Bromeliaceae

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The Bromeliad Society of Queensland Inc.

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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.
ANNUAL GENERAL MEETING is held immediately before the February General Meeting

Front Cover: *Guzmania* Flamingo	Grown by Cheryl Basic
Rear Cover: *Vriesea* 'Green Tea'	*Grown by R&M Dilling*

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Vriesea pardalina and *V. guttata* compared

by Butcher Apl 2012

Vriesea pardalina by Eric Gouda in J Brom Soc 61(5); 224-227. 2011

There is a lot of confusion about the identity and differences between *Vriesea pardalina* (1894: 523) and *Vriesea guttata* Linden &Andre (1875: 43), see for example the cover of Bromeliaceae XLIV(6) Nov/Dec 2010 (The Bromeliad Society of Queensland) and the marvellous website of the Florida Council of Bromeliad Societies (http://fcbs.org/). For some time I thought it was one and the same species, because the latter is quite variable and has several forms with different spotting on the leaves with subdense inflorescences or with the flowers more remote. *Vriesea guttata* is far more common in collections than the rare *V. pardalina.*

Vriesea pardalina is a much larger species with a very long inflorescence, hanging much below the plant base, with many flowers (>40) and the flowers more spreading (flexuous rachis) and remote at anthesis and the bract coloration is more reddish and less waxy (pink in *V.guttata*) and relatively broader, showing as deltoid imbrication before anthesis and with much overlapping margins afterward (partly covering the rachis).

The plant is much larger, about twice the size of *V. guttata*, and with less obvious spotting, but often with a broadly rounded and apiculate reddish leaf apex. The only plant I have ever seen was at the nursery of a friend of mine, Bert Westerman in Germany and I was happy that I could make some nice pictures of it and collect material for identification purposes (see figures).

Literature cited

Linden & Andre (1875) Vriesea (?) guttata, Vriesea a Gouttes de Sang (Bromeliacees) L' Illustration horticole 22 : 43, Plate CC (sterile) .

Mez, C. (1894) Bromeliaceae in Martius Flora Brasiliensis. in Martius. Flora Brasiliensis. vol.3(3). Munich, Germany, 773-634

Notes by Butcher

Baker 1888 named *V. guttata* and

Mez 1935 key had

Floral bracts densely imbricate, hiding the rhachis, fan shaped

pardalina

Floral bracts laxly disposed, not at all imbricate, rhachis not concealed, pinnate

guttata

Smith & Downs 1977 key had

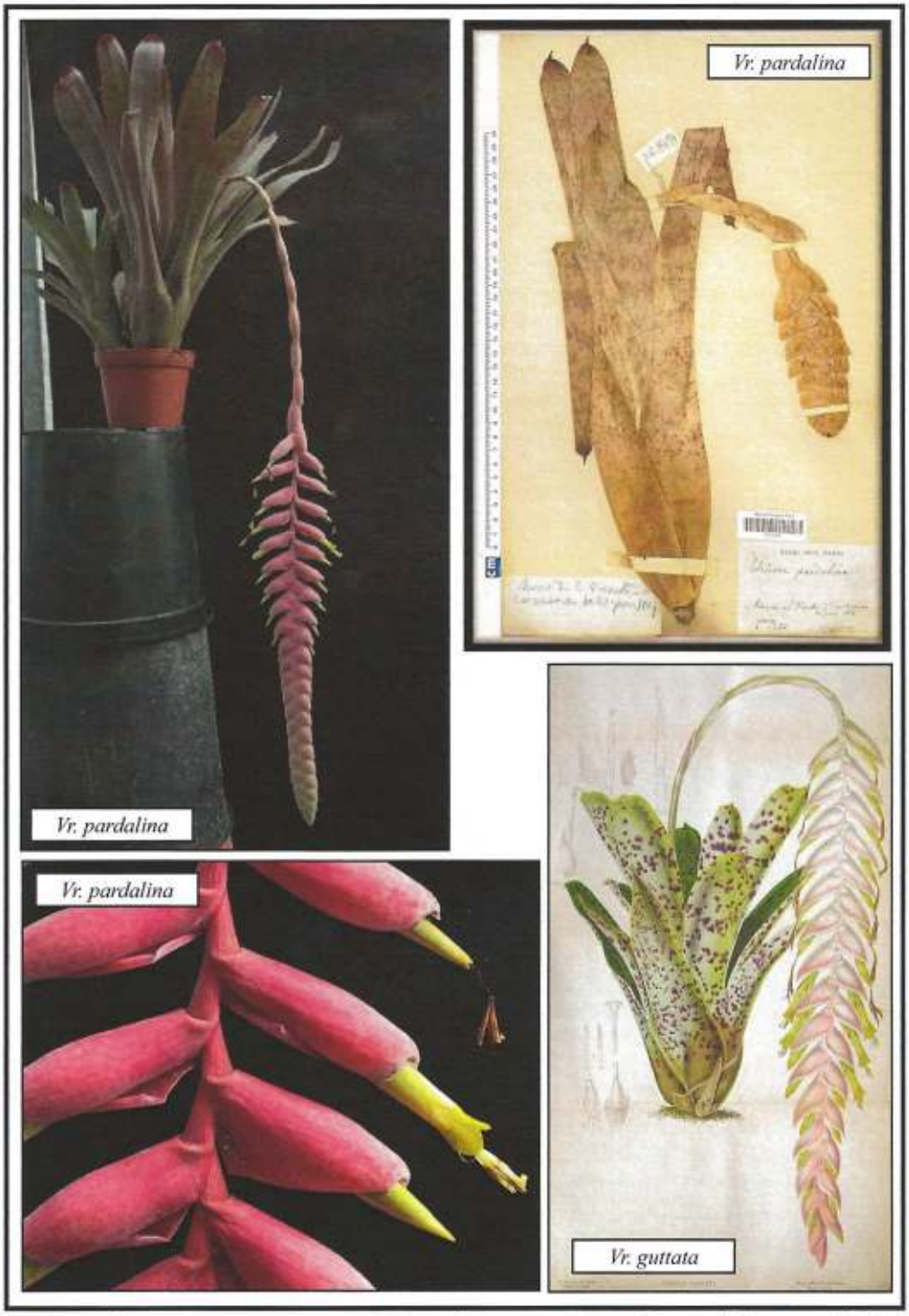
3. Floral bracts imbricate and concealing the rhachis, broader than long, equaling the sepals.

pardalina.

3. Floral bracts enfolding the spreading flowers and thus exposing the rhachis, broadly ovate, equaling or shorter than the sepals.

guttata.

We know that the inflorescence for *V. guttata* starts as having imbricate floral bracts but as the anthesis progresses the rhachis elongates and the flower moves to 90° with the rhachis making it visible


Vr. pardalina
Vr. pardalina
Vr. pardalina
Vr. guttata

treated Glaziou 15474 the same as seed sent by Gautier (See Morren painting)

Mez 1894 treated Glaziou 15474 as *V. pardalina* and Glaziou 14344 as *V. guttata* Where is this herbarium specimen located?

