

B R O M L I N K



May/June 1995

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THE GOLD COAST SUCCULENT AND BROMELIAD SOCIETY - OFFICE BEARERS

PATRONESS

Olwen Ferris

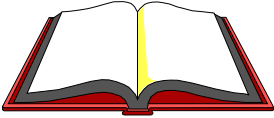
PRESIDENT	Mary Nicholson	72 0993
IMMEDIATE PAST PRESIDENT	Olwen Ferris	77 1904
VICE PRESIDENT	Graham Besgrove	800 5431
SECRETARY	Diana Hughes	
TREASURER	Jum Daniels	77 1469
EDITOR	Wendy Besgrove	
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HOST & HOSTESS ASSISTANT	Olwen Ferris	
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PLANT SALES ASSISTANTS	Narelle Rowe & Jo Ketelaars	
GOODS SALES	Peter Ludowici	
GOODS SALES ASSISTANTS	John Catlan & Nev Ryan	
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RAFFLES SUPERVISOR	Roy Wenzel & Clarrie Morrow	
LIFE MEMBERS	Olwen Ferris Rolly & Evelyn Reilly	
HONORARY MEMBERS	Jum Daniels, Roy Wenzel, Genny Vauhkonen, John Catlan, Bev Collins	

MEETING DATES AND VENUE

Our meetings are held at the Uniting Church Hall, Elanora on the second Saturday of each month starting at 1.30 pm.

DISCLAIMER

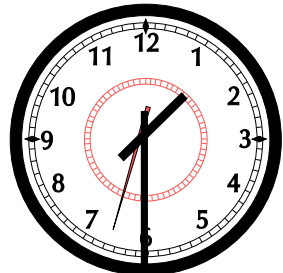
Opinions expressed in this newsletter are the contributor's own and are not necessarily those of the Committee or the Gold Coast Succulent and Bromeliad Society.



DATES FOR YOUR DIARY

DATE	EVENT	COST (if any)
Saturday, 13 May	Regular Meeting	
Saturday, 20 May	Trip to Gympie	\$40.00
Saturday & Sunday, 3-4 June	Rotary Landscape and Garden Fair	
Saturday, 10 June	Trip to Mt Coot-tha No meeting at Elanora	\$15.00
Sunday, 2 July	Visit Flemmings	Own car
Saturday, 8 July	Regular Meeting	
Saturday, 12 August	Regular Meeting	
Saturday, 26 August	Trip to Neville Ryan and Jo Ketelaar	\$15.00
Saturday, 23 September	Trip to Olive Branch	\$15.00

Committee Meetings - 1 hour before
regular meeting.



PRESIDENT'S REPORT FOR MARCH AND APRIL

MARCH

Thirty people attended our March meeting. We had three visitors, Cheryl and Matt Stewart and N Baldwin; and two new members, John and Judy Borthistle.

A big thank you to Bill Bishop for acting as Secretary - Diana attended the Australian Bromeliad Society meeting in Sydney.

The Lucky Door Prize was won by Mike Levine.

There were some nice examples of our Plant of the Month - Cryptanthus. I would like to say congratulations to all of you for your participation in our Show and Tell and Plant of the Month Tables. Keep up the good work.

The cent auction was a success with many people winning a box of plants. If you don't want any plant in your box, feel free to bring them in for our raffles. This is a way of sharing our plants around.

Plants on the display table were very well described by Olwen Ferris, Neville Ryan and Genny Vauhkonen. These were:

Aechmea retusa, smithiorum, fasciata (spineless), *purpureo-rosea, napoensis* (formerly *Streptocalyx pallidus*)

Canmea Majo

Ceropegia woodii (?) variegated

Cryptanthus bromelioides, fosterianus, carinata(?), *bivittatus, luddemannii*(?), Frosty, *Acaulis* 'Grace', Claws, Coffee Royal, Silver Lining, Carnival (?), Glad, Desert Sand, Osyanus Red, Cascade, Starwine, It, Ti, Dusk

Cryptbergia Red Burst

Guzmania rubro-lutea

Neoregelia meyendorffii albo marginata, Skotak Hybrids

Orthotanthus What

Quesnelia edmundoi var *rubrobracteata*
Tillandsia boliviensis, *duratii* var *saxatilis*, *fasciculata* x
polystachia (?), *baileyi* 'Halley's Comet', *brachycaulos*
'Select'
Vriesea mariae, *metallica*, *sucrei*, *ospinae* var *gruberi*, *ospinae*
(miniature form), *carinata* hybrid, *psittacina* hybrid
Stapelia ?

APRIL

There were 31 people at our April Meeting, Cheryl Stewart and Betty Everett.

Lucky Door Prize was won by Dawn Collas.

The Rotary Landscape and Garden Fair will be held on 3-4 June at Carrara Sports Grounds. Help is required to man our stand. 20% commission on Sales Plants.

The glasses donated by John and Bev Collins for a raffle were won by Dawn Collas. What a lucky day Dawn had with us.

