the display. The display reinforced my view that bromeliads produce some of the most beautiful flowers in the world.

Could be a bit of bias on display in that last statement because I have been heard to say "There are only two types of plants - weeds and bromeliads!" Do I can hear the odd member suck in their breath.

Finally I would like to thank the contributors to this journal. Without their submissions I wouldn't have a journal to edit. As each edition is put to bed, I usually scratch my forehead and think "What am I going to use for the next edition?" Well, this time because the journal is late (again), I have some articles for the next edition and one is from a new author, however I need more so how about dropping me a line.


Vr. 'Snow White'

Vriesea 'Snow-White'

by D Butcher Feb 2009.

Apparently some years ago Cheryl Basic imported a Vriesea sp.53 from Pam Koide at BirdRock in California but it remained unidentified. Recently when Mick Romanowski was marauding in Queensland he was rather taken by this dainty Vriesea in Cheryl's collection that did not fit the description of *V. corcovadensis* or *V. lubbersii*.

Needless to say Margaret took an interest in this plant in Mick's collection on one of our trips to Melbourne and we scrounged an offset. Mick said it was reticent to flower!. In 2008 , before the heat wave, it started to produce a flower scape which had us thinking of bragging rights over Mick.

In 2009 it was still going and we cared for it so much we brought it indoors during the infamous heatwave. It flowered so I took photos from all angles and even got permission from Margaret to remove ONE flower to scan.

I was ready for a telephone brag to Mick but guess what he said. "But all mine are in flower too!"

An email was sent to Harry Luther

-oOo-

Harry

You love challenges and have a good memory. This plant came to AU from the USA several years ago as 'sp' but no-one queried it till now. I think it is a species rather than a hybrid. You will remember the saga of the *corcovadensis* versus *lubbersii*. The main problem is the white petals which lean me towards *corcovadensis* but the leaves lean me to *lubbersii*. I have given up on the distichousness of the flowers!

Have you seen this around Florida? Any thoughts?

Derek

And the answer

As far as I can see, *Vriesea lubbersii*, not the old, broader leaf clone. Several Floridians collected it in the 90s or late 80s. There is also a *V. aff lubbersii* that I think is just a very large clone (more than 30 cm tall) that I've never seen flower. *Vriesea corcovadensis* seems always more delicate or thinner but I've not seen enough of either.

HEL

ps Why don't you ask Elton Leme?

-oOo-

Dear Elton

I know this has no direct links to Brazil but I have a little puzzle. This plant came to Australia from the USA several years ago as 'sp' but no-one queried it till now. As you know, I love queries! I think it is a species rather than a hybrid. The main problem is the white petals which lean me towards corcovadensis but the leaves lean me to

lubbersii. I have given up on the distichousness of the flowers!

Any thoughts?

Derek

-oOo-

Dear Derek,

You cannot imagine how many different plants of this group I have collected, all of them with specific discrepancies, which make identification inaccurate. At this very moment, I have some of them flowering and I gave up trying to identify most of them. Ap-

Bromeliaceae Production Crew

Editor: Ross Stenhouse

Proofreader, and distribution manager: Roy Pugh

Regular Contributors: Derek Butcher, Rob Smythe, Rob Reilly, Peter Paroz

parently, few of them are new. Others look to be just variations of different populations.

I agree with you that your plant looks closer to *Vriesea corcovadensis*, and I would not be much concerned with the rosette conformation at this point of the available knowledge. There is a PhD student trying to understand this group right now, so we wait to see what conclusions she makes.

Best,
Elton

-oOo-

This information made me decide to bite the bullet because it is better to identify this clone with a cultivar name than just *Vriesea sp*. Margaret came up with 'Snow-White'. Anyone who knows their Nursery stories will know that Snow-White had white skin and dressed in white (white Petals) had ruby lips (red floral bracts) and black hair (Colour of the leaf sheaths). Plant 20cm diam, x 15cm high, flowering to 30cm high. We will be linking this name to both *V. corcovadensis* and *V. lubbersii* in the Cultivar Register for possible amendment in the future.

How long can Bromeliads live ?

by Geoff Lawn

What a seemingly-simple question but with several implied deep meanings !

1. Regeneration. In the broadest sense, bromeliads are considered capable of living indefinitely, whether wild-grown or cultivated. A particular taxon or cultivar's genes are imparted into the next generation by seed for both species and hybrids. Vegetatively, clones are replicated by offsets or tissue culture, ensuring potential survival ad infinitum, providing growing conditions remain favourable for reproduction and the clone stays vigorous.

However, Mother Nature is quintessentially about renewal and recycling. So of course every solitary living organism has a maximum but finite life span physiologically possible. In other words it means death of the individual but continuity of it's offspring.

In the wild, a number of other interrelated, complex factors affect the survival of every single taxon in an ecosystem:

• seed germination rate and survival percentage to adulthood.

• a suitable growing niche, which may become less desirable over time, particularly for epiphytes as the forest canopy of host trees continually changes.

• growth and pupping rate , relatively-fast maturers usually aren't inherently long-term stayers.

• ability of a tightly-knit clump to remain connected; strong attachment of stolons and roots.

• breeding systems -- out crossing, selfing; natural pollinators.

• habitat preservation; environmental disturbance.

• adaptability to local climate variance over time, droughts, floods, extreme temperatures etc.

• susceptibility to pests, diseases and predators.

2. Longevity. Man can estimate roughly how long a particular solitary-growing species lives, such as *Puya raimondi*i taking 50-80 years from seed to maturity, but long-term field studies of particular specimens' longevity are seldom recorded. Does P. *raimondii* have detectable annual growth rings in it's cross-sectioned stem ?

Cultivation can bring advantages:

• better monitored growth, nutrition, protection from weather and climate extremes.

• efficient pest and disease control methods.

• widespread popularity and therefore while commercial or private stocks last, continued interest in cultivating.

Some cultural disadvantages are:

• most collections are in isolation. Species which require out crossing to achieve same species seed-set may be unfulfilled, particularly as many species have only one or at best a few distinct clones introduced into cultivation, which may not be readily available as seed or pollen parents.

• unsuitable local growing conditions or poor cultivation -- potentially a high mortality rate.

• whether commercial or hobby traders, collectors and collections come and go -- the only constant factor is change. History and origin details often are lost when collections are dispersed.