Butcher's comments

Is Eric describing the 'true' *V. pardalina*? We have no provenance of Bert Westerman's plant. Nowhere in any of the old descriptions of the species and synonyms does it indicate *V. pardalina* is the larger of the two. It seems that a 40cm high plant is expected for both species. There also seems to be variability in the length of the fertile portion of the inflorescence. We only have a herbarium specimen for *V. pardalina* (See Berlin and Paris) which suggests in its dry condition you cannot tell if the rhachis would have been visible some time during flowering. There is nothing for *V. guttata* other than Morren's painting.

The floral bracts are much shorter than the sepals in the photo of Eric's *V. pardalina* which makes me think I was right in following the Brazilians who have yet to declare they have found *V. pardalina* in the wild (and send me a photo!) but recently have described new species with pendant inflorescences.

The latest being

From Vriesea piscatrix Versieux & Wand. Hoehnea 36(3): 455-458, 2 fig., 2009

Vriesea guttata is frequently confused with *V. pardalina* Mez in herbarium collections, because of the fragility of characteristics used in their distinctions, such as the degree of extension of the rachis in the inflorescence, the position of the floral bracts and their size in relation to the sepals (Smith & Downs 1977). Those characteristics depend on the stage of development of the inflorescence, hindering identification. It is possible that *V. pardalina* is a synonym of *V. guttata*, which is the oldest binomial and is here adopted for comparison with the new species.

Note from Elton Leme July 2010.

Concerning *V. piscatrix*, it looks to me a kind of natural hybrid between *V. lubbersii* and *V.guttata/capixabae*. It is interesting to mention that *V. lubbersii* very often produces natural hybrids and I have about 10 specimens of different origin which exemplify this phenomenon.

Elton Leme's comment on *V. capixabae* "When sterile, it cannot be distinguished from *V. guttata*, other than by its geographical distribution limited to the mountainous region of Espirito Santo, whereas the latter is found from Santa Catarina to Rio de Janeiro and Minas Gerais."

Contact with Elton Leme in Apl 2012 found him agreeing with Eric Gouda's identification.

In other words, if we ignore history then *Vriesea pardalina* is a bigger plant AND

Report to BSQ Committee for Autumn Show 2012

By Competition Steward – Helen Moriarty

As this is my first show as competion steward, I thought I should give a detailed report to the committee of my perceptions of the show. Firstly I would like to thank all those who helped with the recording, Rob Murray, Glenn Bernoth, and Rob Butler; the setup Fred Thomson, Cheryl Basic; and the judging of the exhibits, Olive Trevor, Cheryl Basic, Nev Ryan, and Pam Butler, and of course the exhibitors. I would also like to record a special thanks to Arnold James for his unfailing support and enthusiasm over the past 2 years.

The standard of exhibits was very good

and the show benches were a credit to our society , and attracted a lot of interest from our show visitors.

I am submitting this report to the committee as suggestions for future directions, food for thought, ways to enhance the participation and enjoyment by our members of their shows.

Entries – Exhibitors

As per report to BSQ Journal, all of the Show entries were of excellent quality and the show bench display was well received by the general public. The Trophy winners are especially to be congratulated for their superb exhibits.

Although there were a good number of entries overall, the hobbyist growers were under represented, and some classes did not have any or many entries.

Proposal

Ongoing education sessions for members at the general meetings to encourage them to prepare and exhibit their plants at the Spring Show .

A review of the competition schedule of classes to encourage more members to exhibit.

Judges – Judging

The judges had a very hard task. With fierce competition between exhibitors, in some classes, making the judging a very exacting task. Especially at the end of such a long day, as most of the judges had a lot of sale plants to prepare, as well as involvement in the main BSQ display, and other committee responsibilities.

To complicate their problems I was trialing, using a computerised recording system, which I hoped would speed up the recording of the judge's awards, ensure all the plants were judged in the classes they were entered into, and make data entry of the award certificates easier. Although it did ensure that all of the plants entered in a class were available to the judges, I think that the other criteria were not met.

The premise of the system was that all exhibits could be entered on the computer, as the entry forms were handed in during the day. This would give time for the 'classification' of the exhibits to be checked, ready to print a "Judges/Stewards List"* at close of entries at 6 PM. This list could then be used to 'bench' the entries in their correct classes and copies could be used by the stewards and judges during the judging. This would be especially useful for a show where each plant is judged, has points allocated, and an award is based on these points as per the BSI system.

Problems were encountered when about half of the exhibits were presented just before 6pm, causing a bottleneck with entry into the computer system, benching of the entries, printing of the judges/stewards listing, and last but not least, the arrival of our dinner.

Proposal - Judges

- More Judges
- Judges School before Monthly Meeting

I would like the committee to consider a proposal to train more judges, so that we have around 10 judges available. This would enable 2 or 3 groups of 3 judges to work simultaneously on the judging of different classes. It would enable more judges to gain experience at different levels, and would allow for judges not being available for a particular show. It would be good if this training were to start soon so that some new judges were available for the Spring Show. Some members indicated that they would be available to attend if the classes could be held prior to the monthly general meeting. Olive indicated that she would be available to train the judges at this time also.

Proposal - Judging Time

- Show Judging on Saturday Morning
- Official Trophy Presentation by VIP.

This does sound a bit radical, but it would overcome 'judges fatigue' after the long day on Friday, allow the entries to be benched on Friday night, and the Judges and Stewards List to be printed, ready for judging on Saturday.

It means that the ribbons and trophies would not be known until late morning. We could use this as a plus and invite one of our local politicians to do the presentation. It could be used as a catalyst to change the emphasis of our show for the general public, with more educational displays etc., encouraging our visitors to stay longer and move the emphasis of our show away from selling.

- OR Close of entries 3-4 pm Friday

The alternate to this would be to close the registration of entries earlier on the Friday. The entries were ready for judging at 7:30, an hour and a half after the close at 6pm. To be more comfortable at least 2 hours should be allowed, as many of the entries were already benched prior to the close of registrations. No entries were brought into the show by 'working' members after work on Friday. The reason for the rush of later entries was simply the priorities of the members, they had many other responsibilities on the day, the competition schedule said 6 pm, so their entries were ready by 6 pm. If the competition entries were to be in by 3 or 4 pm, some problems would be overcome, but 'judges fatigue' after such a long day at the show would still make the demanding job of judging very hard.

General Changes to the Show Schedule of Classes

Points for consideration.

Decorative and Educational Displays.

Reading the BSI judges Manual, there is a lot of emphasis on Decorative and Educational Displays. Admittedly most of this is intended to apply to shows of the International, interstate kind, but there are some points we could take on board to change the focus of our shows. The "decorative classes" in the Show schedule are intended to show visitors to our show, creative ways of growing and displaying bromeliads. These classes are therefore not restricted to a single plant or a single species.

The "educational" classes of the Show schedule are intended to be displays with an emphasis on educating visitors on different aspects of bromeliad culture and can contain signs, videos and other educational material. These are usually entered by other bromeliad societies and can be included in the judging as at the RNA.