Some of the plants ably described by Graham were:

Aechmea lueddemanniana, *triangularis*, *leucolepis*, *contracta*,
calyculata, *eurycorymbus*, *purpurea-rosea*, *recurvata* v
benrathii, *nudicaulis rubrafolia*, *fasciata purpurea*,
fasciata albo marginata, *fasciata Super Select*, *orlandiana*
Rainbow, *gamasepala* Lucky Stripes, Fosters Freckles,
Hojo Rojo, Bert, Hummels Hybrid, Cherokee Maid, Len
Butt, Tessie, Shining Light
Billbergia Bobtail x Catherine Wilson
Neoregelia kautskyi
Tillandsia complanata, *rectangula*
Vriesea saundersii x Victoria F1, Carlsbad, several different
carinata hybrids

UNDER THE MANGO TREE

John Catlan

It was the year my father considered having himself committed. At our place called Goodnight we had a number of Aborigines working for us. The chief of the tribe was Captain Billy and he would make sure the right number of gins and bucks turned up to do the allotted tasks. No one messed with Captain Billy, his entourage of wives each had their allotted tasks, one looked after the cooking, another carried his waddy and made sure it was near him at all times and so on. Anyone that upset him got walloped. Another wife was in charge of a wind up gramophone, this last item was responsible for my father losing his marbles.

When everyone arrived in the morning at their camp for the day, the first thing to be set up was the gramophone. They were only interested in one record at a time and the record for this year was “Ghost Riders in the Sky”. It was played over and over till it deteriorated to an unintelligible mess but you had heard it so many times, you knew what it was supposed to be.

My father had acquired an unhealthy hatred of “Ghost Riders in the Sky” and with its deterioration his mood improved. It was early morning and we were eating breakfast in the kitchen when we all froze, not a movement anywhere, all sound had been sucked from the world - the only exception was a new record from the aboriginal camp loud and clear, a brand new “Ghost Riders in the Sky”.

Normally my father would use any excuse to get out of going away for the full two weeks of our holidays. Not that year. He went like a lamb to the slaughter. Glad to leave the place probably. All our gear was loaded into the boat, taken across the river into the truck and off. We arrived at our uncle’s holiday place at lunchtime. In the park behind our uncle’s house was a fun fair and next to the back fence was a merry-go-round. The showman shouted all aboard, it started up and blaring from the speakers was its signature tune “Ghost Riders in the Sky”. The fair started mid morning and finished after dark. It was there for the full two weeks.

I know I have a tendency to go on and on about this but one of the draw cards to our meetings is our Show and Tell Table. Call them brag plants, show and tell or broms, but when you come to our meetings you get to see the top plants, new and old. The plants that have been in our collections for some time, don't dismiss them as not important. The new members to our hobby may have never seen the plants before. Also there are different clones coming to light. A good plant is a good plant, is a good plant, no matter how long it has been around. So do the right thing - bring a plant or two for the Show and Tell Table, it's just something you as a member can do to improve the meetings.

This year there has been a lot *Vriesea philippo-coburgii* in flower. A variation in the intensity of the red colouring of the flower bracts exists within this group of plants. The darker and bigger the black tip on the leaves the more extensive and intense is the red of the bracts, so even when the plants are not in flower you can pick good clones. In the yellow form of *Vriesea philippo-coburgii*, *Vriesea* Yellow Dancer, the dark tips are completely absent, this plant also flowers on a much more regular timetable. I am not talking about *Vriesea vagans* but there is a smaller form of *Vriesea philippo-coburgii*.

Vriesea philippo-coburgii was named in honour of Prince Philip Coburg in 1880.

We have two types of owls that sleep over at our place on odd occasions. The Laurel and Hardy owls - the skinny owls are the frogmouths (which aren't owls) and the fat ones are the mopokes.

All efforts to set seed on *Aechmea maria-reginae* turned out to be a bust. I have kept both of the dead inflorescences as one article I came across mentioned the fact that you would not believe the male and female inflorescences came from the same species. By the next flowering I will have acquired more knowledge, but from looking at "Blooming Bromeliads" by Baensch I would say I had two males, maybe.

Aechmea maria-reginae was discovered in 1863. In its native habitat it is prized as a flower for church decoration which means the only flowering plants seen are out of reach on tall trees.

Athol, our President's better half, being a man of the land, decided he would plant a crop of potatoes. Although he now lives on a residential block, this did not deter him. The crop has now been lifted and moved to the garage. The family gathered to gaze upon the fruits of Athol's labour. The family agreed the crop did not exceed two tons. The family also agreed that the crop did not exceed two sacks. Nor did it exceed two kilos. The Nicholson Family counted the potatoes and agreed there were exactly two.

Its Billbergia month. Over the last few months the day length has been decreasing. This triggers Billbergia flowering. Billbergias were named after a Swedish botanist, Gustav Johannes Billberg in 1821. In 1992, Luther and Sieff listed 61 species and 27 varieties within these 61 species. To simplify this article we will divide the plants according to flowers into two groups, watch spring (helonicoides) and others. Watch spring, this name originates from the fact that the individual flower petals (up to 50mm (2") in length) as they open they curl back upon themselves and look like a watch spring. When the flower is spent they will uncurl. The bracts are spectacular, pendulous and larger than the other group. The plants are very tubular **often** with silver bands on the backs of the leaves and they take longer to mature, they respond to very small doses of fertiliser each year.

