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

Study Group meets the third Thursday of each month

Next meeting 19th July 2012 at 11 a.m.

Venue: PineGrove Bromeliad Nursery

114 Pine Street Wardell 2477

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Discussion: June 2012

General show & tell

Photosynthesis 2

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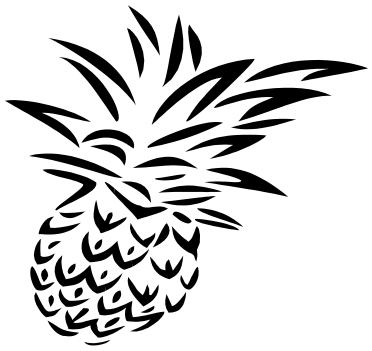


Meeting 17th May 2012

The meeting was opened at 11:37am. Ron welcomed 33 members and mentioned apologies for seven members. Of particular interest was the special guest Bill Morris who had kindly volunteered to make a presentation to the group (see p.10 for a summary of his talk). Ross summarized the article on p12 of the May 2012 newsletter, which give us an insight into Bill's mammoth contribution to the International and Australian bromeliad fraternities during his long career with the Bromeliaceae. This of course includes his 50 years as Trustee to the BSI. Our congratulations to Bill for an awesome achievement.

General Business

Ross, in consultation with a number of members developed the view that an additional meeting every so often, may be necessary to accommodate the 'hands on' tasks which should be learnt and practised by members. There is just not enough time in an ordinary meeting to cover the tasks such as garden inspections, seed collecting and planting, brom mounting on trees, stumps, or rocks, dividing difficult and well armed clumps of broms and the list goes on. In any case the weather has been too inclement these recent months to practise these tasks. In addition these kind of tasks are difficult to demonstrate and practise with 25-30 bodies. Smaller groups would be far more favourable towards generating positive learning experiences. Of course some members, for whatever reason, may not wish to participate, and that is O.K.
It was suggested that interested members arrange among themselves, small compatible groups say six to 10 individuals, and organize a day suitable for Ross and Helen (other than a meeting day) with a suggested practical agenda. This way those smaller groups can concentrate on those subjects/ knowledge gaps which need additional attention. Most members thought this was an excellent suggestion and a number of members expressed an immediate interest.

Dawn asked if there was a current list of members names addresses and phone numbers. The reply indicated there was a list but it needed updating. Also members privacy was to be protected and respected, those wishing to not making that information available could do so. On that basis the list would be updated and made available.

Laurie and Ross mentioned that a few of our members attended the recent 'Friendship Day' held by the Woodburn Garden Club, with everyone having a good time. Fortunately the weather held making it a pleasant sunny day.

The raffle earned $137 for the group. Thank you plant donors and ticket buyers.

Member's Show and Tell

Kay Heindke presented a very nice *Ananus comosus* with a little red pineapple fruit and a small pup. The *Ananus* was grown in a lot of light but pretty much left

to it's own devices, it had done well. She also presented a *Vriesea hieroglyphica* hybrid with two pups (the plant being an upper pupper). It was suggested the pups be left until August/September when they will be larger and much easier to extract. The plant requires a little more water.

Ross displayed an *Aechmea bromeliifolia* he obtained from Laurie with white bracts and bulbous base grown from seed Laurie had obtained from the BSA. Ross also had a different *Ae. bromeliifolia* grown from seed wild collected in north Brazil, perhaps var. *angustispica.* This plant has bright pink bracts. Keep in mind there are a number of different *Ae. bromeliifolia* worth collecting.
Bill Morris made the comment that when people collect plants they usually collect those that appeal to them, which usually happen to be different to the general population. Remember to take care, as these specimens should not be used to judge the type form (original collected plant for the botanical description).

Ross also had some broms which could handle more promotion. The first was *Aechmea cathcartii* which came to Australia as seed from the USA and has been around since 1979. It is an attractive plant but has not been widely grown. The BSI in its Journal in 1997 suggested this plant needed re-introduction and Ross agrees. This particular specimen is most likely true to type. Another was *Ae.dactylina* which has not yet flowered and the third was *Ae. strobilina* with a very attractive multi branched inflorescence with pink/yellow bracts and broader leaves than *Ae. dactylina*. Bruce Dunstan collected this seed in the wild in Panama in 2007. Finally *Aechmea phanerophlebia* which has also been around for some time and needs re-introduction. It has a beautiful inflorescence with pink/ red bracts, and blue petals. Definitely worth having.