These displays could also be entered by Commercial Growers*. Doing this would take the pressure off BSQ to provide the main display, even if it was done only for one show a year.

Scheduled Classes for Hybridisers and seed growers.

At our discretion we can add new classes to reflect the interests of our members, and to encourage members' interests.

Overall Trophy Winners

In the BSI Judges manual , when plants are judged as medal winners , another plant is moved to take their place as 'BEST of' . This means that there are more winners on trophy bench, rather than the champion plant having 3 awards, as we do in our show.

Sweepstakes Award.

These are given to exhibitors with the most number of firsts and awards of merit in the show.

Again as our show is not a full BSI show we would have to make our own rules (as we do now!) to make an award of this kind.

'Reserve Champion' Show 2011
Vriescantarea 'Bursting Wings'
Grown by Len and Olive Trevor

xVrieslandia 'Fireworks' Unregistered
Grown by Len and Olive Trevor

'Champion & best Bromelioideae Show 2011
Orthophytum burle-marxi
Grown by Cheryl Basic

Guzmania conifera
Grown by Nigel Thomson

Ae brassicoides
Grown by Len and Olive Trevor

Commercial Growers

In BSI rules there is provision for separate scheduled classes for commercial and hobbyist growers. Basically BSI duplicate the schedule for each group. We could just have separate sweepstakes awards for commercial and hobbyist growers.

Commercial Growers might also like to donate money towards awards, in return for advertising and/or promotion.

Summary

A review of our show schedule of classes could be beneficial to our shows, and to our membership.

This review could include the competitions at our meetings, and the meeting schedules could be used to trial new classes. As we are part way thru the year, we would have to be cognisant of the effect any changes would have on our existing mini-show and popular vote results.

A sub-committee could be appointed by the committee to look at this and submit a revised Spring Show Schedule to the BSQ committee. It could be an idea to submit the revised schedule to existing BSQ judges for their written comments, as they are all famil-

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Guzmania lindenii
grown by Mal & Michelle Cameron
winners of the 'Olwyn Ferris Cup' Champion Bromeliad of the Autumn 2012 Show

Neoregelia 'Yin'
grown by Nigel Thomson
winner of the Nev Ryan Cup
'Reserve Champion Bromeliad of Show' at the Autumn 2012 Show

Cryptanthus 'Ti'
grown by Barry & Ann Kable
Winners of the 'Grace Goode Trophy' at the Autumn 2012 Show

Pitcairnia sp.
grown by Barry & Ann Kable
winners of the 'Best *Pitcairnioideae* Trophy' at the Autumn 2012 Show

'*Guzmania* Hilda' variegated (note 'Hilda' is not normally variegated)
grown by Len and Olive Trevor

iar with the BSI Judges handbook.

It would be preferable to have the new schedules ready some months prior to our Spring Show, so members can begin preparing their plants. The 'new' mini show classes could be used as a catalyst for an education program for members about showing.

Trophy Winners BSQ Autumn Show 2012

Olwyn Ferris Cup
Champion Bromeliad of Show

Mal & Michelle Cameron
Guzmania lendenii

Background: The Olwyn Ferris Cup

This trophy recognises one of the pioneers of growing bromeliads in Australia. Peter Paroz – one of the Queensland bromeliad pioneers provided a few notes. Looking at the Bromeliad Cultivar registry there are 94 named plants associated with Olwen Ferris. Most of these are Neoregelia hybrids with fourteen Billbergia, five Cryptanthus, one Dyckia and one Alcantarea.

I am surprised there are not a few more Dyckia as she had a rock garden of some specimen Dyckia at Paradise Point when I visited many years ago.

It is not clear from the text which ones she actually created. I know that for many years she corresponded with Adda Abendroth in South America and regularly received seed from her. The note attached to the Alcantarea entry indicates that this was a selection from some seed from this source

Olwen was originally involved in the Bromeliad Society of Australia. She became President in 1969 , and in 1971 she also became Editor, a position she held until 1988. In 1973 Olwen moved to the Queensland Gold Coast but continued as Editor. In 2004 the BSA listed the then life members and the notes at that time recorded the following:

"Olwen Ferris is now in her 80's and living in a retirement village on the Queensland Gold Coast . Olwen is a long and active member of the Bromeliad Society of Australia. She started and ran the Seed Bank for many years, it still operates today. Olwen is a member of The Board of Trustees of the Bromeliad Society International. She could be considered the matriarch of our Society."

Nev Ryan Cup
Reserve Champion Bromeliad of Show

The Nev Ryan Trophy is a new trophy to honour the devotion he has for his plants and at its inception the trophy has in 2012 been awarded to

Nigel Thomson
Neoregelia 'Yin'

Background : The Nev Ryan Cup

Nev is a caring person and devotes his life to looking after his elderly parents and his tillandsias. Nev Ryan has had a lifelong love of growing unusual plants. In 1985 he joined the Bromeliad Society of Queensland and added bromeliads to his list of favourites.

He has an interest in many unusual bromeliads but his main love is tillandsias. He now has a huge collection of tillandsias which numbers many hundreds Over the years he has cultivated them from seed and has done many hybrids such as 'Uluru,' 'Black Feather', and 'Silver Surprise'. He likes collecting different clones of a plant and has

eighty different fasciculatas and many different ionantha. Nev is always eager to help at meetings and setting up at shows especially putting the display together. He is also an accredited judge of the Bromeliad Society International and judges at society shows. He is an active member of the BSQ and the Gold Coast Society and a member of the Australian and Bromeliad Society International. He is always eager to display his plants and give out information at society meetings.

Tom Schofield Memorial Award

President's Award for best plant in the display.

Nigel Thomson
Vriesea 'Elysian Kandy'

Nez Misso Memorial Trophy

Best Tillandsioideae

Winners: Mal & Michelle Cameron
Guzmania lendenii.

Background: The Nez Misso Memorial Award.

Author: Peter Paroz

Nez Misso was the President of the Society for the first two years of the Society, 1967-68. Apart from his involvement as President, Nez's contributions to bromeliad culture were the introduction of tillandsia species into cultivation in Queensland; and the development of techniques for growing tillandsias from seed using the ideas of Dr. Oeser, the European tillandsia guru of the day, adapted to local conditions using coconut fibre.

Nez worked in administration at U.Q. and lived nearby within walking distance. This enabled him to slip home at lunch time to mist his beloved seedlings on days of low humidity.

Sadly, Nez passed away suddenly in his garden in 1974. The perpetual trophy for the best Tillandsioideae at the Combined Show was inaugurated in 1981; the winner being Olive Trevor's *Vriesea fosteriana.*

Hudson Trophy

BEST Bromelioideae

Nigel Thomson
Neoregelia 'Yin'

Background: The Hudson Trophy

Bob Hudson's involvement with the Bromeliad Society of Qld stretches back to the 70s when he lived at Ashgrove. He was interested in orchids and two of his mates decided to go to the BSQ show one weekend. Bob was quite reluctant but was dragged along and there he discovered tillandsias. He specialised in growing species tillandsias from seed before he left for warmer climes in the north. Only then did his interest stretch beyond tillandsais to other genera.