Billbergia flowers do not last, true, but we can extend the life of the bract. Heat and low humidity hasten the end of the spectacular event. Move the plant to an area that is darker. This should decrease the temperature and therefore increase the relative humidity. Strong dry breezes hasten the deterioration of the bracts. Under improved conditions you can get up to four weeks with some bracts. Remember - drop that temperature as the bract emerges from the tube.

The other group contains *Billbergias* valued for their bracts and/or foliage, any excess fertiliser of the foliage plants or too little light reduces these plants to green look-a-likes. There are quite a lot of people who advocate no fertiliser at all for these plant but I find this leads to premature deterioration of the foliage.

For potting, I prefer very open mix, a standard pot and to grow the plants as clumps. To conserve potting mix, a couple of large rocks and a bit of chopped up styro boxes in the bottom of the pot. As our mix is very light the rocks do not make the pots too heavy but does add stability.

Gradually, we are eliminating all the wild or common balsams from around our place and, as the balsams go, so do the butterflies. It is very sad. The butterflies feed from the balsam nectar.

Some years ago, I grew a large number of *Billbergia Fantasia*. They were 3 metres (10 feet) from the ground, growing near the roof of a glasshouse. They grew exceptionally well. *Billbergia Fantasia* has masses of cream spots all over the plant, more near the tips of the leaves than the base. One flowering season, someone remarked its a pity the more colourful plants did not flower as well. Later examination showed the more colourful plants had flowered the previous season. If you can maintain the spotted *Billbergias* in good condition after flowering, the colours will intensify. When these stock plants were removed from their high perch in the glasshouse and grown on the ground, the whole crop was a failure. We could not get the same colour into the plants plus splashes from the ground left marks all over them.

God willing, you will hear from us in the July-August newsletter. We will end with a thought from Mrs Spenser:

If you find a dog on a Monday
Or anything starting with D
 Like a deer or a duck
 It could bring you luck
 But there again
 It might no be

COMPARISON BETWEEN *Aechmea eurycorymbus* AND *Aechmea mulfordii*

Graham Besgrove

At our April meeting, the Plant of the Month was *Aechmea*. I gave the talk on these plus the other plants as well.

Bill Bishop put a question to me about the relationship between *Aechmea eurycorymbus* and *Aechmea mulfordii*. I am not an expert but from a little bit of digging around, these next paragraphs might answer the question. This is what I found.

Aechmea eurycorymbus was found in March 1932 at Serra Negra in Brazil. It is a plant which can attain a height of 2 metres when in bloom. The leaves can reach 9-12 dm (decimetre) long. They taper into a large sharp spine. The base of each leaf is 5-7 cm wide where they meet the stem and are covered with pale appressed (close and flatly pressed against) scales. Its inflorescence is stout and erect. Scape bracts, ranging from 4-13 cm long, are lanceolate (lance or spear shaped) and taper to a point. Inflorescence amply 3-4 pinnate (formed like a feather), pyramidal (of a conical shape) and glabrous (smooth, glossy without hairs). The branches of the inflorescence are elongated. Petals of the flower are narrow and lanceolate, acute, 2 cm long and are dark yellow/green in colour.

This plant grows either as a terrestrial or an epiphyte between 300 to 525 metres in altitude.

Aechmea Mulfordii was discovered in June 1939 a quarter of a mile from the ocean at Portoa, Bahia in Brazil.

This plant when flowering will be over 1 metre high. The leaves can be over 8 dm long with appressed white scales having brown centres. These leaves can be up to 9 cm wide at the base.

The inflorescence is tripinnate (three feathered inflorescence where the flowers are borne on tertiary spikes or branches), up to 35 cm long and lax

(loose flowers not touching one another in the inflorescence). Except near the apex (tip), the branches of the inflorescence are spreading with the lowest ones up to 15 cm long with the spikes separated. The flowers are in broad, digitately (spread like fingers) clustered spikes (kind of inflorescence with short-stalked flowers).

This plant can also grow as a terrestrial or epiphyte.

If you wish a more scientific and detailed description, please refer to Smith and Downs, *Flora Neotropica*, Monograph No 14, Part 3, Bromelioideae (Bromeliaceae), pages 1770-1771, 1817 and 1823.

Descriptions of both plants were taken from Smith and Downs, *Flora Neotropica* and, hopefully, I have simplified it enough from the glossary so that you may be able to get some idea of how they compare.

There is not much about colour of petals or spikes. Both plants seem to have pale green leaves that are tough. I did reference Bromeliads by Victoria Padilla, 1973, in which she describes *Aechmea mulfordii* as having foliage that is green with rose overtone - faintly banded, scape is red, flower petals are yellow. I am sure someone who has more knowledge could enlighten us further.

At the end of this saga one would say there does not appear to be any relationship. But, there are three things which you can say makes them related:

1. They are both found in Brazil (Kissing Cousins, so to speak);
2. They are both Aechmeas (both have good bloodlines); and
3. They are both in the subgenus Aechmea (definitely Cousins!!).

Hope this helps your query, Bill.

PS By the way, a decimetre is a tenth of a metre (10 centimetres). How confused are you now? Decimetre, Centimetre??

**BROMELIADS NATURAL
At Buchanan's and in Brazil**

Jum Daniels

To incorporate an account of a bus trip to view Buchanan's bromeliads at Wardell with a review of "Bromeliads in the Brazilian Wilderness" (available from the Society's library) may seem to be an odd combination.