Laurie presented a number of *Tillandsia* including *Till. streptophylla* in a clump, a nice display; *Till. recurvifolia*, with pink bracts and white petals; *Till. funckiana*, a group of seven on an old bottle cork, flowers a brilliant red, leaves red tipped, grown in lots of sun under 25% shade cloth; *Till. tenuifolia* var. *saxicola*, a long inflorescence with tiny white petals and pink bracts; *Till. magnusiana*, attractively grown on cork on a small pot; *Till. butzii*, grown from seed (29 Sept. 08) on cork...a lot of them; *Till. capitata '*Salmon', the cold has brought out the beautiful salmon pink. He also had a *Canistropsis billbergeroides* variegated identified.

Ross referred to the articles on cork (see p.11 May 2012 newsletter). He showed a number of samples of first cut or 'virgin' cork bark from Portugal, which he had acquired in Sydney as a 54 kg bale which has lasted for many years.

Jeanette was wondering what the dead marks and spots on her *Till. fasciculata* X *Till. flabellata* were. The answer was that the spots are most likely the result of damage from something falling on it.

Ross used Lesley's *Neo.* labelled as 'Heart Music' to show there are two forms of this plant. One with striations and one without, the non striated form has now been registered as *Neo.* 'Heart Music Too'. Lesley's was the non striated form.

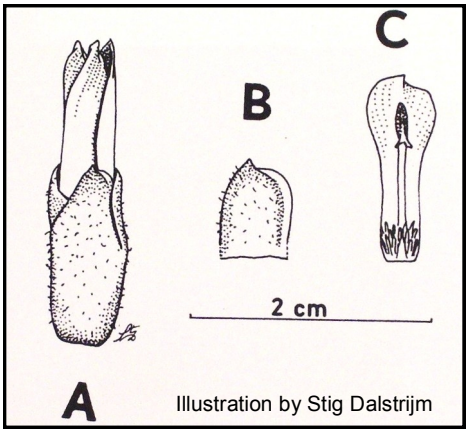
Introducing: *Aechmea cathcartii* by Harry E. Luther

Although *Aechmea cathcartii* was first described in this journal (Reed and Read, 1981), it apparently has not been widely grown by hobbyists. Perhaps it needs a "reintroduction" to the readers of these pages.

The type of *Ae. cathcartii* C. F. Reed and R. W. Read was collected in 1976 from northern Venezuela where it grows as an epiphyte in the rainforests of Parque Nacional Guatopo. When described it was known from only a single collection, but now several additional specimens have been identified in herbaria, all originally misdetermined *Aechmea nudicualis,*[1] in spite of the fact that the authors of *Ae, cathcartii* compared their new species to *Ae. victoriana* in subgenus *Lamprococcus.*

Flowering specimens of *Ae. carthcartii* are 35 - 60 cm in diameter and 30 - 50 cm tall. This species requires warm, moist and shaded conditions. I suspect one factor accounting for it's scarcity in horticulture is it's intolerance of even short periods of freezing temperatures (0ºC.). Also, the inflorescence is not especially long-lived; it lasts in good colour for two to three weeks.

Aechmea cathcartii was poorly illustrated when described. The photo (p.9) and the drawing presented here will, hopefully, alleviate any questions concerning the nature and identification of this species.



Aechmea cathcartii, drawn from the clonotype. A, flower; B, sepals; C, petal and stamen.

Literature cited :
Reed C.F. and Read R.W. 1981.
Journal Bromeliad Society, 31: 60 - 61.

Mulford B. Foster Identification Center
Marie Selby Botanical Gardens, Sarasota, Florida.