The original Hudson Trophy was donated in the 70's but has been lost. The current trophy has been again donated by Bob. It reflects his love of nice timber as well being a piece of bloodwood on a silky oak base.

The following is the citation provided by The Cairns Society on occasion of Bob becoming a life member of our sister club:

In 1983 when Bob and a number of other Bromeliophiles started what was to become the Cairns Bromeliad Society they set down the club's aim as being:

"To promote and develop interest in Bromeliads through friendship. To Co-operate with similar clubs throughout the

Neoregelia 'Delirious'
Grown by Dorthy Cathcart

Guzmania 'Hilda' grown by Len and Olive Trevor

Neoregelia 'Groucho' Unregistered (Kiehl)

Neoregelia'Rainbow Carcharodon' grown by Len and OliveTrevor

Vr. 'El Supremo' grown by Len and Olive Trevor

world"

If you were to ask any member of the Society over the past 26 years they would all agree that this statement describes Bob to a B.

It does not matter whether it is a member of the public asking about the "green plant with prickles and a pink centre" or the "Grey, fluffy plant with the yellow flowers". Bob will always help them to select the best plant on sale as well as tell them how or where to grow it to get the best display. If, at a Conference, members of the Society ask where's the best place to grow *Neoregelia* 'Rosea Striata' x concentric or should they buy a *Tillandsia multicaulis* Bob will inform them whether or not it grows here in Cairns or which specimen on the Sales table is the best to buy.

Regular attendees to Society meetings will know Bob's feelings on Tillandsia hybrids and his commitment to growing and propagating Tillandsia species. At every opportunity he is demonstrating how to pollinate plants or how to grow Bromeliads or Tillandsias from seed. He also takes great delight in listening to stories about how somewhere in North Queensland there are Sunbird nests adorned with baby *Tillandsia ionantha* and *T. bulbosa.*

At conferences, when the presenter announces how hard it is to grow a particular species of Tillandsia or that he "has the only three specimens of a particular plant in Australia" Bob Hudson takes great pride in being able to inform them that "I know where there are three more in Cairns" or that members of the Cairns Society have "no problems" growing them. As well as his 14 year Presidency, Bob Hudson's commitment to the Cairns Society can also be seen in his efforts to keep members up to date with latest news from the various Bromeliad conferences and bringing "new" varieties of plants back from his many "expeditions".

Grace Goode Trophy

Best Crypthanthus

Barry & Ann Kable

Cryptanthus 'Ti'

Background: Grace Goode OAM.

Grace was the recipient of 2008 Wally Berg Award of Excellence

Grace Margaret Goode was awarded the Medal of the Order of Australia by Her Majesty the Queen in the Australia Day 2004 Honours List. The citation reads that she is "officially recognized for service to horticulture through the cultivation and hybridization of bromeliads".

The award marks the culmination of thirty years of devotion to this remarkable family of plants and climaxes a list of other honours received along the pathway of producing some 800 cultivars. Grace Goode is a Life Member of several Australian Bromeliad Societies, a Charter Member of the Cryptanthus Society (USA) and an Honorary Trustee of the Bromeliad Society International. She has visited the USA as a bromeliad expert on several occasions.

Grace recalls the beginnings. "If a 16th century Czechoslovakian monk can produce beautifully coloured sweet peas, surely I can do it with bromeliads." People encouraged and helped her - like Olwen Ferris, another bromeliad pioneer in Australia. She read a small book by Joan White, then a member of the Bromeliad Society of Australia, in which she depicted a few neoregelias. Grace commented "They were nothing like the lovely neoregelias of today" but she fell in love with them. They were enough to spur her on and the long journey of hybridization began at 'Bromania', her home at Alexandra Headlands where she has lived for over fifty years.

In the early 1970's there were only about twenty species of bromeliads available in Australia – not many to begin with. Untrained as she was apart from some basic plant knowledge gained at school and with a little help from her friends, she began to play the part of the birds, bees and bats initially with billbergias and cryptanthus.

Grace also dabbled with intergenerics and while she has maintained her favourite plants were cryptanthus, most who know her associate her name with neoregelias. Neoregelias 'Amazing Grace', 'Mandella', 'Break of Day', 'Charm', 'One and Only' to name a few favourites that will always be in dmand. Her hybrids are well documented in articles in bromeliad magazines and the Bromeliad Cultivar Registry.

At 'Bromania' there was always evidence of the patient disciplined care and attention – the necessary qualities in the long process to bring the plants to maturity. To a reporter Grace said, "You can't rush the creation of bromeliads". Grace has given us so much by growing so many intriguing and colourful bromeliads.

May this generous, hospitable Lady, with the sometimes wicked sense of humour, Grace Margaret Goode OAM, enjoy many more years of health and happiness – and of course bromeliad growing.

Last thing, when next you meet her, don't forget to bow!

Now Grace has another prestigious award – "Wally Berg Award of Excellence". Grace has achieved this award by her dedication in not only hybridizing bromeliads, but also introducing other persons to a new and colourful world; and willingly educating and encouraging anyone in both bromeliad culture and to indulge in hybridizing. Congratulations Grace.

Grace Goode OAM will be 95 on 23rd July 2012. Lynn

Best Pitcairnioideae

Barry & Ann Kable

Pitcairnia sp.

Spring Show 3rd and 4th November 2012

The Society is anticipating another good exhibition of plants in the Spring Show to again be held at the Brisbane Table tennis Centre in November.

Now is the time to begin selecting and tending competition plants for November.

The Society has updated the trophy list for the Spring Show with all trophies named for significant contributors to the Society. Their background notes will appear in a subsequent issue of this journal.

Spring Show Trophies

Champion Bromeliad
– Olive Trevor Cup

Reserve Champion Bromeliad
– Arnold James Cup

President's Award (best bromeliad in displays)
– Bob Cross Trophy

Best Pitcairnioideae
– Ruth Wilson Trophy

Best Cryptanthus
– Bob Paulsen Memorial Trophy

Best Bromelioideae
–Len Butt Trophy

Best Tillandsioideae
– Rolly Reilly Trophy

Mosquitoes

Found this article about Cinnamon on the net, thought it may be of interest to other members - contributed by Michael O'Dea

Cinnamon oil shows promise as a great-smelling, environmentally friendly pesticide, with the ability to kill mosquito larvae, according to a new study published in the July 14 issue of the Journal of Agricultural and Food Chemistry, a peer-reviewed journal of the American Chemical Society, the world's largest scientific society.

While conventional pesticide application is often effective in controlling mosquito larvae before they hatch, repeated use of these agents has raised serious environmental and health concerns.

"These problems have highlighted the need for new strategies for mosquito larval control," says Peter Shang-Tzen Chang, a professor in the School of Forestry and Resource Conservation at National Taiwan University and lead author of the paper. Scientists are increasingly turning to more benign natural chemicals to ward off mosquitoes and other pests.