But for those who visited Buchanan's (or may have been there before) the experiences of seeing bromeliads growing in natural Australian bush surroundings on 25 March and reading about these plants in their natural state as presented in the book are not all the dis-similar.

Admittedly, comparison of Buchanan's acreage with a country the size of Brazil may seem a bit extreme; but the very notion of growing bromeliads on or under native trees, interspersed with blackboy (*Xanthorrhoea australis*), must be pretty well unique. At least it was to an observer who has only seen them growing in garden pots, home nurseries, Expo and commercial nursery situations.

The wilderness in Brazil, as illustrated in this book, includes such diverse areas as the Atlantic Rainforest, high altitude grassland, grasslands on rocky soils, sandy coast plain vegetation, the Catinga and Amazonia. The links are shown of bromeliads to not only other plants, but to animals and even Man.

Many years of joint effort by Elton MC Leme (text) and Luiz Claudio Marigo (photography) in the presentation of bromeliad in their natural habitat reaches culmination in the two hundred photographs, drawings and maps.

While there is always a temptation to look at the pictures first, it should be remembered that the substantial amount of reading matter is presented in an easy to absorb way which can contribute towards appreciation of the illustrations. Not the unintelligible academic approach here and even our own State gets a mention on the cover of the book with reference to author

Leme's "Revision of the *Nidularium* genus which he presented in early 1993 at the 7th Australian Bromeliad Conference in Queensland." His qualifications to provide the text are quite impressive.

Impressive, too, can apply to the illustrations. There are double-spread features which in a book 12" x 10" in size (about an inch thick) allows for the reproduction of some beautiful photographs as well as the full page, half and quarter page pictures in both long distance and close-up. Reading and looking at this book is quite a pleasant experience.

However, viewing bromeliads in their natural habitat doesn't necessarily present a sanitised version of the plants which we are used to seeing in our own gardens in our homes or at displays or shows. In natural conditions one would expect to find plenty of leaf trash, dead plants among the growing, dead ends on leaves or leaves spotted or perhaps attacked by insects.

At Buchanan's though, also the result of many years of joint effort, the plants seemed surprisingly clean particularly those growing as terrestrials. As a bush walk revealed when members followed bush tracks into the Wardell wilderness, *Neoregelias* and *Aechmeas* appeared to enjoy the humus provided by the dead leaves from these native trees and bushes over the years. The size of plants ranged from very small to very large. An *Aechmea blanchetiana* measuring over four feet across and its inflorescence taking it to over six feet high proving to admirers that this plant can do well in an Australian situation. This plant is also featured in the book, growing in sandy coastal plains vegetation, but also as an epiphyte in rainforest area where it loses its yellowish leaf colouration. I'll settle for the one at Buchanan's, which is a pinkish colour (I managed to get a splendid pup!) anytime. No need to go to Brazil to get one.

Going to Brazil to view bromeliads in their natural state is probably not on the itinerary of most members anyway, so there are still alternatives to seeing them grow in natural surroundings. Do as I did. Grab "Bromeliads in the Brazilian Wilderness" from the library before anyone else does and

take a bus trip to Wardell wilderness at Buchanan's. Both experiences are well worthwhile.

But there is more!

March 25 was not only the day for a bus trip. It was the date when our Genny decided to present herself to the world. President Mary, on displaying the birthday cake, said that it happened 85 years ago! We all knew that she was 35 - or was it 45 years? - out in her calculations. After all, Mary had to get square for being told SHE had been born four score years and ten earlier.

Not that it matters much really because the rendition (an apt word) of Happy Birthday Dear Genny was nevertheless sung with sincerity for our popular expert on plant identification. Genny appeared suitably embarrassed, responded by dividing the cake up among all present but failed to comment on the quality of the singing. Who could blame her for that?



JUST A THOUGHT

The most valuable thing I have learned

from life is to regret nothing

W. Somerset Maugham

**PUZZLE: SOME LATE WINTER FLOWERING PLANTS IN
SOUTH EAST QUEENSLAND**

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

AMOENA
 AUREO
 BOB
 BRETT
 CARINATA
 CAUDATA
 CHLOROSTICTA
 COELESTIS
 COMPACTA
 DAD
 DAY
 DISTACHIA
 FAVOURITE
 FOG
 FULGENS
 GAMOSEPALA
 GEM
 LATERALIS
 LEPTOPODA
 LINE

MACROCALYX
 MARMORATA
 MARS
 MARY
 MEAD
 MEN
 MERIDONALIS
 MINOR
 NUDICAULIS
 NUTANS
 PAIN
 PEAT
 PINELIANA
 PUNTATISSMA
 RACINAE
 ROSEA
 RUBRA
 TAIL
 VITTATA

12 letters remain - rearrange them to form another plant flowering at this time.

A	e.														
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SOLUTION TO MARCH/APRIL PUZZLE

LEAF - SUN - SPIKE - VARIETY - POLLEN - TEMPERATE - CLONE
 - SIMPLE - PUPS - SEED - SHEATH - COOL - BRACTS - SHADE -
 ZONE - PLANT - QUESTION - ADAPT - LAX - EVEN - WARM -
 SUMMER - JUST - STYLE - PINEAPPLE - LIGHT.