• man-made hybrids are "domesticated" - refined and conditioned to "civilised" growing conditions. If introduced into the wild most would not survive more than a few generations vegetatively and invariably cannot set seed true to type.

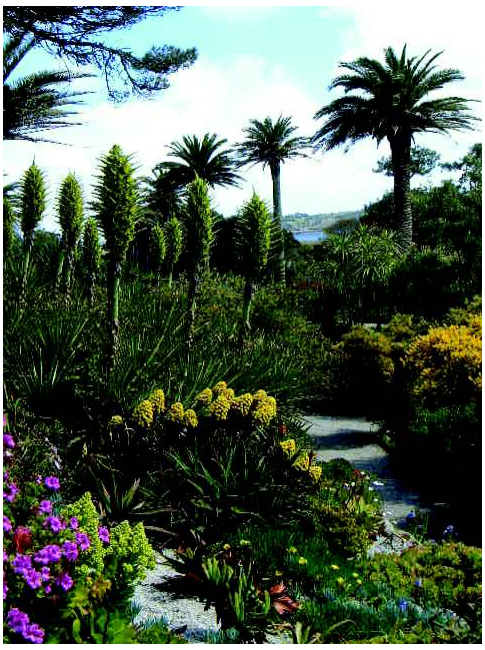
Herb Hill of Raintree Tropicals in Lithia, Florida has continuously grown since 1961 a specimen of *Tillandsia araujei* var. *araujei* from a single offset. In it's early years the clump was shadehouse-grown but later relocated to a greenhouse. By 1986 it's huge mass became just too heavy and split in two, one portion going to Marie Selby Botanical Gardens in Sarasota, where Harry Luther identified and recorded it as SEL 1986-0084A.

By August, 2004 Herb's remaining clump, hanging from the rafters to bench level, had extended to about 2 metres long by 70 cm. wide with at least 200 active growths. In December, 2007 Herb reported the clump is still intact and healthy, with no central die-off. This continual downward and outwards growth habit at average 4 or 5 cm. annually makes the specimen at least 46 years old.

Long-established botanical gardens or parks usually keep record of their plantings and may accommodate large tracts of terrestrial bromeliad genera. Potentially long-lived but slow growing Ochagavias, Fascicularias, Dyckias and Puyas may remain "permanent" for decades until the Institution's landscape maintenance and/or policy changes. Outgrowing their allocated space may seal such xerophytes' fate.

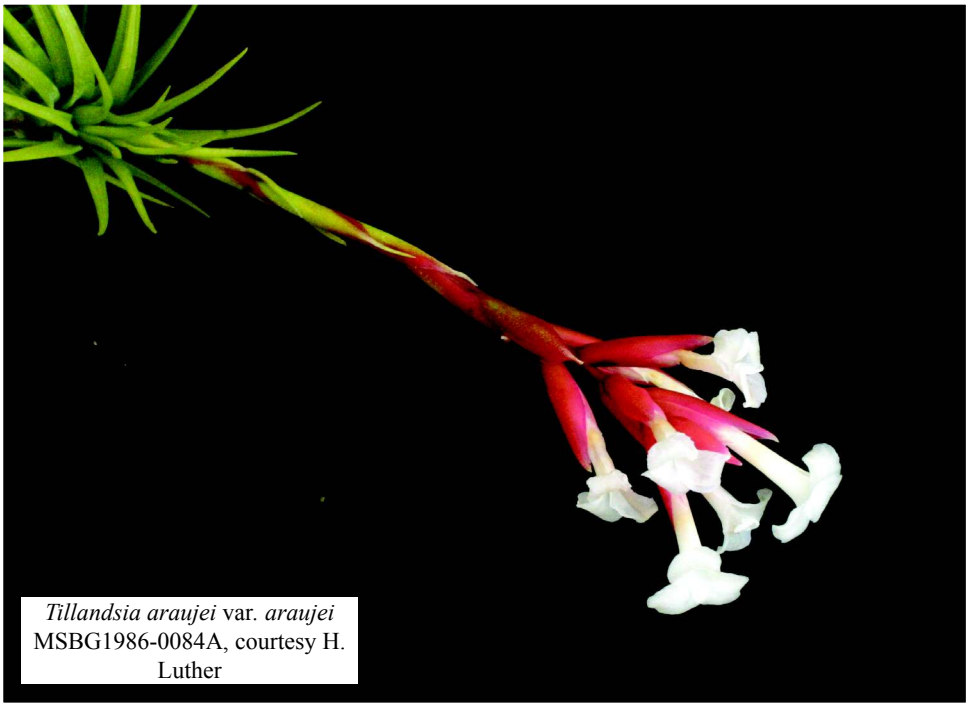
In 1848 *Puya chilensis* was introduced to Tresco's Abbey Garden in the Scilly Isles 40 kms. off the Cornwall coast, England. Planted on a terraced bank in the middle of the garden, this species now occupies almost exclusively a commanding site of over 30 metres long by 8 metres deep. Over the past 160 years this thick wall of puyas has spread down the embankment, leaving behind snaking trails of it's stout brown trunks.

3. Future of Conservation. Given the starkly-different scenarios of diminishing natural biodiversity and threatened brome-



Puya chilensis at Tresco Abbey Gardens, March 2000, photo courtesy Andrew Steens

Tillandsia araujei var. *araujei*, H. Hill collection, Aug., 2004 photo G. Lawn



Tillandsia araujei var. *araujei* MSBG1986-0084A, courtesy H. Luther

liad species habitats versus isolated species alongside an ever-expanding array of hybrids in cultivation, the leading question may well become as to which realm will survive the longest ? It's the greatest challenge at all levels for our BSI whose stated objectives are to promote and maintain public and scientific interest in the research, development, preservation and distribution of bromeliads, both natural and hybrid, throughout the world.

Acknowledgements:

Many thanks to Herb Hill, Derek Butcher, Harry Luther, Andrew Steens and Eileen Killingley for photos, information and advice.

References:

Benzing D. (1980) The Biology of the Bromeliads. Mad River Press Inc. Eureka, California.

Killingley E. (2006) Some bromeliads encountered during my trip to England. Illawarra Bromeliad Society Inc., Newslink October 2006.

online: http://bromeliad.org.au/ Illawarra Bromeliad Society Inc., Club News

Moore A. (2003) Puya. Tresco Abbey Garden website: http://www.tresco.co.uk/the_abbey_garden/Articles/article_puya_puya.asp

Sick of Getting your Arms Scratched?