[1] *Achmea nudicaulis* is a polymorphic and widespread species and is the type of subgenus *Pothuava*. It does appear to have an affinity with *Aechmea cathcartii* as do some members of the genus *Ronnbergia*. The ronnbergias with their inflorescences of muted colours and with spreading corollas, are probably adapted to insect pollinators. In contrast hummingbirds probably find the "hot-colored" inflorescences and tubular corollas of the aechmeas more to their liking. Perhaps the differences between *Ronnbergia* and *Aechmea* are due more to recent adaptations to different sorts of pollen vectors than to phylogeny (descent).

Reprinted from: Journal of The Bromeliad Society, Vol. 47, November - December 1997, No.6.

Aechmea bromeliifolia (Rudge) Baker in Bentham and Hooker, 1883.
Notes by Ross Little

These plants can attain a height to 900mm including the long stemmed spike with a conical or pinecone type inflorescence with yellow petals which turn black after anthesis. It grows from near sea level to approximately 1600 metres altitude. It has a tubular growth habit of few leaves forming an urn-shaped rosette. This species is suitable for a sunny position growing terrestrially in the garden or saxicolously in a rockery area. All the varieties of *Ae. bromeliifolia* are well suited to growth as epiphytes high in the tree tops to gain maximum available light.

Ae. bromeliifolia - pinkish brown concolorous leaves occasionally darker brown banded, scape bracts pale rose to red.

Ae. bromeliifolia var. albobracteata - grey green leaves, scape bracts white.

Ae. bromeliifolia var. angustispica - grey green leaves, scape bracts bright pink.

Each of these varieties of *Ae. bromeliifolia* in the photo's top of page 9 are well worth looking out for to have in any garden.

Helen's Heuristic Hunt # 3 -- Find a Word

T	I	L	L	A	N	D	S	I	A	S	W	G	L	N	U	V	G
E	X	I	P	H	I	O	I	D	E	S	B	F	I	M	S	Y	I
N	I	H	J	K	L	P	O	I	U	Y	T	R	E	I	W	Q	L
U	O	G	F	D	S	A	A	M	I	X	A	M	S	D	F	G	L
I	I	H	F	J	K	L	M	N	A	B	V	C	X	Z	W	A	I
F	D	A	I	Z	O	I	D	E	S	Y	T	R	X	E	Q	N	E
O	E	D	O	I	U	A	L	O	C	I	D	N	A	P	L	I	S
L	S	U	C	R	A	L	G	S	M	N	O	P	X	A	G	T	I
I	O	R	S	E	L	A	D	R	S	E	I	R	U	A	L	N	I
A	C	A	H	T	M	G	I	P	T	T	B	M	W	Q	B	E	Y
B	A	T	S	O	P	L	O	L	I	A	C	E	A	K	F	G	P
V	Z	I	Y	R	E	D	F	G	H	J	K	L	Z	X	C	R	V
F	G	I	H	T	J	K	L	M	N	S	T	R	I	C	T	A	B
W	J	D	S	A	A	Z	Q	W	E	R	T	Y	U	I	P	O	M
C	R	O	C	A	T	A	X	C	V	B	E	R	E	C	T	A	N

aizoides andicola argentina crocata duratii
erecta gilliesii ixioides loliacea maxima
retorta stricta tenuifolia tillandsia xiphioides

***Nidularium* 'Red Queen'** by Derek Butcher 5/2012

This all started when Justin Lee of Victoria asked me what I knew about *Nidularium* 'Nat DeLeon' because plants of this name were being sold on e-bay but there was no reference in the Bromeliad Cultivar Register. The name rang a distant bell so I checked my old photographic slides and found some noted with a faded ex 'Nat DeLeon' and the same plant called 'Red Queen'. How could this have happened ? Margaret and I remembered having had a plant with *Nidularium* ex 'Nat DeLeon' on the label in the early 1980's from Qld somewhere.
In the late 1980's we were working with Don Beadle on his preliminary hybrid list and thought it would be a good idea to see if we could nail this *Nidularium* hybrid. We chanced upon 'Red Queen' which fitted ideally even to the pink petals linking it to the *Nid. regelioides*. So we changed our label and it has been there ever since. We even showed the photo on the BCR in 2000 under 'Red Queen'. It is easy to see how the 'ex' got dropped which links the source of the plant not its name! A querying mind would wonder why a hybridist would name a plant after himself. *Nidularium* 'Red Queen' is shown in the BCR as a hybrid done before 1973 by R. Davis from (*regelioides* x *innocentii*) but little is known about the hybrid other than what was written as follows:

***"Nidularium* 'Red Queen'** by Irma Gall in J Brom Soc 23(5): 183-4. 1973
Another hybrid that is not too different from its parents is *Nid*. 'Red Queen.' Its outstanding characteristic is the clear, bright red colour at time of blooming and the length of time it holds in excellent colour. The first one to bloom for me held its bright, fresh colour for twice as long as one of its parents, *Nid. regelioides*. I had one of each of these plants next to each other, and they came into bloom at the same time. The *Nid.* 'Red Queen' was fresh and new looking when the *Nid. regelioides* had completely lost its colour."

We know there were strong links between Davis and DeLeon and this was another reason why we changed the name at the time.

With any plant imported from the USA I always like to get Ross Little to check the Ledger kept by PineGrove Nursery and there was an entry
BBK # 2651, *Nidularium* 'xNat DeLeon', 5/1986, from Grace Goode.

We know that Grace Goode never named any of her hybrids 'Nat DeLeon' so it must have come from another source.
Maybe that entry should have been 'ex Nat DeLeon' which is where the confusion has come from.

Current investigations reveal that nobody is growing any unregistered *Nidularium* 'Nat DeLeon' in Florida but then nobody has owned up to growing *Nid.* 'Red Queen' either! We do know that in Michael Kiehl's catalogue he offers 'Red Queen' but also offers (*regelioides x innocentii*) so he must be seeing differences with the same alleged primary cross.

However, we do have a photo that Herb Plever took at the World Bromeliad Conference at Orlando in 1980 of a *Nid.* 'Red Queen' which confirms that the red leaved form of *Nid. innocentii* was used in the hybrid.

At the moment I believe that *Nid.* 'Nat DeLeon' is an unnecessary name, however for Australian growers it has been put in the Bromeliad Cultivar Register as a reference to *Nid.* 'Red Queen'.

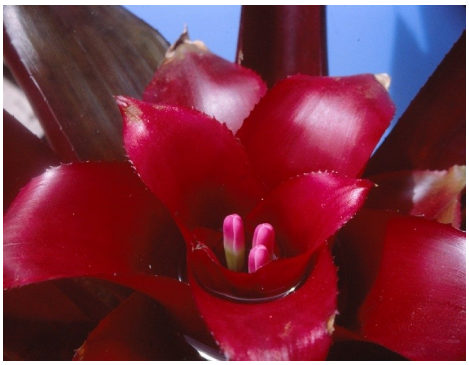
BCR reference below by Geoff Lawn (BCR Registrar):

***Nidularium* 'Nat DeLeon'**

Invalid cultivar name perpetuated in Australia for many years (<1984), from an import by the late Marj McNamara in Terrigal, New South Wales. Possibly from well-known bromeliad identity Nat DeLeon in Florida U.S.A who says this cultivar name and it's photo reviewed are unknown to him (pers. comm. -- May, 2012). This entry 5/2012

Refer *Nidularium* 'Red Queen' which is identical to *Nid.* 'Nat DeLeon'.

Nidularium 'Red Queen'
photo by Herb Plever at WBC Orlando 1980.



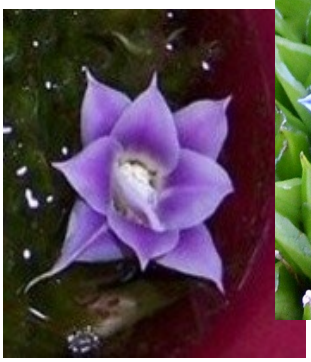
Nidularium 'Red Queen'
photo by Derek Butcher

Nidularium grown as 'xNat DeLeon'
photo by Ross Little

Vriesea gigantea var. seideliana
1st Open -- Laurie Mountford

Tillandsia bulbosa -- Debbie Smith
1st Novice and Judges Choice

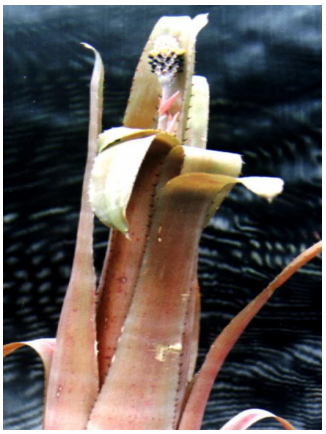
Till. fasciculata x flabelleta



A diagnostic feature of the Bromeliaceae family is that all flowers are made up of three petals, however some anomalies do occur.