A PUP FOR WENDY

Roy Wenzel

On the weekend of 17 February 1991, our club had a field weekend to the Sunshine Coast. One of the Brom growers we called on was, naturally enough, Grace Goode. One of the brom pups I bought from Grace was *Neoregelia* Raincloud. I discovered after I had bought this particular pup that Wendy had been looking at it and was considering buying it, so I agreed to give Wendy a pup off it. I put two tags in the pot when I potted it up - one marked "Neo Raincloud" and the other marked "Pup for Wendy".

Well, as you can see by the date it was purchased, its been a long wait for a pup. About a month ago I noticed that the middle of this plant was starting to rot away so I thought, "there goes Wendy's pup". Last week I was picking up *Grevillea* leaves which had fallen down amongst the Broms when I looked across towards *Neoregelia* Raincloud on an acute angle and there, low and behold, was the swelling which indicated a pup is on the way.

Contrary to normal practice, Wendy will be getting the first pup off this plant. This must surely be some sort of record for a slow growing plant.

IN RESPONSE TO THE ARTICLE "AN APOLOGY" IN MARCH-APRIL 1995 BROMLINK

Mary Nicholson

Graham, you are being too critical of your talk on the Tillandsias.

You have a good knowledge of the plants and this came across in your talk. We - being the majority - are just so pleased for your explanation of the plants and answering all our questions. You gave us the information we needed to go home and try, and then when we put that into practise (our trial and error), we will be back with more questions which I feel sure you will answer for us.

8TH BROMELIAD CONFERENCE, ADELAIDE

Olwen Ferris

Easter 1995 saw about 70 Bromeliad persons gather at the Royal Coach Motor Inn in Adelaide and it was great to meet so many of my old friends again and to share a room with my New Zealand friend, Patricia Perrot.

I arrived the day before the Conference started and was able to contact my cousin Dorothy and her husband and we spent some time at the Rose Garden and then on the Saturday night I had dinner with them after 20 years separation.

On Saturday we were all welcomed by the President of South Australia and the official opening was by Malcolm Campbell.

Renata Ehlers was the main speaker and her talks about Tillandsias and her overseas trips exploring their habitat were scattered through the conference and what a wealth of knowledge she has. We were all envious of her trips through Mexico, Argentina and other places.

Other speakers, fitted in to give Renata Ehlers a break, were Derek Butcher who spoke on Neoregelia species here in Australia and Kim Chipper who gave us a “Sandgropers View” of climatic conditions in Western Australia. Peter Franklin explained how he kept a check on his plants with computer control.

Sunday started with Tillandsia identification with Renata Ehlers’ help. Andrew Flowers from Wellington, New Zealand, showed us different ways to grow seed. These were much like the methods I used when living in Sydney. Vriesea Hybrids was given by Adam Bodzioch; Tom Kapitany (Victoria) gave a talk about Marketing Bromeliads; and Maurie Kellett (Victoria) told us about a Bromeliad Safari.

On Sunday afternoon, two buses took us to visit four collections and we took off in different directions. I saw a lot of plants that were new to me.

Late Sunday afternoon we had a Rare Plant Auction and this was well carried out by Len Trevor. There were lovely, scarce plants and I'm sure the committee was well pleased with the results.

The three Raffles were drawn: a beautiful rug made by Grace Goode was won by Patricia Perrott (New Zealand); a framed, hand embroidered picture by Margaret Draddy was won by Marie Daniels (when I sold her the ticket, I promised to bring it back for her!!); and a beautiful baby doll made by Pat Sweeney of New Zealand.

This was followed by one that took me by surprise and started the tears running. A lovely framed plaque that read:



BROMELIADS “BLACKLISTED”

Geoff Lawn

No foliage bromeliad is truly devoid of colour, or black, but some come close since they have predominant or solid shades of indigo, mahogany, and aubergine purple, to deepest ebony. These dark beauties can be loosely grouped as those with rather fixed pigmentation and others of very variable leaf hues. Anthocyanic pigments¹, which mask the green undertone and serve several purposes, produce this foliar attractiveness.

Anthocyanin-laden epidermal cells can shield deeper leaf tissues from intense ultraviolet light, which might otherwise destroy the photosynthesising chloroplasts. This function applies especially to sun-exposed, sparsely-scurfed species in the thinner atmosphere at high altitudes, particularly if stressed through moisture and nutrient deficiencies. Nearer sea level, growers can still achieve comparable results, even if seasonal, but low humidity and bleaching are dangers to watch. Become aware which green species and hybrids never redden up in your area but burn readily if subjected to strong light of long duration.

Leathery-leaved bromeliads of this category are named below. They are usually reliable, but the reader should realise that hard-grown specimens at maturity are usually smaller than their well-fed, but less colourful counterparts:

- *Aechmea fasciata* var *purpurea*, *A.* Black Magic, *A.* Burgundy, *A.* Black Marble, *A.* Noir, *A.* Very Black
- *Billbergia* Clyde Wasley, *B.* Othello, *B.* Penumbra
- *Cryptanthus* Black Cherry, *C.* Black Mystic, *C.* Black Prince, *C.* Cherry Frost, *C.* Snakeskin.
- *Dyckia* Dark Chocolate.
- *Neoregelia fosteriana*, *N.* *johannis* “Rubra” (in hort.), *N.* *melalodonta*, *N.* Claret, *N.* Dark Delight, *N.* Deep Purple, *N.*

Dexter's Pride, *N. Morris* Henry Hobbs, *N. Royal Flush*, *N. Sanguine Night*, *N. Vulkan*, *N. Alvin Purple*, *N. Blackie*, *N. Darkie*.