Neville Wood in an article titled "Recycling" published in the Illawarra Bromeliad Society's April 2009 publication of "Newslink" has suggested an easy method of reducing getting scratched.

Neville says "I have found that by modifying a recycled pair of thick woolen work socks and cutting out the toe section you can get pretty good protection by wearing them on your forearms."

Good idea Neville!

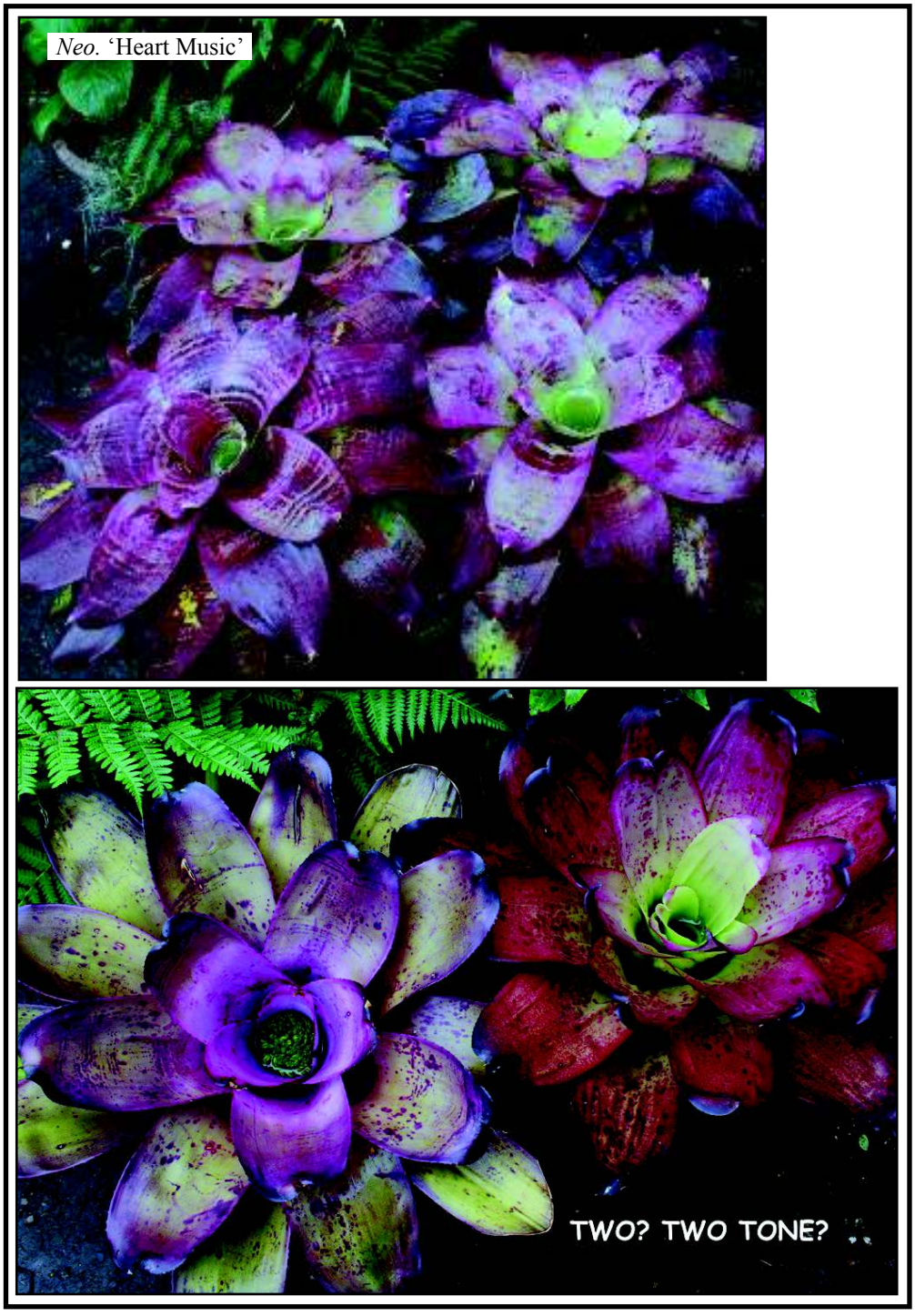
'Music' to the ears? SOS for how many more?

Neo..'Heart Music'? I can hear you saying 'not again' and preferring to stay well away from the naming debate, curiosity in this instance became irresistible. To make matters worse, I have four different plants that carry the name. The photos here show just two?

Having collected quite a lot of these beautiful plants I felt some of these photos may be of interest. With the particular one here in the photo one could almost think these are a variation within the same plant as I have found varying degrees of banding within these plants. EG: some plants heavily banded some ½ + ¼ down to almost nil as in photo. The plants pictured have all been grown under 50% shade cloth. It is perhaps worth also noting that cameras tend to often pick up more red tones than they should & that these plants are in fact more purple than red.

Along with these thoughts so what do we do with all the other neoregelias out there that there are more than one of that carry the same name? I have found this quite common, particularly the older plants. Large form. small form clone 1 2 3. Many I feel deserve a name in their own right. Some examples are *Neo*.'Two Tone' which I have four quite different plants. Photos here show two *Neo*.'Two Tone's, originally purchased from two of our largest nurseries. Some other examples are *Neo*.'Lilac Dream ' and *Neo.* 'Earthrose'…. to mention just a few of the two offs.

Apart from these there are so many simply stunning unreg. plants out there that are not listed with the FCBS or anywhere


Neo. 'Heart Music'
TWO? TWO TONE?

else, it seems a pity. At one stage I hoped to help with photos but nobody appears interested unless you were the original breeder with the full details of parentage.

Understandably an enormous task to create an accurate database. Perhaps we should carefully create an online database of these unregistered beauties so at least they will have an ID without being given even more pet names? A least we would have a photo reference. It could be created with as much data as possible + opinions from growers who are familiar with these plants. Many of these unregistered older plants are well known by certain names within this country by long time collectors who religiously adhere to the original names & like myself note the plants origin & dates where possible…what else can we do?… Don't let the magpies steal those labels….or the Green frog.

Happy Bromming.

Deb Green Frog

Purchasing Bromeliads on the internet

Written by Aaron Smythe

(Please note the below information is my own opinion)

Having a well known hybridizer and intellectual for a father is great. He feeds me information, but only enough to encourage me to learn for myself. One thing I have learnt for myself is about buying bromeliads on the internet. I wondered why he never did. Maybe it was because he was the older generation and felt a bit funny about purchasing on the internet. He warned me but I did not listen.