Chang and his co-workers tested eleven compounds in cinnamon leaf oil for their ability to kill emerging larvae of the yellow fever mosquito, *Aedes aegypti*. "Four compounds — cinnamaldehyde, cinnamyl acetate, eugenol and anethole — exhibited the strongest activity against A. aegypti in 24 hours of testing," Chang says. this is the first time researchers have demonstrated cinnamon's potential as a safe and effective pesticide,

Cinnamaldehyde is the main constituent in cinnamon leaf oil and is used worldwide as a food additive and flavoring agent. A formulation using the compound could be sprayed just like a pesticide, but without the potential for adverse health effects — plus the added bonus of a pleasant smell.

Bark oil from the Cinnamomum cassia tree is the most common source of cinnamaldehyde, but the tree used in this study — indigenous cinnamon, or *Cinnamomum osmophloeum* — has been of interest to researchers because the constituents of its leaf oil are similar to those of *C. cassia* bark oil. The leaves of *C. osmophloeum*, which grows in Taiwan's natural hardwood forests, could be a more economical and sustainable source of cinnamon oil than isolating it from bark, Chang says.

"We think that cinnamon oil might also affect adult mosquitoes by acting as a repellant," Chang says. The researchers haven't yet tested this theory, but they plan to find out in the near future.

The BSQ Web Site

Don't forget that the society has a web site. We place urgent and general information and information on the site.

The URL is:

www.Bromsqueensland.com

Your attention is drawn to the Society's library. It is run as a service to its members. Members are able to borrow books from the library. The Society also sells specialist books relating to Bromeliads - see the web site for details.

Got information about forthcoming events

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Report of Competition Entries for BSQ Autumn Show 2012

By Competition Steward – Helen Moriarty

The first thing I would like to do is to commend the exhibitors on the extraordinary standard of the plants entered for judging. The judges had an unenviable task selecting the plants for the various awards. This was especially so in the Foliage Vriesea class, where the judges elected to give four additional Highly Commended Awards as well as the first three placings

Although the entries in the decorative classes were of a very high standard, some classes did not attract any entries. For our Autumn Show we would like to attract more participation in this section by our members.

I would like to thank all the judges and the Chief Judge, Olive Trevor, for their time, expertise, and patience, during the judging, especially as it was at the end of a long day for them all, preparing plants and setting up other parts of the show. Also thanks must go to the exhibitors for their efforts in growing such lovely plants, and for caring for their plants over the time, often years, it took to reach such perfection. Thanks must also go to the many members and friends who helped with the show setup, and special thanks to Fred Thomson, Rob Murray, Glenn Bernoth, and Arnold James for all their help with setting up the competition.

Following are all the awards from the Autumn Show 2012

Class	Place	Entrant	Plant
1. Tillandsia	1st	Pam Butler	*Tillandsia xerographica*
	2nd	Pam Butler	*Tillandsia tectorum*
	3rd	Pam Butler	*Tillandsia xerographica*
2 Tillandsia in flower or spike.	1st	Nigel Thomson	*Tillandsia 'Roy Ford' hybrid*
	2nd	Nigel Thomson	*Tillandsia* 'Roma'
	3rd	Barry Genn	*Tillandsia crocata x duratii*
3 Vriesea in flower or spike.	1st	Len & Olive Trevor	*Vriesea* 'Kerri Ann' Unregistered
	2nd	Maxim Wilson	*Vriesea ospinae*
4 Vriesea – decorative foliage.	1st	Nigel Thomson	*Vriesea* 'Green Jade'
	2nd	Nigel Thomson	*Vriesea* 'Cappuccino'
	3rd	Robert & Melissa Dillings	*Vriesea* 'Forrest Splendor' Unregistered

Class	Place	Entrant	Plant
	Highly commended	Pam Butler	*Vriesea* 'Forrest'
	Highly Commended	Mal & Michelle Cameron	*Vriesea* 'Memoria Howard Yamamoto'
	Highly Commended	Robert & Melissa Dillings	*Vriesea* 'Mels's Forrest'
	Highly commended	Nigel Thomson	*Vriesea* 'Celestial Jewel' Unregistered
5 Guzmania	1st	Mal & Michelle Cameron	*Guzmania lindenii*
	2nd	Len & Olive Trevor	*Guzmania* 'Amethyst'
	3rd	Len & Olive Trevor	*Guzmania* sp
6 Other Tillandsioideae	1st	Mal & Michelle Cameron	*Werauhia kupperiana*
	2nd	Mal & Michelle Cameron	*Alcantarea glaziouana*
7 Other Tillandsioideae In flower or spike.	1st	Mal & Michelle Cameron	*Catopsis compacta*
8 Crypthanthus	1st	Barry & Ann Kable	*Cryptanthus* 'Ti"
	2nd	Barry & Ann Kable	*Cryptanthus* 'Jean Nicol
	3rd	Barry & Ann Kable	*Cryptanthus* 'Silver' Unregistered
9 Billbergia	1st	Mal & Michelle Cameron	*Billbergia* 'Hallelujah' Variegated
	2nd	Len & Olive Trevor	*Billbergia* 'Darth Vader'
10 Aechmea	1st		*Aechmea* 'Pilfered' Unregistered
	2nd		*Aechmea* 'Blue Tango'
	3rd		*Aechmea* 'Roberto Menescal'
11 Neoregelia – 200mm max. diameter.	1st		*Neoregelia* 'Aventura'
	2nd		*Neoregelia* 'Groucho' Unregistered
	3rd		*Neoregelia* 'Palmares'
12 Neoregelia - 400mm max.diameter.	1st		*Neoregelia* 'Night Sky'
	2nd		*Neoregelia* 'Magali'
	3rd		*Neoregelia* 'Lorena Lector'

Class	Place	Entrant	Plant
13 Neoregelia – over 400mm diameter.	1st	Cheryl Basic	*Neoregelia* 'Yin'
	2nd	Mal & Michelle Cameron	*Neoregelia* 'Alcatraz'
	3rd	Mal & Michelle Cameron	*Neoregelia* 'Atomic Blast'
	Highly commended	Mal & Michelle Cameron	*Neoregelia* 'Captain Moxley'
15 Other Bromelioideae	1st	Barry & Ann Kable	*Orthophytum gurkenii*
	2nd	Maxim Wilson	Ananas 'Emerald' Unregistered
16 Orthophytum	1st	Ema Basic	*Orthophytum gurkenii*
	2nd	Pam Butler	*Orthophytum gurkenii*
17 Dyckia	1st	Pam Butler	*Dyckia* sp.
	2nd	Pam Butler	*Dyckia fosterianus*
	3rd	Pam Butler	*Dyckia marnier-lapostollei* var. *estevesii*
20 Any Intergeneric	1st	Nigel Thomson	*xNidumea* 'Midnight'
	2nd	Mal & Michelle Cameron	*xCanmea* 'Jasper'
21 Specimen –Any genus	1st	Barry & Ann Kable	*Pitcairnia* species
	2nd	Len & Olive Trevor	*Guzmania* 'Grand Prix'
	3rd	Mal & Michelle Cameron	*Neoregelia* 'Shamrock'
22 Novice – Any genus	1st	John Olsen	
	2nd	Betty Shepherd	
23 Bromeliad in decorative pot.	1st	Nigel Thomson	*Crypthanthus* 'Absolute Zero'
	2nd	Len & Olive Trevor	*Cryptanthus* 'Pomegranate'
	3rd	Robert & Melissa Dillings	*Vriesea* 'Flat White' Unregistered
25 Miniature Bromeliad Display.	Highly commonage	Maxim Wilson	*Tillandsia bergeri*

Additional Notes on Breeding Superior Tillandsias

Author: Mark A. Dimmit

The following is an extract from an article which appeared in the Journal of the Bromeliad Society International 1990, V.40 (3),pp118-123.