A collection of Tillandsias grown by Laurie Mountford

Kay's Ananas fruit with crown (pineapple)



Aechmea bromeliifolia

var. albobracteata

var. angustispica

Aechmea phanerophlebia

Aechmea cathcartii

Aechmea strobalina

Grass pups with skewer supports

Orthophytum 'What'

Photo's supplied by: Ross Little, John Byth, Derek Butcher and Bill Enders (9 petals).

Bill Morris-Special Guest Speaker

Topic: Some Old Favourites/Hybridizing

Bill introduced his talk with a statement on what was driving him at present. Turns out he wants to realize some of the potential that was never realized in his previous hybrids. He has turned his attention to *Billbergia*, which he says are easy plants to hybridize because of the well presented male and female parts. His main reason for being up this way (he comes from the Newcastle area) was to obtain some of his 'old' *Billbergia* hybrids. Billbergias were the first broms that he hybridized. As a consequence he has become familiar with the gene-pool and he has seen the results of his efforts. From this work, together with discussions with many breeders, Bill now has much information on good parents, which is one of his keys to hybridizing.

Bill recently visited John Catlan's nursery, where he inspected some 3,000 of an original batch of 10,000 *Billbergia* seedlings. John's plant's parentage was American with the second parent being mostly Bill's old hybrids. Another hybridizer from Bundaberg, Valerie Honeywood, is also using mostly Bill's *Billbergia* hybrids for her parents. Bill has concluded from all of this that his early *Billbergia* hybrids had and have good potential, and that he himself never realized it.

He was able to obtain on this trip a number of plants derived from his earlier hybrids. The first one of his new spoils which he presented to the meeting was a *Billbergia* with brown leaves and yellow spots, not the colour of it's parents and seemingly a new combination of colours.

It was at this point that Bill decided to make some more detailed comments regarding breeding. He said that breeders usually selected plants with the best characteristics to hybridize, ever hopeful of obtaining a plant with the combination of all the wonderful characteristics of these parents. Unfortunately this very rarely occurs. The hybridizing may stop and the plants won't realize their potential. Bill points out that 1000 or more hybrid seedlings may be needed before one 'super' seedling is raised. Raising 100 is probably not good enough, and raising 10 will give no chance at all. It is a numbers game.

Bill himself grew relatively few, not even 100,of each of the *Billbergia* hybrid's seedlings. As a result any particular cross didn't get to realize it's potential. Bill would pick out those he liked. It is actually this step which is the most important in the process i.e. the selection of plants to interbreed/cross, that have complex and known ancestry. This is usually a personal choice where we have potential but don't know what the specific potential is. Here too we must remember Mendel's Laws, and that characteristics may be dominant or recessive. It may take a long time and a large number of seedlings before a combination of two recessive character genes produces the 'super' hybrid seedling.

Orchid growers sometimes spend 20 years searching for good parents. Once found they use them time and time again, usually with another (third) good parent. When the 'super' hybrids are crossed the whole process slows down, for the excellent results compare with the parents and we ask ourselves, what is an improvement? It is a slow process and some hybridists fall by the wayside.
Bill says this is where perseverance is a necessary virtue.

Here again Bill showed some of his spoils which he had picked out from various batches because they appealed to him. Some were unexpected results. The group included a hybrid *Billbergia* 'Bill's Triumph', a green/brown plant with white bands which had been named by Grace Goode. Bill mentioned that Grace had named quite a few plants for him because she was very good at picking apt names, particularly ones which related to the plant's ancestry. Apparently Grace kept a notebook of potential names which she gleaned from a number of sources, whenever she came across an interesting word. Bill admitted that his ultimate aim was to produce a large *Billbergia* of attractive colours with clean white spots, knowing of course that this plant might come from parents totally unlike it.