Neo. 'Trifle'

Vr. 'Jungle Jack' (unreg) grown by Mal & Michelle Cameron

Don't get me wrong, I have purchased (and received some duds) from the internet, but now mainly use these sites for learning purposes. By this l mean that if l see a Neoregelia l like, or have not seen before, l will then go to the fcbs website and proceed to the BSI Neoregelia Cultivar Registry Online Database. This will have the newly registered neo's (but no picture) and the old ones to firstly see the picture (if there is one) and compare it with the one being sold. I take into account different growing conditions etc. Secondly, I check the parentage of the plant being sold. I do this as I may use the bromeliad to hybridize and the features of the bromeliad may be beneficial. Thirdly, I like to keep an eye on what prices some bromeliads are going for (most are shocking). Fourthly, I check if the bromeliad that is being sold is registered. Even if it is a beautiful looking plant I keep away from any unregistered bromeliad as this compounds the problem of wrongly named bromeliads.

Another point about internet buying is that most sellers do not show photos of the actual plant/pup you are buying. I know it costs a small amount to add a second picture but maybe sellers can incorporate the mother and pup in one picture. I encourage people who are thinking about buying from a seller that does not show the picture of the pup to get them to e-mail a picture of the pup you are buying. Then you can make your mind up whether it is the real deal. I now avoid any sellers that do not show pictures of the plant they are selling.

In previous articles of the Bromeliaceae we have heard how there is a lot of bromeliads out there that are wrongly named. I admire my father's tenacity as he is one of the few who make an effort to make sure bromeliads are named correctly. It takes a lot of time and effort to solve naming issues.

The internet is one of the evils that compound the problem of incorrect labelling. Sometimes, it is not the sellers who are at fault as they put the initial name that they were given on the tag. The best option, if possible, is always to sight any bromeliad you are thinking of buying. This can be from your local Bromeliad society, nursery or local hybridizer/grower.

My aim in writing this article is not to give sellers who sell on auctions sites or who have their own internet site a bad name but to enlighten buyers to make informed choices when purchasing on the internet. In summing up I hope to encourage people to do their research before purchasing on the internet. By doing this little by little we will all help with ensuring bromeliads are correctly labelled.

The moral of this story is. Don't buy a picture buy a bromeliad.

A photo of *Neo.* 'Trifle' (page opposite) is one of my favourite internet purchases.

Food for thought

As a follow up to Neville's question regarding the use of potash Nov/Dec 2008 Page 40.

Sorry slow response, just missed the last edition with this one. Busy times in the garden.

I am more than happy to share ideas but please keep in mind this article was really only intended to share ideas, rather than a guide. Considering the uptake of fertilizer depends very much on the individual environmental factors in your particular area, light, temperature-photosynthetic rate, PH, potting medium etc.. there of course can be no exact rule of thumb & for the grower it is often a personal preference as to what works best for you..

With overuse of nitrogen it is so very easy to send all your lovely neoregelias irreversibly green & I for one would be really disappointed to think I had caused this, so please do take care. Some growers I find reluctant to state their exact rate of fertilizer usage - I suspect often for this reason + err on the side of caution. Potash on the other hand is safer to use in larger amounts, though I tend to avoid the foliage.

I often use these amounts & more without any problems. Also, variegated plants were chosen for this comparison as I find they tend to require + respond well to higher rates of fertilizer than many other Neoregelias. My personal preference - depending on the plant, I generally use around 10% nitrogen, a lot less than the rates here but the basic aim of this test was to see if one could maximize the colour in this particular plant with these higher rates of nitrogen v's Potash.

Fertilizing was done in late spring where temps were hovering around 25 deg with plenty of daylight so uptake was quite quick. On all these plants, soluble Sulphate of Potash., dry powder was added to the potting mix 10gms to 10lr…eg 2 teaspoons to a bucket. The high Nitrogen plant received. 21-1.8-9 + TE 9 month prills 8gm + 2 liquid feeds of 22-5-9. 5g to 5ltr + 5gm sulphate of potash. Plant 2. Received 21-8-9+TE 9month 4g + 2 liquid feeds + 10gm sulphate of potash. Plant 3.Was given 3g of 21-1.8-9 + liquid feed at ½ the above rate. The plant with the minimum received a good handful organic pellets with added potash. 4-2-8+TE .

Interestingly, the plant fed with organic fertilizer, as seen in previous tests- found that when sufficient quantities were used to stimulate growth, the bacterial action in the decomposition process of the transformation of the organic nitrogen, caused not only not the bacteria to consumed itself but also the roots in the vicinity of the fertilizer. This also resulted in leftover residue also blocking airflow in the potting mix…. this just confirming perhaps why we shouldn't use these type of pellets in pots. I have however seen some benefits of this when used very sparingly on plants to promote growth without effecting colour…but this is another rather long story in itself.

Also in this test I suspected some leaching of the soluble sulphate of potash in the very open chunky potting mix & more recent similar experiments [still under way] suggests the use of controlled slow release potash prills more beneficial.

Another interesting finding I thought, was the plants given balanced & higher rates of fertilizer appeared less prone to green slime in the bases of the leaves. Perhaps partly due to the anti fungal properties of the potash? or more likely, a healthy plant is a happy plant with higher resistance.

'Happy Growing. Deb Green Frog

Tillandsia cyanea & Tillandsia lindenii

Author: Peter Paroz

Autumn is the regular flowering season for *T. cyanea* and a related species, T. lindenii. These species are easy to grow in S.E. Queensland; and can be readily acclimatized to grow outdoors in full sun and form 'bedding clumps'.

If naturalized, ensure the location is well drained. I prefer to dig out a hole in the ground and fill with a potting mix that has a coarse bark component (for root attachment). For pot culture, I have had very good results using coarse (10-18 mm) diatomite. It is totally recyclable; but the down side is that it provides no nutrition and requires regular fertilizing.

As with other bromeliads, these plants, whether grown in pots or naturalized in the ground, benefit from a regular treatment with a soluble fertilizer. If you keep the solution weak –less than 3 grams (about a level teaspoon)/litre-, there is little chance of damage from fertilizer burn on the leaves. I use a soluble fertilizer with an N.P.K. ratio about 14: 4.5 : 22 with about 1.5% each of calcium and magnesium, plus trace elements. Check that the mixture contains at least 2% sulphur. A regular spray with the above solution and a monthly immersion of the pot in the fertilizer solution is ideal. Tedious but produces great results.