- Bigenerics: *XCryptbergia* Red Burst, *XNeolarium* Thor, *XNeomea* Black Snow, *XNeomea* Magenta Star.

A race apart are the shade-loving *Aechmea* species whose soft, bicoloured foliage, it is theorised, enhances photocynthesis at lower light levels through the reflective properties of their anthocyanins. The red reverses of *Aechmea victoriana* var *discolor*, *A. fulgens* var *discolor*, and *A. miniata* var *discolor* impart completely maroon- or garnet-coloured leaves to many hybrids, often by the champion specialist breeder Ed Hummel. Excessive light often dulls and muddies the natural foliage sheen and colouring in this group:

Aechmea Belizia, *A. Black Flamingo*, *A. Black Knight*, *A. Black Panther*, *A. Black Prince*, *A. Black Tiger*, *A. By Golly*, *A. Chocolate Soldier*, *A. Ebony Glow*, *A. Foster's Favorite*, *A. Grape*, *A. Jackson*, *A. Lullaby*, *A. Mirlo*, *A. Nightlight*, *A. Nigre*, *A. Perez*, *A. Pico*, *A. Tonado*, *A. Black Jack*, *A. Prieto*.

In other genera, there are *Vriesea sucrei*, *Nidularium billbergioides* Rubra, *N. innocentii* Nana, *N. microps* var *bicense*, *XNidumea* Jean, *XNidumea* Midnight.

Some growers complain that the appearance of these dark-leaved plants is lifeless either en masse or singly and, indeed, they can look somber when shown this way. As companion plants in a mixed display, however, they provide contrast and solidarity to plants with lighter patterned foliage, notably variegates.

For competition and displays, the shiny-leaved specimens especially should be wiped clean as they invariably show up any mineral deposits,

grime or dust. In artistic arrangements requiring dramatic or bold simplicity, blackish rosettes or leaves can evoke themes of evil or mysticism.

This favourable “black list” is by no means complete but it focuses on a multitude which, often possessing long-lasting, attractive inflorescences too, vie for a plum role, figuratively speaking, in our collections.

REFERENCES:

- Benzing, D.H., *The biology of the bromeliads*. Eureka, CA: Mad River Press; c1980.
- Butcher, D.R., comp. *Hybridist's handbook and checklist of bromeliad hybrids and cultivars*. 2nd ed. [Adelaide, S.A.] The Bromeliad Society of South Australia; 1986.
- Smith, B., comp. *Manuscript of bromeliad hybrids and cultivars*. 2nd ed. Plano, TX; 1984.

NOTES:

1. Anthocyanic pigments are those that give red and blue flowers their colours.
2. A slightly different version of this article was published in the Bromeliad Society of New South Wales Bromeliad Newsletter, Feb. 1988.

Como, Perth, Western Australia

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September-October 1989.

A DIAGRAM OF BROMELIAD HABITATS

P. Raulino Reitz

Thanks to a series of studies based on ecological observations made in southern Brazil, especially Santa Catarina, by Henrique P Veloso and Roberto M Klein, we have a clear idea of the habitat of the commoner bromeliads. It has been proved that bromeliads have no particular preference for any species of tree. There is only an indirect relation to the shape and size of the tree. If, for example, a certain species of wild fig, *Ficus organensis* (Miq.) Miq., has a taller trunk and longer stouter limbs that overtop other trees, then more sun-loving (heliophile) bromeliads will grow on it than on other trees. On the other hand, if a given species of tree prefers shady valleys, then it offers a more favourable ambient for shade-loving (ciophile) species.

On entering our forests one soon sees that certain species of bromeliads live only on the bases of tree trunks or on the ground, others only at the middle of the trunk, still others on the great limbs, and a final group at the ends of the branches. It is a perfect staircase of life, which has also been observed in the animal kingdom. A species falling from the outer branches to the ground, dies. Similarly, a ground species is seriously damaged if we raise it to the top of the tree.

The secret of these levels of life is the preference that each species has for certain intensities of light and relative humidity.

After detailed observation we can distinguish four levels in the distribution of species from the jungle floor to the treetops.

The first level is the ground. On it live the ciophile species; that is those that need little light and high humidity. They are most notably *Nidularium innocentii* Lem var *paxianum* (Mez) LB Smith and *Nidularium procerum* Lindm. They grow in enormous quantities in the forest shade, making the