How do we expose a Billbergia's potential? We know that we are dealing with mutations, so Bill thought we should touch on the production of colour, pigment, contrast, spots etc. He introduced the major pigments using a *Neoregelia concentrica* as a model. He spoke of the pigment anthocyanin which can be broken down into three sub-divisions:
(1) Pelargonidin, red/orange, from *Pelargonium*.
(2) Delphinidin, generally purple sometimes blue, from *Delphinium*.
(3) Cyanidin, blue or red or any colour in between.
These pigments can be diluted and lead to different shades of colour.

Also colour can be derived from plastids:
Chloroplasts, green.
Chromoplasts, yellow can be orange.
Amyloplasts, white, really just little bags of starch.

Bill showed some more well coloured (red, brown, purple) Billbergias from John Catlan. All were very small. John had used *Billbergia* 'Domingos Martins' as a parent in a lot of the seedlings, but Bill selected those with less white as he wanted those with different colours, patterns, and spotting. For Bill its all about potential. His last selection from John was a well marked green with white spots *Billbergia*, with a pointed leaf form. The plant appears to have *Billbergia nutans* in it's ancestry.

Bill said that since we are looking for two plants with the same recessive gene, it is most probable that the character wont appear until, at least, the second generation .i.e. do your F1 and then self the F1 or cross the F1, to get a large number of variations.

Bill also breeds Clivias. In his experience these plants have the most scientific information available on pigments, of all plants. Therefore those seeking more information on pigmentation should look to this source.
An analysis of 180 results using orchids showed the following:

Pelargonidins	1%	(very rare)
Delphinidins	3%	(rare)
Cyanidins	96%	(common)

Because of this Bill predicts the purple colours in the *Neo. concentrica* are actually cyanidins not delphinidins. Keep in mind that brown is formed with a mixture of red and green.

Bill made some general comments regarding brom decoration. Many broms have anthocyanin spots, which are different to billbergia spots, which in general have a different origin. Lots of other patterns, spots ,streaks, sequences of spots and streaks, lines of colour etc., all have similar origins (all broms) i.e. caused by growth. Variegates differ in origin (see p6 FNCBSG(NSW) March 2012 Newsletter) and develop from the meristem cells, where some of the tissue can't make chlorophyll. As a general rule, pigments that cause different colours exist in the leaves, lines and streaks are due to growth, with a slight modification for variegates.

Bill pointed out that with time the variegations in *Neo. concentrica* disappear. New leaves have stronger and sharper variegations. Selection of the best offsets will, over time, improve the strength of the variegations. *Neo. concentrica*, *meyendorfii* and *carolinae* all breed and throw variegates, however, variegation in *Billbergia* is rare. Another of Bill's projects (does this man ever slow down?) is to make a large number of crosses to see if Billbergias have the potential to produce variegation.

Bill saw this as a good spot to finish his talk and take questions:
Leslie asked what sort of time frame these sorts of projects would take?
Bill's answer was that it varied depending on a number of factors. Perhaps one of the most important factors was the growth rate of individual plants. Some plants are known quick or slow growers e.g. *Billbergia* 'Domingos Martins' is a slow grower and generally has few offshoots. These plants would not be a commercial proposition and are for collectors only. By way of another example, all of Bill's plants from John Catlan are very small, slow growing, but with good colour. In fact these plants are probably four to five years old, again not something for a commercial grower.

Bill thinks the trick is to get maximum growth out of the plant early i.e. in the first year by using a suitable potting mix and fertilizer. Sure the plant will go all green, but there will probably never be as good a chance to accelerate growth. In any case once put in the sun, and with the fertilizer used up, the *Billbergia* will show its true colours. So two years for a reasonably quick cycle.

The group thanked Bill for an excellent and informative presentation.

A Question Asked this Month

Question by: Mike
Does anyone pay attention to *Neo.* flowers ?
Every now and then, I see one of the *Neo's*. flowering, and it always seems to be a little purple one (flower). I don't really study them though ? Does anyone ? Are they at all diagnostic for ID the plant ? Are they all purple ?