The distinguishing features, for plant recognition, are: *T. cyanea* has a short stem to the first floral bracts and a relatively short broad flower head. By contrast, *T. lindenii* has a longer flower stem and longer narrower flower head. The plants are similar; some clones developing a pink flush or fine pink striation in the leaves.

There is a hybrid, *T. (lindenii x cyanea)*, registered as *T. Emilie*. This was one of the early tillandsia hybrids and does not appear to be common in local collections. The flower head is similar to that of *T. lindenii;* but with a longer more robust stem and a longer more sturdy flower head. Plants grown in isolation are difficult to differentiate from *T. lindenii*.

The flowers of all these plants are similar; with petals in shades of blue. There is a form of *T. lindenii* with pale pink petals.

The pink bract colour, which is one of the attractive features of these plants, develops on exposure to light as the inflorescence develops. For maximum colour development, expose the plants to as bright sunlight as possible and turn the plants regularly to develop the colour on both sides of the flower head. T. cyanea seems to develop the best colour but there is some clonal variation in both species.

A related plant is *T. anceps*. This is the poor cousin of the group with a short stem and stubby flower head very like that of *T. cyanea* but with little colour in the floral bracts and small pale petals.

See Tillandsia images page opposite.

2009 Autumn Competition

by Arnold James
Chief Competition Steward

This year the competition ran fairly smoothly following the changes we made last year except for the confusion caused by the misprint in the schedule for Classes 11, 12 & 13; however with the co-operation of all involved we sorted it out and the judging proceeded.

This year we had over a hundred entries in the competition and 14 members competed; a fairly big drop from 27 members competing last year; perhaps we can improve next year with more members participating.As usual the quality was very high and the judges were scratching their heads trying to select the best entries in each division; they did an excellent job & are to be congratulated.

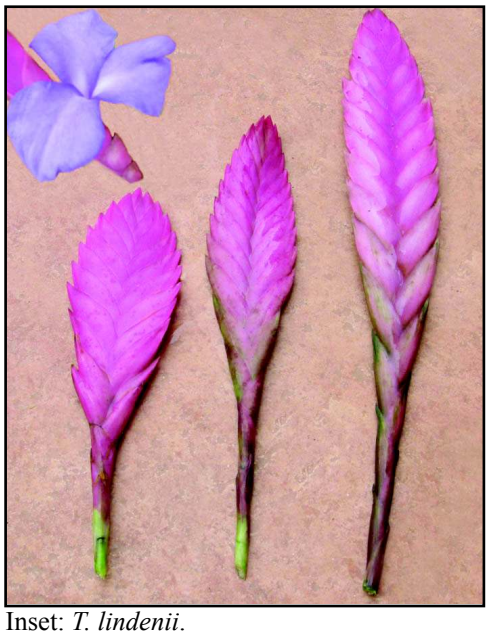
There were four classes with no entries which was disappointingly; they were Tillandsiodeae in Flower; Nidularium, Other Pitcairnoideae (for the second year in a row) and Bromeliad on a Decorative Mount; we hope that some of you very keen growers will rise to the challenge neat year.

Books For Sale

The Society has the following books for sale:

• Starting with Bromeliads	$18
• Pitcher Plants of the Americas	$60
• Bromeliads: A Cultural Manual	$5
• Back Copies of Bromeliaceae (2005, 2006 Editions)	$4
• Bromeliads for the Contemporary Garden by Andrew Steens	$36
• Bromeliads: Next Generation by Shane Zaghini	$33
• Bromeliads: The Connoisseurs Guide by Andrew Steens	$36

Postage and package extra. Unfortunately we cannot supply overseas orders. Please phone the Librarian, Mrs Evelyn Rees (07) 3355 0432 to order books.



Inset: *T. lindenii*.
Flower heads: L to R: *T. cyanea, T. lindenii* and *T. Emilie*

Bil. 'Poquito Mas'' grown by G&N Aizlewood

Neo. 'Rare Berry' (unreg) grown by Cheryl Basic

Congratulations to Margaret Kraa who won the Mary Grasselii Award which is given to a novice grower. As one of the judges commented that the *Neophytum* 'Galactic Warrior', she entered would not have been out of place in the open competition. She also won a third place in the same class.

Congratulations also to Mal & Michelle Cameron on their entry *Vriesea heiroglyphica* that won the Nez Misso Memorial Award for the Best Tillandsioideae in the competition. This plant was also the Reserve Champion of the show.

This was their first time that they have entered the comp.

Other major awards were :

Champion Bromeliad of the Show won by Quesnelia Tim Plowman entered by Cheryl Basic; this Plant also won the Best Bromeliadeae of the Show and received the Hudson Trophy.

The Grace Goode Trophy for the Best Cryptanthus was also won by Cheryl with *Cryptanthus* 'Bonnie'.

The Best Pitcairnioideae was *Dickia* 'Silver King' entered by Greg & Narelle Aizelwood.

Barry & Anne Kable were the winners of the **Tom Schofield Memorial Award** with *Billbergia* 'Bills Baby'. This award is given by the President for an outstanding plant not in competition.As I said last year the competition can only be successful with the help of many people; I would like to thank all of the members who entered plants, those who helped in setting up the plants in the right places, my very able assistant steward Greg Aizelwood, the judges who haggled & discussed the merits of the entries, and to the invisible man in the back room who printed the Certificates.

Now that we have successfully completed this years competition I hope you are

Continued page 20

Intercalary Foliar Meristem Revisited.

Author: Rob Smythe MSc

In the March/ April 2008 edition of Bromeliaceae I reported my successful experiment-- growing brom pups from the bases of leaves. The original photograph reproduced here shows the mother with 6 apical pups. A second photo taken one year on shows pups still coming from a rather exhausted mother. It is difficult to believe that my current count is ninety two (92) pups so far and I hope at least 8 more will come. Every single one has survived. They are so weakly attached to the leaf bases that they virtually fall away. Amongst these would be sturdier pups coming from the leaf axils.

All these pups come off extremely small. I have supplied a third photo showing recently removed pups.