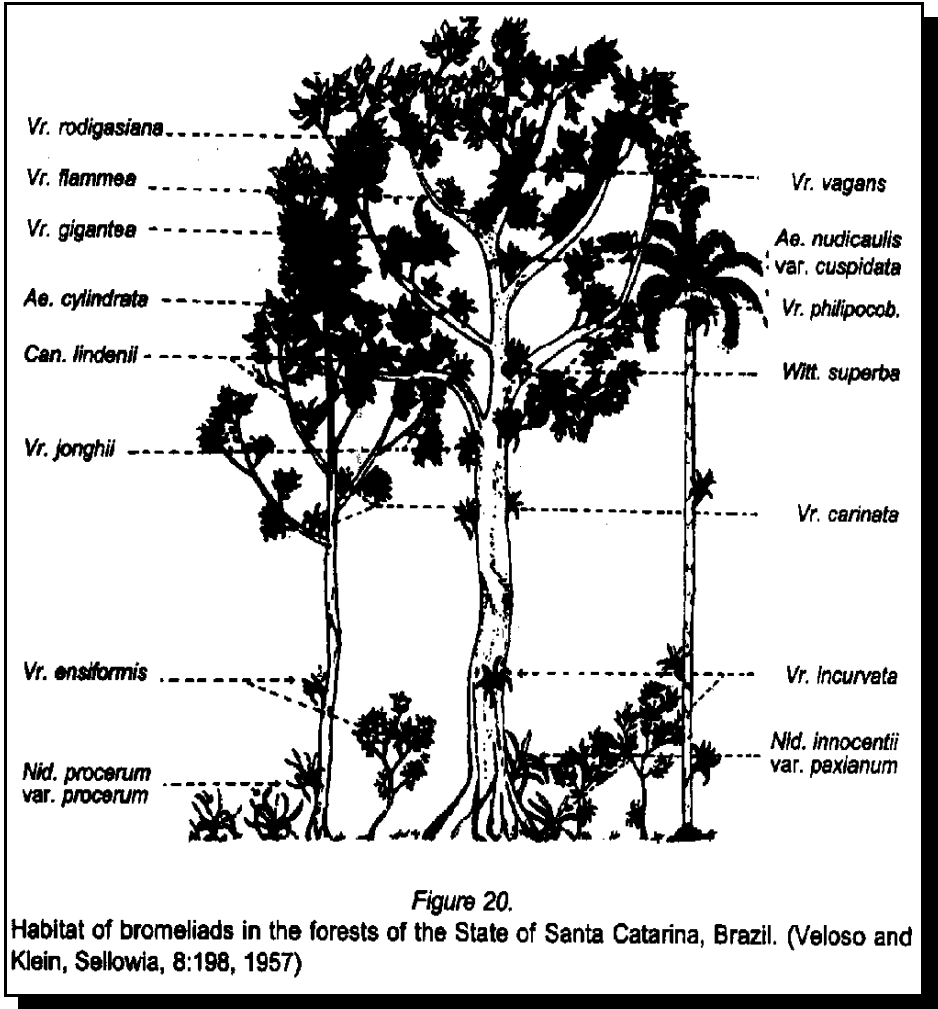
densest of green carpets, and on the bases of bushes and trees, especially on the buttress roots of the latter. These ground level bromeliads are partly responsible for the great humidity of the environment, since they hold an enormous quantity of water and form veritable hanging lakes.

The second or midtrunk level. Here live the semiciophiles. From some six feet up the trunk nearly to the bases of the first limbs of the high trees there is a second level already less affected by the enormous humidity of ground level and with a little more light; it is also on top of the shrubs. This is the level of *Vriesia incurvata* Gaud., *Vriesia ensiformis* (Vell.) Beer, and *Vriesia carinata* Wawra. These species fasten not only on the tree trunks large and small but on the branches of shrubs and saplings that are below the lower limbs of the large trees. It is a space of about 25 feet in depth.

The third or limb level. The species which we may call *indifferent* inhabit the space from the bases of the large limbs to their outer forks. They require a medium light intensity and slightly more humidity than the heliophile species. There are many more species at this level than at the others. The commonest are: *Vriesia jonghii* (K Koch) E Morr., *Wittrockia superba* Lindm., *Canistrum lindenii* (Reg.) Mez, *Vriesia philippocoburgii* Wawra, *Aechmea nudicaulis* (L.) Griseb var *cuspidata* Bak., *Aechmea cylindrata* Lindm., *Vriesia gigantea* Gaud., and *Vriesia flammea* LB Smith. Here we find the species of the greatest stature like *Vriesia gigantea* Gaud whose inflorescence reaches 10 feet, and *Vriesia jonghii* (K Koch) E Morr and *Wittrockia superba* Lindm.

The fourth or branch tip level. Here live the heliophile elements. They require great light intensity and relatively little humidity. They are principally *Vriesia vagans* LB Smith, *Vriesia rodigasiana* E Morr. and various species of *Tillandsia*. These plants are directly exposed to sunlight.

It is important for the grower to know something of the ecological life of the bromeliads, especially of their habitat in relation to light and humidity, in order to obtain healthy and beautiful plants by cultivation.



The figure shows the principal elements of a tropical forest in the State of Santa Catarina (southern Brazil) which reaches an average height of 80 feet. In these forests there can be distinguished the ground cover vegetation, shrubs (3-12 feet), saplings (15-40 feet), palms (up to 70 feet) and large trees (50-80 feet), all represented here. The place of the bromeliads in order of their altitude on the trees is based on the observation of more than 100,000 specimens. All the species shown in the figure are indicated by arrows according to their altitude in the forest.

Itajai, Santa Catarina, Brazil.