Answered by: Lisa Vinzant (Hawaii)
Mike, they are definitely diagnostic for species identification, and will continue to be as long as taxonomy is based on floral morphology (if DNA analysis takes over, then that's another story). If you go to the *Neo.* section of the FCBS photo index and scroll through the species photos, many of them will have close-ups of the flowers, and in some cases Uncle Derek has removed the inflorescence from the plant to better illustrate the distinguishing characters. For most people, they're not something you'd notice from a galloping horse, but when you take the time to look (and measure the parts), there's actually quite a bit of variation. Petal colour is usually not considered diagnostic, only because the current system relies on dried herbarium specimens in which the pigments are long gone, so relative size and arrangement of all floral parts are usually the key. For those of us with live plants to work with, however, petal colour can be a very helpful indicator of ID. They're not all purple, they can be white, blue, lavender, green, even pink, in many different shades and two-tone combinations. Also the shape and amount of openness can vary a lot. Some species even have fragrant flowers, although this is not considered a diagnostic feature either.

Taken from: www.bromeliadforum.za.net

It Works For Me

by John Byth

When potting newly removed *Alcantarea* grass pups, I sit them just two or three millimetres into a two to one ratio mix of chopped sphagnum moss and Perlite, and support them with wooden skewers to provide stability as roots begin to grow. After removal and before potting I spray all leaf surfaces with the anti-transpirant 'Envy' to reduce dehydration stress evidenced by the rolling together of leaf-edges once independent pups are returned to the shade house. I mist pups several times a day until roots are established, apply a few (a quarter of a tea spoon) slow-release fertiliser prills to the surface of the mix, being careful not to let them rest against any plant tissue, and apply a full strength foliar fertilizer at least once a week, mixed with a fungicide to try to reduce the rate of growth of algae and fungi on the surface of the mix. As with mature plants I wish to pup, even with small grass pups I carefully remove any dead or dying leaf so as to expose the basal tissue (the area at the bottom of the trunk where leaf bases meets roots) and then dust the area and any roots with sulphur powder, as I will any exposed tissue on the mother plant, to provide a barrier against infection and reduce the chance of transfer of pathogens to the pup's new medium.

A Specialised Bromeliad Study Group Formed

Report by Trish Kelly

A small group of members of the FNCBSG have formed an intense Study Group to learn more about the complexities of cultivating, breeding and seed raising along with comparative studying of specific species in the Bromeliaceae family. The Group met recently at PineGrove Nursery having a very interesting and informative session. We spent sometime discussing the format and direction of this Study Group, deciding to begin with the following topics:

A) To study the cultivation of selected bromeliads and compare the growth responses given the varying conditions and locations of the Group.

To thoroughly understand and compare these growth responses we have undertaken to meet at the various locations of each member.

Viewing and discussing each location, given the diversity of aspects, conditions and climatic influences will give the members a greater appreciation of the growth responses.

B) Species, alliances, complexes and groups.
eg: study *Nidularium procerum* -- growing a collection of *Nid. procerum* under the same conditions in one location for comparative study, noting the variability within the species and compare to same study at a different members location.

C) Growing specific species in different locations by various members for comparative study eg: *Alcantarea* for Rob Smythe.

D) Seed Raising -- species and hybridising
eg: *Aechmea, Neoregelia* and *Vriesea* with an emphasis on species seed, as a learning experience for Group members and comparative study.

We are an enthusiastic group and look forward to other members of the Far North Coast Bromeliad Study Group forming another group with similar aims so we can share and compare notes and knowledge acquired.

The aim here is that each member must be prepared to present a talk and also a report to the main Discussion Group at a monthly meeting on the activities of the smaller Study Group. Also a different member each month is to write a report for the Newsletter after each meeting. This will assist in greater member participation, more speakers and topics at our meetings and articles for your Newsletter.

Therefore if you are interested in forming another satellite group of perhaps eight people, consider each member must participate in giving a talk and writing a report, it's not to be left to one member only.