Intercalary Foliar Meristem Revisited. Article Illustrations - Photos R Smythe

Guz. sanguinea 'Ecuador'

Continued from page 18

already plotting how you can grab the big prize next year; plan well, grow well and good luck for 2010.

Ed. The full results of the competition have been published in a booklet that is a supplement to this edition of Bromeliaceae. It is also on the association web site

http://www.bromsqueensland.com

Those of you who use the Society's library please note:

It is a condition of use that library books are returned within 1 month.

Bromeliads and the Seasons

Author: Rob Smythe MSc

In Townsville we had the wettest wet season ever recorded. The photos provided show the same exact plant growing through the seasons. The July 2008 photo (two plants) shows the plant in full splendour.

After a lot of heat, rain and overcast weather during summer the plant has lost all its colour and is plain green (photo of plant on its own). The third photo is of this plant taken in April 2009 (group photo) showing the colours returning.

Rain for 40 Days and 40 Nights.

The following tale relates to December/ January. Townsville has had rain of Biblical proportions. I don't know if we are waiting for Noah to come and pick us up or Moses to divide the waters so supplies can get in and out. We are well over the 40 days now as my title to this article was the headline in the local newspaper over a week ago.

This morning it was fine for the second day but pelted down last night. You may remember in a previous article when I was writing about seedlings and birds dropping foreign seed into my seed trays.

The two photos supplied (see page opposite) confirm my problem but suggests the problem could be even earlier. With the long wet foreign seed is germinating and surviving on the dead flowers. The neoregelia with the single seedling, the seedling is distinctive and is from an Alcantarea.

These are wind dispersed just like Tillandsias which come up everywhere. The one with more than one seedling in it looks like it is from an Aechmea.

Neo. 'Cockabell' 15 July 2008

Neo. 'Cockabell'. 23 February 2009

Neo. 'Cockabell' plus 24 April 2009

Crypt 'Blake Babcock'

Guz. 'Torch' grown by O & L Trevor

Weird and Unusual Places to grow Bromeliads.

Author Rob Smythe MSc

My interest in this started after the Townsville City Council invited me to give a talk on the growing of bromeliads at a rather low key garden orientated expo they were running in the Botanical Gardens. My topic was **"Bromeliads Grow Anywhere"**

I decided to glue a tillandsia to the brim of my cap. This would get the message over very quickly. This cap still sits on the corner post of my decking. The tillandsia has grown flowered and multiplied over the past couple of years.

As semi-aquatic plants.

In Bromeliaceae Sept/ Oct 2007 p 25 I had a short article and photo of *Neophytum gurkenii* and an orthophytum growing happily with their trunks and roots submerged in a fish pond. They are still doing well. I have had to reduce their size and have cut off a large amount of stem. They have never branched.

Since then I read of *Quesnelia arvensis* overgrowing swamps. I potted up a quesnelia and submerged it in a pond, with its well water level a similar height to the pond water and it has grown well over the past few months. The submerged leaves naturally were not happy and were removed.

Since my article others have reported successes. I am not surprised that one neoregelia is doing well as I have seen photos of these growing just above the water line in the middle of streams in the wild. Quite adult plants. They must endure a lot of water cover during flood periods.

Growing on wires.

This is well known and often reported for tillandsias I spotted small tillandsias along barbed wire and now they are clumps. I have recently run out of barbed wire and strung up some cloths line wire as I desperately wanted to colour up some miniatures that I am currently breeding. Hanging pots don't slip and slide along barbed wire. I had the bright idea of gluing tillandsias along the clothes line wires and they work very well as slide stops.

Growing on Bones

A Townsville grower specializes in this. She does not have a macabre bone in her body. That is probably a poor choice of phrasing for this topic. She gets large bones from the butcher and lets the moderately large dog have his way with them. She recovers the bones, takes them down to the bush house and attaches her plants. I just looked back at what I had typed and I had typed doctor not butcher. This could be the start of a great crime fiction novel that I am destined to write.

Totem Poles

You need an old tree fern trunk. Drive a metal stake into the ground. Then drop the tree fern log over it. You would not think I would have to tell you that? Foolishly I used a broom handle for my first stake. It rotted and fell and squashed my first $100 bromeliad. I

then begin to attach the bromeliads.

Smaller ones to the top and larger ones to the bottom. Use small clumpers or runners and vary the colours. I attach larger plants with black irrigation hose held on by two clouts. Black against black so you don't see the hose. Some effective choices in Neos are *Neo.* 'Short and Sweet', 'Fireball', 'Rosa Muller', 'Fairy Nice', 'Marble Throat', *ampullacea*, *tigrina*, 'Ornato', 'Guinea', 'Wee Willie', 'Strawberry Cream'.

If you are going to cut one of your tree ferns down, remember to firstly chop all the leaves off, then let the first new leaf open and then cut it down. You can now take the top section off and restart it in sand in your bush house. This is for tropical tree ferns like *Cyathea cooperi*. Southern growers don't have to do this with their southern tree ferns. They just grow from the top log, no mucking around. You can buy these live logs in the shops down there.

I have made one totem using a star picket and pushed fern peat (kebab style) from dead epiphytes on to it. Did not quite work out as expected. With all the watering the ferns came back to life. Does not look too bad. Not sure which will win?

Hollow Logs

These are very ornamental and if you can get some from old hardwood hollow trees, with hollow branches, all the better. I have a lot of the very large plants growing in these. *Aechmea mexicana* and many of the giant *N. johannis* related neoregelias. In contrast I have a log with holes on the side and variagared *Aech orlandiana* look quite attractive sprouting out of these. Ants can be a problem and one time I even had white ants in one log.

Big Logs

When ever a tree comes down in the yard I chop it up. Longer lengths lie along the ground. *Aech*. 'Forest Fire' Hybrids make a wonderful display on these.

The remaining logs go into piles and I place a whole range of plants in these. Soon the logs can't be seen. Palms rot quite quickly and can be mulched to make good peat. Before this I drill holes with a 'key saw' and then plant my bromeliads. Usually get up to about 4 years of growing. Much smaller logs you can hang horizontally along a fence or even hang vertically from a tree.

Rocks

I have even heard of people drilling holes into rocks to hold plants in place. That is just too much trouble. Set the plant in place with any fast setting glue. This alone is no good as it breaks down in sunlight and cracks away when you hose it. When the glue has set, put a band of silicon sealant which is useless for a while but once set allows for a lot of movement. Use the guttering type. Growing is slow and often these once cute gardens become mounts for large bromeliads and the rocks seem to disappear. Well, one of mine did and the second is heading down the same path.