This discussion continues my article on selecting superior tillandsia forms for hybridization purposes that appeared in Journal of the Bromeliad Society, volume 35, pages 101-103, and 130-132.

Selecting Superior Parents

Nearly all the characteristics you can see in a plant are inheritable. Thus, superior parents tend to produce superior offspring and vice versa. If you want to develop high quality plants, don't just cross any two plants that happen to be in bloom at the same time. Know the range of variability within a species, and choose parents that exhibit the traits you consider desirable.

Whether you are creating hybrids or just increasing a species, decide on a goal before you begin breeding. If you want to maximise certain traits such as abstract colour, spike length, or blooming season, select only one variable at a time and stick to it. Genetic inheritance obeys mathematical laws, and one such law is that you cannot maximize two or more variables simultaneously. If you want to combine desirable traits found in different clones, work on two at a time; getting three or more traits into a single offspring in one generation is mathematically unlikely. The following example illustrates these principles.

Suppose you have 100 specimens of *Tillandsia stricta*. There will be considerable variation among the plants, especially if they came from different populations within the large range of this species. You will most likely have one or two plants with spikes much larger than average, and a few with small spikes but deep red bracts. Some clones will consistently bloom earlier or later than the rest. Some will have unusually large flowers, and/or of deeper blue colour.

There are many choices for "improving" this species using the traits named:

1 Increase spike size;

2 Select for deeper coloured bracts;

3-4 Select for earlier or later blooming season;

5 Increase flower size;

6 Deepen flower colour;

7—16 Combine any two of the above traits (10 possibilities).

There are thus 16 possible breeding strategies using the six named traits. Suppose you have chosen to try for a large spike with deep red bracts. Since these two superior traits are rare, it is unlikely that one of your 100 plants has both already. Therefore, you need to cross the plant with the biggest spikes with the one with the reddest bracts. If one of these plants has another desirable characteristic, so much the better. But don't choose, for example, a plant with smaller spikes just because it has bluer flowers; you'd be compromising your stated goal.

Inheritance is random and thus similar to flipping coins. Flipping two at a time, two heads happen fairly often, but just try getting five coins to come up all heads! If you want to obtain the desired result in one generation, be prepared to grow several thousand seedlings. These traits are almost certainly controlled by several genes each, so the probability of all the desirable genes winding up in a single offspring is very small. Chances are that the best progeny of the first generation will have larger than average spikes and deep pink

bracts. Then you will have to cross the best of the first generation to produce a second generation, some of which, you hope, will have giant spikes and red bracts.

Once you achieve your goal (success is subjective; you can keep increasing size and deepening colour for many generations), then and only then think about adding a third trait to your best plants, deeper blue flowers for example. Of course, the deep-blue parent will probably dilute your big red spikes, so it may take several generations to develop all three traits to your satisfaction.

Selecting Parents for Hybrid Crosses

Choosing which two species will make an interesting hybrid is more difficult than improving a species. It takes experience to learn which traits of a given species will be manifested in hybrid offspring. In general, choose two species with very different growth forms if you want to create a distinctive new plant; choose similar species if you want to improve an already good form with hybrid vigor. For example, *T brachycaulos* and *T capitata* are similar in appearance; a hybrid between the two may even be difficult to recognize unless done under controlled conditions. But it may have hybrid vigour, and be larger or develop more intense leaf color at maturity. This is what happened with the hybrid between *T stricta* and *T meridionalis*: Tillandsia Houston is much larger and more vigorous than either parent and could be described as a giant, gray~leafed *T. stricta.* On the other hand, *T pseudobaileyi* is quite different from T streptophylla. A hybrid between these two could create a new and very striking life form if the most distinctive traits of each species come through. Not much of T streptophylla is visible, though; the hybrids look like a giant *T. pseudobaileyi.* In contrast *T streptophylla* and *T paucifolia* both contributed some of their distinctive traits to their hybrid. The result could be described as an elongated *T streptophylla*, or a many-leafed *T paucifolia* with twisted leaves and a large inflorescence.

Selecting and Culling for Further Breeding or Space Needs

If you have been successful, even a couple of seed capsules will result in 100 or more plants, probably more than you have room for. Plants obey the gas laws—they quickly expand to fill any available space. If you don't cull your collection, you will eventually have a huge number of overcrowded, unhealthy plants. It's preferable to have a few good plants than a bunch of crummy ones. As seedlings flower, evaluate them relative to their parents and to each other, and label them. Then get rid of the inferior plants. Save the few very best for further crossing, give away or sell the rest of the top third or so, and throw out the inferior ones. (Don't give away your culls because you can't bear to kill a plant; it's bad for your reputation as a horticulturist!)

Some Characteristics of Tillandsias in Hybrids

By John Olsen

(Noting that my efforts in producing these notes are simply as a collater and coercer based on an idea and starting notes from Peter Paroz. This paper is simply a collation of information from various sources and I acknowledge their input in the notes below).

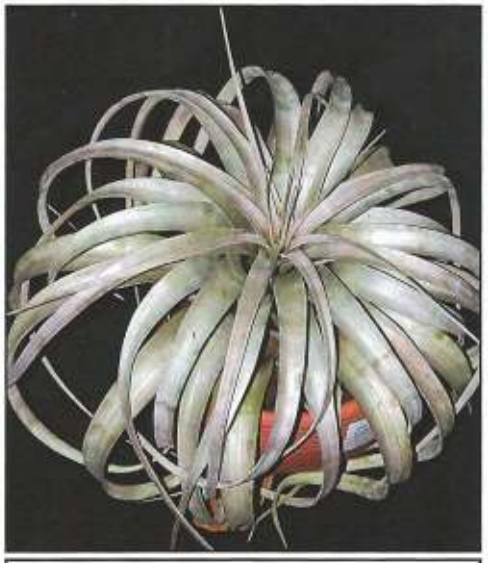
It is always interesting to look at a hybrid and speculate what the parentage may be. Taxonomically the differentiation between species is not based so much on the plant's appearance generally but on specific characteristics of the flowers. However we

Winner 'Best Pitcairnioide' at the Spring 2011 Show
Dyckia 'Dragons Tooth'
grown by Pam Butler

Guzmania 'Denise' albomarginatea
grown by Nigel Thomson

Neoregelia 'Blushing Zebra'

Vriesea 'Mary' Unregistered
grown by R & M Dilling



Tillandsia xerographica
grown by Pam Butler

Vriesea flammea
grown by Nigel Thomson

now have hybridists who have been making new hybrids for many years and have gleaned information which while not definitive helps them see likely parents in the hybrids. That none are perfect in this speculation is often proven when a plant is photographed and distributed on the net seeking identification. In other cases photos are distributed simply as a challenge for those willing to speculate when the true parents are known. These examples often lead to widely different possibilities being put forward and show this identification based on appearance is a hugely difficult task.