Orthophytum **'What'** Hybridizer: J.D. Garretson, California.

X *Orthotanthus* 'What' — *Cryptanthus* 'It' × *Orthophytum saxicola* var. *rubra.*

Mr Garretson made this interesting bigeneric cross in March of 1971.
He used *Orthophytum saxicola* var. *rubra* as the mother plant
and *Cryptanthus* 'It' as the pollen plant. He made the cross both ways; however, all seedlings from the mother plant 'It' were white and did not survive.
The seed matured and was planted in June of 1971. The seedlings were large enough to transplant in August of that year. There were approximately 500 little plants. Only four of these were variegated and just one plant held the variegation to maturity. There were many "dogs" resembling neither plant parent. Some plants remained dwarf, reaching a size of no more than two inches high. Two plants were extra large.
These little bromeliads began flowering in late February of 1972. Three of the variegated plants flowered in early 1973; one had normal flowers and produced one seed pod. The other two produced pseudo flowers and the central growth has continued to grow. On the two plants that produced the pseudo flowers, there has been an offshoot produced at nearly every leaf base.

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What is 'What' ? by Elaine Jones

Elaine had two plants, one labelled as *Orthophytum saxicola* and the other as *Orthotanthus* 'What' growing side by side appearing very similar. She considered the flowers on *Orthotanthus* 'What' to be similar to those of it's *Cryptanthus* parent. Not having flowered *Orth. saxicola* as yet, other differrences between these two plants were noted to set them apart, *saxicola* pups are on long stolons whereas 'What's' appear to come away from the mother plant in much the same way as *Cryptanthus* pups.
"I definitely have both saxicola and 'What' or two of the same with different tendencies, if so, which is which ? Or what is 'What' ?"

What or Not What ? by Peter Franklin

Following Elaine Jones enquiry regarding her *Orthotanthus* 'What', Peter felt he would like to add his penneth's worth on this topic.

NO

My reason for saying that is that my so-called *Orthotanthus* 'What' set it's own seed in 1992. The seedlings are all nice little red *Orthophytums*! - no variegation but you would not expect any. As far as I am concerned my 'What' is just an *Orthophytum saxicola* with red colouring and some variegation. The year before, my green version of *saxicola* flowered and set seed, so the taxa would seem to be self fertile (perhaps with the assistance of wildlife).

Summarised from Bromeletter: January/February 1993 and March/April 1994.

Novice Popular Vote

1st	Debbie Smith	*Tillandsia bulbosa*
2nd	Kay Daniels	*Guzmania* hybrid
3rd	Trish Kelly	*Neoregelia* 'Hot Gossip'

Open Popular Vote

1st	Laurie Mountford	*Vriesea gigantea var. seideliana*
2nd	Marie Essery	*Vriesea* 'Kiwi Dusk'
3rd	------	------

Judge's Choice

1st	Debbie Smith	*Tillandsia bulbosa*

Comments from the growers:

Laurie has been growing his *Vr. gigantea var. seideliana* since 17/11/2010, he grows it in his 50% shade cloth area and as we can see he attains great results.

Marie grows her *Vr*. 'Kiwi Dusk' under 70% shade cloth with little care. She must have just the right spot for these beauties she keeps producing each month.

Debbie's *Till. bulbosa*, is a lovely mounted display, well grown. The *Tills.* were obtained from her neighbour some 12 months ago, Debbie mounted the clump on an old staghorn which hangs on the fence and receives little attention.

Kay's *Guz*mania was obtained from Carol last year, it was removed from the greenhouse and kept inside for the last few months (out of the incessant rain).

Trish's *Neo*. 'Hot Gossip' (same as *Neo*. 'Predator') came as a pup from Kay some 18 mths ago, she finds it a slow grower, it is one of Trish's few *Neos.*

From the Glossary

Lamprococcus -- A subgenus of *Aechmea*

Ronnbergia -- A small genus of terrestrial and epiphytic bromeliads discovered and named in 1874 by Edouard Morren to honor M. Ronnberg.

F.1 -- The first filial generation; a new constant breeding hybrid type.

Bigeneric -- The crossing of two different genera eg: *Aechmea* x *Neoregelia*