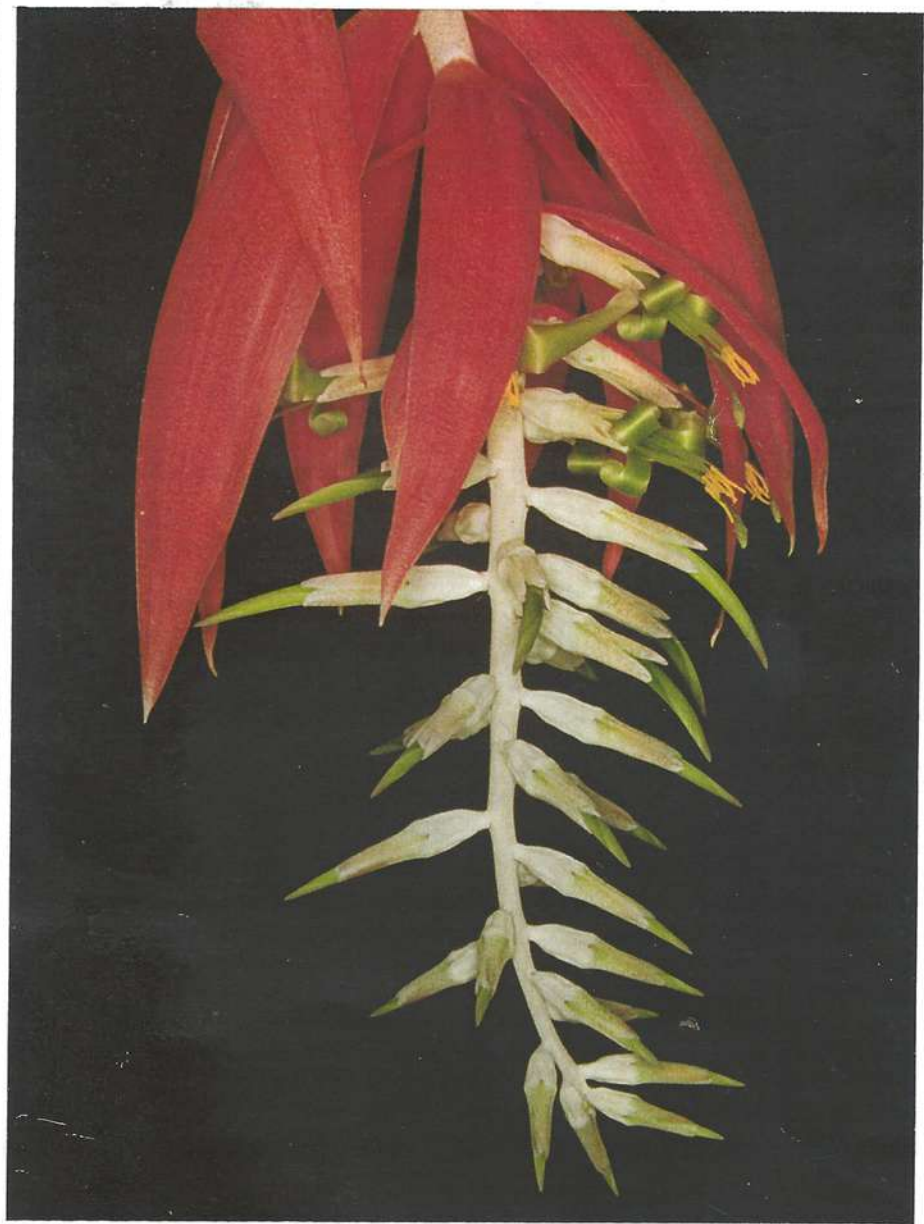


Bromeliaceae





BROMELIAD SOCIETY OF QUEENSLAND INC

P.O. Box 565, FORTITUDE VALLEY,
QLD. 4006 AUSTRALIA

*General meetings held on the third Thursday of each month except December at the
Uniting Church Hall, 52 Merthyr Road, New Farm, Queensland, commencing at 7.30pm.*

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LIFE MEMBERS	: Mrs Grace Goode, Mr Peter Paroz, Mr Bert Wilson	

*Opinions expressed in this publication are those of the individual contributors and may not
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Cover Photographs – Front and Back

***Billbergia* 'Bill's Baby' – Derek Butcher**

There was great excitement in the Butcher household in July which is surprising because usually this is a quiet month with Bromeliads, just waiting for Spring. JG 29002 was coming into flower and what a magnificent inflorescence it was with many large bright red scape bracts contrasting with a white farinose scape. It stayed like this for days with us waiting for the petals to open so that we could get a photograph or two and dissect a little bit. John Catlan and Genny Vauhkonen had previously flowered this plant and their photograph of its inflorescence meant we just had to have one plant too. In trying to name it from the photograph I toyed with the idea of it being *Billbergia oxysepala* or even *violacea* because John had said the plant had come from a very old collection in northern NSW. I thought it just had to be a species in the *Helicodea* group.

So July saw me filling in my worksheet and the wandering through Lyman Smith's key, time and again, getting almost matches but not quite. While looking at the petals I noticed pale blue lines in the upper part of the predominantly yellow-green petals and I remembered seeing similar colouring in *Billbergia macrocalyx*. I was now convinced that I had a hybrid in front of me, and one done some 30 years ago by Bill Morris when he crossed *B. macrocalyx* with *B. rosea* (then *venezuelana*). It's name came into being only 20 years ago when Grace Goode and Olwen Ferris felt the plant needed a name. Not wanting others to go through the traumas of tracing the identity of this plant, I would like to take this opportunity of describing this rather large 'Baby'.