Importation of new and different plants to Australia is difficult and costly. However the production of new plants by hybridisation is generating a whole range of new plants often with spectacular characteristics as improvements on both parents and in the case of some slow growing species the hybrid vigour which reduces time to flowering.

However the information such as the table below can be turned around in the hands of the hybridist to make an educated guess how a certain cross may result. Hopefully these hybrids are made by design and not dictated by pollen availability. When it takes some years to determine success in the results of a cross, it is also useful to know something of the likely outcomes and avoid wasted effort.

The table below has been assembled from prior sources and discussions by Barry Genn, Peter Tristram and George Stamatis at and following the 2012 Tillandsia Workshop. Barry and George discussed a variety of hybrids which they are making, have made and have imported. Information has also been taken from Bob Reilly's paper "Influence of Grey-Leaved Tillandsia Species in Hybrid Crosses" published in Bromeliaceae in 2003 which in turn drew on Dimmitt's earlier publications in the BSI Journal and discussions at the 2002 Tillandsia Workshop. Ten years seem to have slipped by quickly!

Dimmitt's paper has been reproduced in an edited form in this magazine. The original paper "Additional Notes on breeding Superior Tillandsias" BSI Journal V 40 (3) 118-123 discussed many of the traits given by different parents to their hybrids. As that information is contained in the table those sections are not reproduced in this magazine. While Dimmitt's paper relates to Tillandsia species and hybrids his message in relation to improving plants applies equally well to hybrids and intergenerics more widely.

Parent	Dominant Features	Recessive Features
T aeranthos	• pink bracts, large dark petals • white flowered form can give multi-coloured petals • ease of flowering	
T albida	• Long thin inflorescence	• caulescence
T baileyi	• Size, • growth habit • inflorescence shape	• clumping habit
T bergeri	• Size • Growth habit • Twisted petals	

Neoregelia 'Magali'
grown by Nigel Thomson

Aechmea 'Roberto Menascal'
grown by L&O Trevor

Aechmea mariae-reginae
grown by Len and Olive Trevor

Best Cryptanthus Spring 2011
Cryptanthus 'Arlety'
grown by Nigel Thomson

Billbergia 'Watermelon Man'
grown by Greg and Narelle Aizlewood

Parent	Dominant Features	Recessive Features
T brachycaulos	• Soft green leaves • Shortens or supresses elongated spike of another parent	• Red leaves at maturity
T bulbosa	• Bulbous base • Twisted leaves • Dwarfs the inflorescence of hybrids • Very dominant to point hybrids usually resemble it	
T butzii	• Clumping habit • Dark barring on leaves • Bulbous plant shape	
T capitata	• Shape size, colour of inflorescence	• Leaf colour at maturity
T carminea	• Shape • Growth habit	
T. concolor	• Good symmetry to rosette • Stiff leaves • Branched spikes and chartreuse margins to bracts • Peduncle length, bract colour, leaf length, plant size	• Pink petals • Peduncle length,
T crocata	• Small inflorescence • Petal colour • perfume	
T deppeana	• multiple spikes • dense rosette • bigenerics	
T duratii	• Flower size • perfume	• Size tends to be recessive although Wonga and Goomong (x with *stricta*) are large cf to *stricta*
T ehlersiana	• silver, bulbous foliage • interesting shapes • pink spike	• slow growing
T exserta	• Inflorescence size and shape • Bract colour	
T flabellata	• Leaves "go off" through winter • Branched scape • Leaf colour (red to green is retained)	

Parent	Dominant Features	Recessive Features
T gardneri	• Softens leaves • Poor bract colour	
T geminiflora	• Branched inflorescence • Plant size	
T. ionantha	• Dwarfs its hybrids • Greatly shortens the inflorescence such that a stemmed inflorescence is rare	• Leaf colour at maturity
T laxissima *T platyrachys*	• pink bracts • multi-branched spike • perfumed flowers • rosette shape	• rosette can be large
T multicaulis *T complanata*	• flowers from leaf axils • rosette shape • bigenerics	• size • flower colour (x *crocata* gave all yellow flowers)
T neglecta (red form)	• Leaf colour • Plant size	
T pseudobaileyi	• dominant parent • bulbous base • twisted awl shaped leaves	
T recurvifolia ...var *subsecundifolia*	• Stiff lepidote leaves • Fairly vigorous growth • reduced flowering frequency • lepidote leaves • length of scape	 • orange bracts
T rothii	• Shape and colour of inflorescence • Red tinge to leaves at flowering • Slow growth	
T schiedeana	• Two tone petal colour to flowers is quite dominant • Leaves at 90 deg to stem is a strong influence	
T sprengeliana *T kautskyi*	• Both produce soft leaves with large trichomes • Bract colour • Plant shape	
T streptocarpa	• Growth habit • Inflorescence size/shape • Petal colour	• size

Parent	Dominant Features	Recessive Features
T streptophylla	• large size • large well branched spike • twisted leaves is less dominant trend	
T stricta	• Rapid growth • Short lived blooms • Rosette habit and size	• Flower bract and petal colours are suppressed when crossing with green bracted or white flowered species
T tennuifolia	• Caulescent growth habit	
T tectorum		• lepidote leaves

Vriesea 'Highway Beauty' (*platynema x saundersii*) and *Vriesea* 'RoRo' (*saundersii x platynema*)

Revisited by Butcher 4/2012.

This problem has been bugging me since 2001 when Peter Huddy thought he had solved the problem of two variegated vrieseas that had been imported to Australia under parentage formula from the USA. We know that parentage formulae are often reversed and that forms of variegation do vary. In 2011 *Vriesea* 'Shiraz' was registered

***Vriesea* 'Shiraz'**

Hybridist unknown, named by Peter Huddy, SA, Australia. Named in 1995 (*platynema x saundersii*) Plant 60cm diam, flowering to 90cm high. Has never shown signs of variegation in 20 years cultivation in SA. Although this has the reverse parentage to that reported for the variegated 'RoRo' there appears to be great similarity and thus similar origins.

Reg Doc by M Butcher 11/2011

The only way to answer this problem was to try find someone in the USA who was still growing plants called *V. bituminosa x saundersii* (variegated) and this was Michael Kiehl of Michael's Bromeliads in Florida. Michael promised to send me a photo of the plant in flower and did so in March this year.

We now have photos of all plants involved in this saga. They have a red floral bract, yellowish sepals and light green petals. All have discolor leaves.