These rocks are now covered with very large pots of landscaping plants e.g. *Hohembergia rosea*. Smaller pots are stuck into the crevices leaving the rocks no longer visible. There are some wonderful examples in gardening books (The Tropical Garden by William Warren publisher Thames & Hudson Pg 140-143,208) where rocks have been integrated with a water feature like a pond or a waterfall. Just not possible on my quarter acre. I never envy but I can dream.

Rockeries

These are the best of all especially if you have a dull and boring flat block of dirt.

With a small retaining wall at the back pile up the rocks. You may like firstly, to mound with dirt to get a greater spread of your rocks. Plant your plants in the crevices

held firmly by some garden mulch.

Ornaments

It is quite an added attraction to have bromeliads growing out of ornaments. My little monkey looks exceptionally cheeky and my possum has quite a load to carry.

Companion planting

Ferns and orchids look first-rate when grown together with bromeliads. The photo shows a couple of vrieseas growing happily with a phalaenopsis orchid and a crow's nest fern. When the ants killed the original epiphytic fern on the tree I immediately started planting these plants in the peat already in place.

Topiaries

I am not sure that is the right word but what I am writing about is not clipping to shape but a construction of a shape and then covering it with ground stars. You can make the figurine out of any sort of mesh that you can stuff with peat. The now famous one at Nong Nooch Tropical Botanical Gardens, Pattaya, Thailand could possibly be reproduced using ag-pipe and a key hole saw to make holes for planting the plants. I think it would be a good idea to insert drippers within the peat. It would be difficult to water evenly otherwise.

You might be able to find the botanical gardens site on the web. If not I am fairly confident that you would find it if you look for The Cryptanthus Society Journal Vol XX11 No.4 Oct-Dec 2007. My son also named Rob, has made a, fine mesh wire frame, with the full shape of an emu and has covered the frame with Old Man's Beard.

Looks very interesting and definitely a talking point with visitors. Simple to construct and no filling was required. This one does get trimmed so I am happy to call this a topiary. These days *Tillandsia usneoides* does need attention to avoid fungal attack. You can't just make the topiary and leave it as you would have done five years ago.

Trees

To me this does not fit the title of the article but sort of wraps up epiphytic growing.

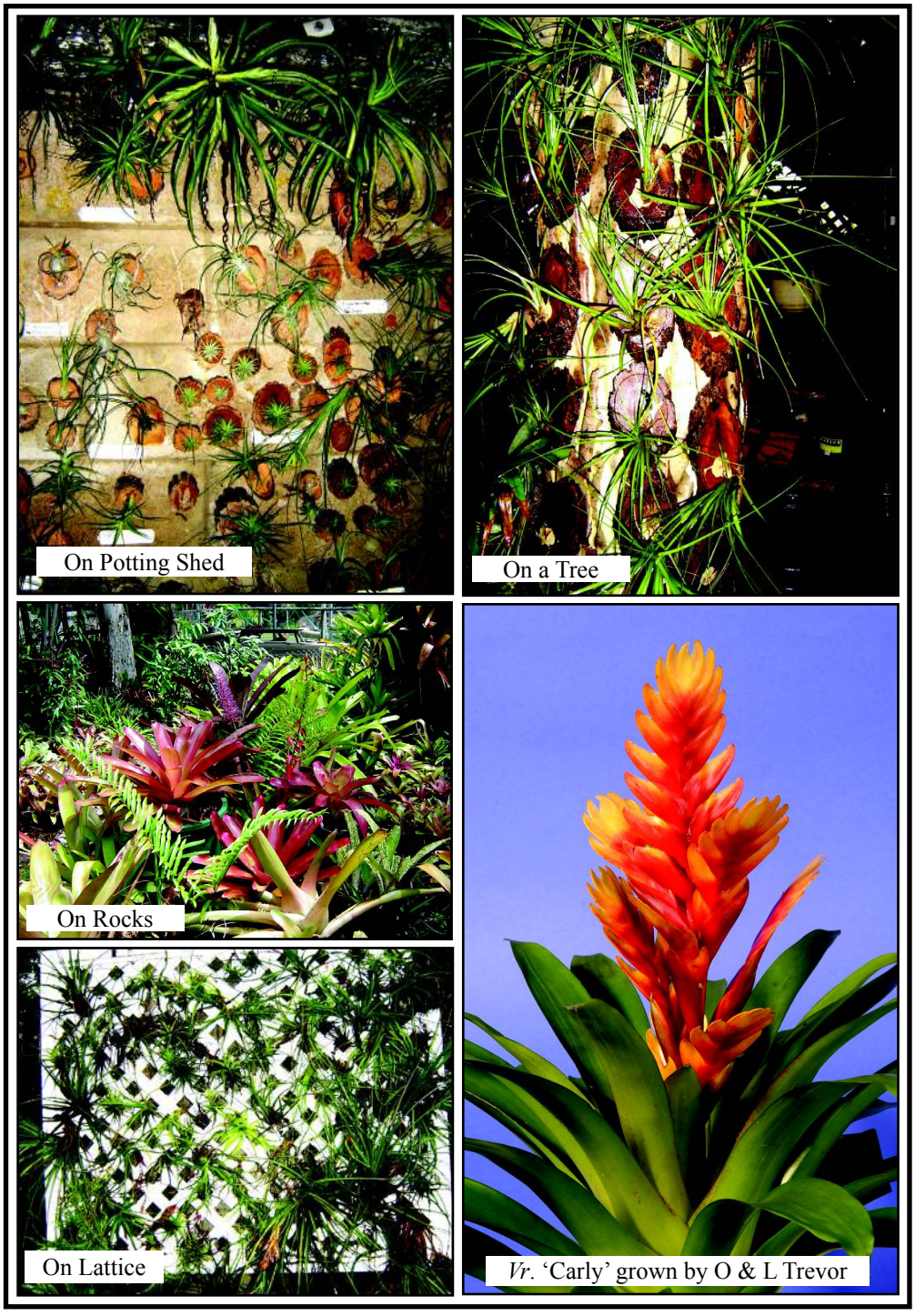
Hopefully the photos will speak for themselves. If the trees shed their bark it never looks as good as you have to firstly attach the plant to something which you then have to nail to the tree. It looks a little odd but I have nailed a section of aluminium lattice on to a bark shedding tree and I just place tillandsias in the holes and they grow. I call tillandsias "Grey Grasses" as they grow fast up here. They nearly need mowing. They come up everywhere. I have another similar section of lattice nailed to a barren brick wall of my potting shed.