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A SUGGESTION FROM GENNY

It has been talked of for a while, now we are actually getting it done. This includes our members who cannot attend meetings - maybe it is of more value to you. Will you help by participating in the request for all members to write out any problems they may have with their plants. We will answer your questions and maybe we will even do an article on it. If you are proud of the way your plants are growing, we can share your you. Send to: Mary Nicholson, 55 Dawn Parade, Miami Q 4220.



CENT AUCTION

It was wonderful how much fun can be had by our Cent Auction every March and September. If members keep bringing in several plants each to be placed in groups, the responsibility will be less on just the same few. The building up of our Library is the aim of the Cent Auctions.

Please remember not to throw all your tickets into the lots but retain the No. 1 ticket for the draw.

PLANT OF THE MONTH

For Plant of the Month, could you please bring in some plants from the nominated genera for that month. Remember that the plant doesn't necessarily have to be in flower, we also grow Bromeliads for their foliage. This segment of our meeting is to help us to learn to identify the different genera and perhaps see the diversity within that genera. The genera for the coming months are:

JUNE	Nidularium
JULY	Vriesea
AUGUST	Guzmania

NAME TAGS

If you have a name tag, will you please wear it to the meetings. Wearing a name tag makes for a more informal meeting which is what we are striving to offer.

ORDINARY RAFFLE

This is one way of making money for the Society. It is up to all of us to help by bringing in some plant/s when we have extra ones. It doesn't have to be a bromeliad, just something you would like to win yourself. Let us see if we can make this one good continuous raffle.

HELP?

If you have a plant that you are not happy with the way it is growing, bring it in and our panel will help with ideas on what you can do different.

!! CONGRATULATIONS !!

Happy Birthday to Graham Besgrove, Jun Daniels and Clarrie Morrow.



Welcome to K Bradtberg, Derek Butcher, Don Woods, John and Judy Borthistle, E&A Sellars, C&M Tooth, E&D Beyley, Chris Larson, Peter Tristram, K Hannam.

If you would like to have a birthday or any other message put in the Newsletter, please just let us know.

PLANT ROSTER

We are now operating a roster to share the responsibility of bringing in plants for the Lucky Door Prize and the Special Raffle. If anyone other than the people rostered for that month would like to donate a plant, please feel free to do so. The plants do not have to be succulents or bromeliads. The Lucky Door Prize is drawn first and has the pick from the table followed by the Special Raffle with a choice of the plants available.

JUNE	No Meeting
JULY	Bev Collins, Evelyn Reilly, Jan Tobiano, Jo Ketelaars
AUGUST	Mac McAlister, Rolly Reilly, Phyllis King, John Borthistle
SEPTEMBER	John Catlan, Wendy Besgrove, Olwen Ferris, Genny Vauhkonen

If you are unable to attend the meeting, either get the plant to someone to take it in for you or swap with someone else.

SUBSCRIPTIONS

Subscriptions are due in October of each year. If you require postage of your newsletters, please forward 6 (six) current-price stamps.

Family - \$6.00

Single - \$4.00

WHO AM I?

Don't forget, anyone who has a mature plant or one in flower but doesn't know it's name, our experts are here to help identify it for you.

LIBRARY BOOKS

Library books are available on loan for one (1) month only. Please return them so someone else can take the book out.

The list of some of the books available for loan are as follows:

BROMELIADS:

- Journal of BSI 1981 - 1993
- Bromeliads - The BSI
- Bromeliads - Werner Rauh (2 copies)
- Bromeliads - Walter Richter
- Bromeliads for Modern Living
- Bromeliads for Everyone - Bea Hanson
- The Colourful Bromeliads - Victoria Padilla
- Tillandsias - Paul Isley
- The Bromeliad Lexicon - Werner Rauh
- Bromeliaceae of Venezuela
- Bromeliads - Victoria Padilla
- In Search of Flowers of the Amazon Forest - Margaret Mee
- Handbook for Judges and Exhibitors - BSI, 1982



CACTUS AND SUCCULENTS

- Cactus and Succulents - Sunset
- Succulents and Cactus - Sunset
- Cacti and other Succulents Vol 1-6 - Edgar Lamb (2 copies Vol 5)
- Cacti for the Amateur - Abbey Garden Press
- The Book of Cacti and other Succulents - Claude Chidamian
- Cacti and Succulents - E.E. Kemp
- Cacti and Succulents for Modern Living
- Cacti - Sir Oliver Leese
- The Stapelieae, Vols 1, 2 and 3

Photo Album of members' donations.

ITEMS FOR SALE

POTS	105 mm squat pot	20c
	125 mm	25c
	140 mm	30c
	165 mm	45c
	200 mm	65c
OSMOCOTE	500g	\$2.50 (9 month)
LABELS	10 for 25c	100 for \$2.50
PENCILS	\$2.20 each	
PHOSTROGEN	625g -	\$18.00
PLANT LADDERS	25c	
PLANT HANGERS	25c	
SALES STICKERS	5¢ each or 10 for 50¢	
SOCIETY BADGES	\$3.00 each	
	Available from the Treasurer, Jum Daniels	
BOOKS		
	"Bromeliads for Everyone" by Bea Hanson - \$3.50	
	"Growing Bromeliads" - \$11.50	
	"Bromeliads for Modern Living" - \$8.50	
	"Bromeliads - A Guide to the Beautiful Neoregelias" - \$20.00	