The problem seems to be on what was considered to be *V. bituminosa* when the hybrid was done many years ago. If we look at Flora Neotropica by Smith & Downs 1977 we will see that even the botanists had problems with identity involving *V. platynema* whereas, these days, most of us know how to identify *V. bituminosa* with its brownish petals (see Foster's painting of his *V. bituminosa* for another problem regarding colour)

The most likely scenario is that first we had *platynema x saundersii* (now called 'Shiraz') which sported variegation but some had different variegation and some bright individual felt one had '*bituminosa*' in it not '*platynema*' - and even reversed the parentage.

We should continue to use the names 'Shiraz', 'Highway Beauty', 'Highway'(non-variegated 'Highway Beauty') and 'RoRo' because so many are growing plants under these names (as well as *saundersii* x

Vr Shiraz
Vr bituminosa x saundersii variegated
Vr Shiraz
Vr bituminosa (Foster)
Vr RoRo

platynema AND *platynema* x *saundersii* plus or minus the notation 'variegated AND bituminosa !) but remember we are dealing in all probability with the same hybrid. In our experience the plant in Adelaide called 'RoRo' has a more stable variegation pattern but then this could be different in a different climate. All have the *V. saundersii* spotting of the leaves at some time in various intensities in their life to flowering.

'Highway Beauty' was named from a plant in Adelaide, South Australia because it had so-called '*bituminosa*' in its parentage. This particular clone is still here but I would doubt that an offset actually escaped from here. The only logical solution is that growers in Australia and/or the USA were growing variegated plants with *bituminosa* somewhere in the formula on the label and automatically assumed it must be 'Highway Beauty' . We know this happened in New Zealand where Peter Waters maintains their 'Highway Beauty' does not link to *V. bituminosa*.

This is yet another example of non-action by the hybridist and while we now have a tenuous solution it is a muddled one.

Previous writings on the subject follow:

***Vriesea* 'Highway Beauty' (*bituminosa x saundersii*) and *Vriesea* 'RoRo' (*saundersii x platynema*) by Butcher 10/2009.**

Remember that since 2005 there is only one name for a variegated Bromeliad irrespective of the form of variegation it has. These forms can be added as adjectives if felt necessary.

Towards the end of 1990's Peter Huddy of Adelaide, acquired these variegated plants from Queensland under the formula as quoted and wondered why they had not been given names and registered them. Despite searches he was unable to trace a source but it seemed to be in Florida. In 2001 he decided to grandfather them into the system. The bituminosa reference took Peter to bitumen and thus 'Highway' and the other he used the nickname of his daughter.

Strictly speaking only the plants named by Peter should have these names but what do you do with plants around the world with this quoted parentage. Formulas are so misleading. It is a pity these plants were not given names by the hybridist concerned or even by the person when the first variegation appeared. If anyone has information in this regard please contact the writer

How accurate is this formula? Could the formula have been 'corrected' after the first release. Could the label have been carelessly written. We know that in the 1980's little care was taken that the seed parent comes first.

In my search for references to these parentages I tried all avenues. There is no reference in the Journal of the Brom. Soc. There is reference to a (*bituminosa x saundersii*) and reverse in Brian Smith's 1984 Manuscript. This, no doubt, came from Hill's 1984 catalogue which has reference to Bert Foster. One can only assume this was not variegated because this form always attracts a higher price. It would also seem to be the plant that got to Australia in July 1986 and recorded in the ledger of PineGrove Nursery, NSW, under #2952.

What is recorded for variegated plants? In 1993 we see in the catalogue for The Olive Branch, Qld reference to *saundersii* hybrid variegata and a *saundersii* hybrid albomarginata. Is there a tenuous link here?

Vriesea (bituminosa x saundersii)
References found

- 1997 Pineapple Place, Florida, (*saundersii x bituminosa*) variegata - note reverse parentage
- 2004 Michael's Bromeliads, Florida,

(*bituminosa x saundersii)* variegated

Vriesea (saundersii x platynema)
References found

- 1986 Pine Grove Nursery #2941 (*platynema x saundersii)* variegated (from USA)
- 2004 Michael's Bromeliads (*saundersii x platynema*) albomarginate
- See Bromeliad (NZ) 42(9): 2002 From the Registrar by Gerry Stansfield

This month we have two very interesting vrieseas that have been around.

The second *Vriesea* has been around for some time and unnamed is a cross between *V. saundersii* and *V. bituminosa.* I can remember seeing this plant in Harry Martin's collection back in the late 1960's and these came from the very famous Muriel Waterman's collection, who was a hybridiser and seed grower, and remember that both *bituminosa* and *saundersii* are very old and early vrieseas, and it is possible that this lovely cross originates there.

Anyway, this plant has been called 'Highway' and the connection is *bituminosa* sounds like bitumen for sealing our highways. *Vriesea* 'Highway' sported a variegated plant, and it is this we will show as *Vriesea* 'Highway Beauty'. It is truly a lovely variegated plant and makes a fine specimen as we saw last month at our Auckland meeting with Marie Hesley's plant from Hamilton. To add more confusion, there is another form and that is albomarginated. All these plants have multi bract spikes which they have taken from *V. saundersii* as *V. bituminosa* has a ladder type spike.

Not to be confused with *Vriesea* 'RoRo', which is *V. saundersii* x *V. platynema* and can be variegated or albo-marginated

From Bromeliad (NZ) 48(11): 2008

Vriesea 'Highway Beauty' a bit of a mystery- Article and photo by Peter Waters

For many years we have been growing a very attractive variegated vriesea as 'Highway Beauty' but formerly under the formula *bituminosa x saundersii.* The name 'Highway Beauty' was registered in 2002 by Peter Huddy of Adelaide. Since then 'Highway' has been applied to the non-¬variegated version. In 2001 Peter Huddy registered a very similar plant as *Vriesea* 'RoRo' (*saundersii X platynema*)

In New Zealand the plant first surfaced as *Vriesea bituminosa x saundersii* and eventually adopted the name 'Highway Beauty'. For some time I have felt that there is something amiss here. *Vriesea bituminosa* is a very large wide-leafed bromeliad with a large dark patch on the leaf tips, and our 'Highway Beauty' seemed to resemble *platynema* more than *bituminosa.* However I didn't really worry too much until I had a *Vriesea platynema* var *platynema* flower. It had come from Elton Leme in Brazil and the floral bracts were a bright pinkish red, totally unlike *Vriesea platynema* var. *variegata*, a night-flowering plant, which has rather colourless flowers. Incidentally, Elton says that they are not the same species and he will at some time alter the name of *platynema variegata* back to its original name *Vriesea gamba* (Currently hiding under *V. jonghei*! - Butcher). At this stage I began to wonder why the flower on our 'Highway Beauty' was bright pinkish-red. *Vriesea saundersii* has yellow floral bracts and petals and *bituminosa* has green or pale yellowish flowers like most night-flowering vriesea. At this time I am still trying to find a 'Highway Beauty' with a flower that is not red, and until I do, I am thinking that all our *Vriesea* 'Highway Beauty' should be named *Vriesea* 'RoRo'. I remain to be convinced that 'Highway Beauty' actually exists, at least in New Zealand.

Vr. 'Green Tea'