My potting shed is worth mentioning. It is actually the aviary my boys had when they collected parrots and pheasants. The flight area is my seedling area and the shed part is my potting area. The skirting board below the roof is covered with overgrown tillandsias. One wall is covered with tillandsias glued to cross sectional cuts of my callistemon tree branches. Cut the branches at a 45 degree angle and they look fine.

The longer side of the shed has the Aluminium lattice plus tillandsias. I'm not mad on tillandsias but they keep falling to the ground and I have to mow them or mount them somewhere. They look great clumped on trees. On top of my potting shed you would find a multitudes of cut down foam boxes full of my seedlings. Altogether not a pretty sight so no photo is supplied here.

The trees they do the best in my yard are the callistemons and the melaleucas. Next best would be palms and corkwood. Buckinghamia and umbrella trees would be the last of the good ones.

Ed. Illustrative images opposite supplied by Rob Smythe


On Potting Shed
On a Tree
On Rocks
On Lattice
Vr. 'Carly' grown by O & L Trevor

My First Impressions of the BSQ.

Author: Leisa Dresiner

After reading all back issues of Bromeliaceae for free last year, I finally joined the society this year and have been on my toes ever since! I've been along to 2 of 4 meetings so far this year, and found them really enjoyable and beneficial. The other members are very friendly and welcoming. The beginner's sessions are a great way to learn from knowledgeable people, as well as a handy forum to ask questions, resolve a problem with a plant or to have one identified. The main speakers at the meeting I attended talked on fire ants and organic products, and were both entertaining and educational. I've had to get myself a new notebook dedicated to bromeliads, so I can keep all my notes in one place – it's too much for my brain to hold!

The bus trip to the north of Brisbane on 21st March was a bargain for the price, as it included not only the bus trip, but also a raffle ticket, morning tea and lunch. The BSQ certainly knows how to provide value for money! Again I enjoyed friendly and knowledgable company, saw some lovely gardens and even got some good buys! Then in April, I gave a very inexperienced hand at the show (on Sunday), and was rewarded by learning lots from everyone present, and even got fed into the bargain! Thanks to Narelle Aizlewood who took care of me for the day.

In the past few months I've seen so many nice bromeliads, that I've started my own wish list in my new notebook. And despite being able to cross off some that I've acquired at a good price, the list is still growing! This is just feeding my addiction! So in summary I feel being a member of BSQ represents excellent value for money, is an enjoyable way to meet friendly and knowledgeable people who share a passion for bromeliads, as well as providing great opportunities to see and (of course) acquire lovely plants!

Calendar of Events

2nd & 3rd May - Australian Open Garden Scheme at Anne McBurnie & Philip Beard's garden, 5 Timbertop Court, Capalaba. Entry $5.
Vibrant, diverse , all seasons garden. Beautiful bromeliads in landscaped gardens. Over 60 varieties of crotons, colourful cordylines and interesting ground covers, cactus and succulent gardens. Bring a friend, stroll through the gardens, chat over a Devonshire tea, or sit and enjoy the magnificent music and song of "Raven" as she plays the heavenly harp, dressed in Mediaevel dress, in a leafy setting.

Heavenly Harp times - Saturday 11.30 - 1.00 Sunday 12.00 - 2.00
Cute Kids performing Poetry & Storytelling Saturday only 11-11.30

Prize winning bromeliads,crotons,cordylines and ground covers for sale.

7/8 Nov - Society's Spring Sale of Bromeliads at Mt Cootha Botanic Gardens
3rd Dec - Society's Christmas Party

GENERAL MEETINGS of the Society are held on the 3rd Thursday of each month except for December, at the Uniting Hall, 52 Merthyr Rd., New Farm, Brisbane, commencing 7.30 pm. Classes for beginners commence at 7.00 pm.

Plant of the Month Programme for 2009

FEBRUARY:	Ananus, Intergeneric Plants, Tillandsias and Full-sun Neoregelias.
MARCH:	Cryptanthus, Tillandsias, Full-sun Aechmeas and Canistrums
APRIL:	Cryptanthus, Tillandsias
MAY:	Spotted Neoregelias, Orthophytums, Tillandsias and Variegated Bromeliads
JUNE:	Alcantareas, Foliage Vrieseas, Dyckias, Hechtias
JULY:	Billbergias, Pitcairnias, Nidulariums
AUGUST:	Billbergias, Foliage Vrieseas, Catopsis and Miniature Neoregelias.
SEPTEMBER:	Billbergias and Guzmanias.
OCTOBER:	Vrieseas, Neoregelias, Nidulariums, Guzmanias
NOVEMBER:	Not often seen Bromeliads and Succulents

Competition Schedule for 2009

Novice, Intermediate and Advanced in each Class of the Mini-Shows and in the Popular Vote.

January: **MINI-SHOW**
- Class 1: Aechmea - species and hybrids
- Class 2: Vriesea - species and hybrids
- Class 3: Dyckia - species and hybrids
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

February : **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

March: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

April: **MINI-SHOW**
- Class 1:Bromelioideae not listed elsewhere in the schedule – species and hybrids.
- Class 2: Guzmania - species and hybrids
- Class 3: Pitcairnia and Pepinia - species and hybrids
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

May: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

June: POPULAR VOTE: Any Genus – species or hybrid, Novelty Bromeliad Display

July: **MINI-SHOW**
- Class 1: Billbergia - species and hybrids
- Class 2: Tillandsioideae not listed elsewhere in the schedule – species and hybrids.
- Class 3: Neoregelia - species and hybrids – up to 200mm diameter when mature.
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

August: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

September: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

October: MINI-SHOW
- Class 1: Neoregelia - species and hybrids – over 200mm diameter when mature.
- Class 2: Tillandsia - species and hybrids.
- Class 3: Pitcairnioideae not listed elsewhere in the schedule – species and hybrids.
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

November: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

Note 1: Class 4 in each Mini Show schedule provides for any flowering bromeliad that would not be in its prime for the appropriate Mini Show.

Note 2: Class 1 (April), Class 2 (July) and Class 3 (October) provide for plants from these subfamilies not elsewhere included in the Mini Show schedule.

Floral Display at the 2009 Autumn Show by David Rees