- Plant-** tubular, to 1 metre high with about 8 leaves.
- Leaf Sheath -** large, up to 25cm long and 10cm wide.
- Leaf Blade -** to 75cm, 5cm wide, green with pale green spots in the upper half, sparsely spined, with irregular farinose bands predominantly in the lower half.
- Scape -** 1cm thick, farinose, semi-pendent.
- Scape Bracts-** mainly clustered below the inflorescence, 17cm to 10cm long, 12mm to 4mm wide, shiny red #26 with lepidote covering on the outside.
- Inflorescence -** simple, ovoid, 15cm long, 5cm wide, with 25-30 flowers.
- Floral Bracts-** similar to upper scape bracts for the first 3 or 4 flowers (first exceeding the flower, the last exceeding sepal) reducing drastically to a 3mm by 3mm triangle red-brown in colour.
- Sepal-** lancelike, 23mm long, 11mm wide, green with pinkish overlay.
- Petal -** ligulate, 65mm long, 6mm wide, greenish-yellow #81 with light blue tip #58, pale blue veined in top 3rd, becoming coiled almost like a watch spring in Queensland, but straight in Adelaide!

- Pistil** - 5cm long, including green spiral stigma.
Ovary - top-shaped, 12mm long, 8mm wide, lightly ribbed, farinose covering.

***Billbergia* 'Bill's Baby' (*Billbergia* JG 29002) – John Catlan**

The story for me begins on the 9th of January 1996. I'm at Mike Symmons' place and I find a large unnamed *Billbergia*, it's like nothing I've ever seen before. No, he has none to spare, but he throws all the old mothers on the compost heap. So, I'm in the compost heap, up to my arm pits sorting through while Mike stands surveying his kingdom he pronounces "You know, you're welcome to anything I **haven't** got".

Anyway, I find the old mother with a dead flower bract. This plant was in an old collection Mike acquired many years ago.

Later I forward a plant to Derek Butcher for identification. He has to grow and flower the plant but in the mean time Neville Ryan tentatively identifies the plant as *Billbergia* 'Bill's Baby' and at a later date Bill Morris identifies a non-flowering plant as *Billbergia* 'Bill's Baby'. I didn't tell Derek any of this because I try not to influence his decisions and prefer he comes to his own independent conclusion. It also helps to stretch his abilities and is good for character development.

Off the cuff identification of hybrid bromeliads is fraught with disaster, but we now have three people whose opinion I value, independently identify this *Billbergia* and it is not fair to the people concerned to ask for an off the cuff opinion and then quote it as a fact, there is a difference.

From now on, *Billbergia* JG 29002 is *Billbergia* 'Bill's Baby' and anyone who disagrees has to prove it is not. It should be remembered, plants vary among themselves because of environmental differences.

The plant is approximately 1 metre tall, foliage is straight and green, banded, with a few not very obvious white spots. The inflorescence is 22cm long (9"), 20cm wide (8") and the scape is 64cm (2'2"). The scape bracts extend back along the scape giving the impression that the inflorescence is 40cm (18") long. Each individual flower is 7.5cm (3") long.

The quality of the scape bracts lasted from the 2nd of April (when it emerged) for 28 days. It looks like a *Heliconioides* type, but a characteristic of this plant is that one of the three flower petals never recoils correctly. The plant is a pleasure to grow, the scape bracts have size, colour and lasting abilities. Another quality Australian hybrid.

Plant grown by: Derek Butcher

Photographed by: John Catlan

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Tables full of plants that have been subjected to name changes, plus a speaker capable of discussing the whys and wherefores of the name changes, was undoubtedly the highlight of the October general meeting.

Mr. Neville Ryan held our interest answering questions which encouraged the discharge of many underlying doubts we may have held as to the necessity of the sometimes confusing alterations and introduction of new bromeliad genera.

As to why so many mistakes were made by some of the early taxonomists, it has to be understood many interpretations and conclusions were often based on poor quality herbarium material. Classification must have been difficult. It has been written, similarities were often used to place plants into coherent groups. Today bromeliad specimens are readily available for identification.

From the book 'Canistrum - Bromeliads of the Atlantic Forest' written by Elton M.C. Leme, the following was taken from the 'Preface' written by Gregory K. Brown, Professor of Botany at the University of Wyoming and currently serving as Treasurer of the American Society of Plant Taxonomists.

"In addition to the normal evaluation of herbarium material, Leme has, for many years, placed a focused emphasis on data from live plants, both in their native habitat and transplants under cultivation. Furthermore, care has been taken to make meticulous use of fresh and liquid-preserved floral material. As a consequence, Leme has had the opportunity to observe and discover morphological features and make interpretations that are not available from even the best prepared herbarium specimens."

Ed.

The Changing Names of Bromeliads - Neville Ryan

In November 1992 Michael Spence and Lyman Smith published a revision of the 'Genus *Deuterocohnia*' in which it was stated a study of thirteen species in two closely allied genera of Bromeliaceae, *Abromeitiella* and *Deuterocohnia*, there were a lack of sufficiently distinct characters to warrant their separate generic ranks.

Abromeitiella is therefore reduced into synonymy under *Deuterocohnia* which has priority.

A year later 1993, Michael Spence and Lyman Smith published 'Racinaea, A New Genus of Bromeliaceae'. A reevaluation of *Tillandsia* subgenus *Pseudocatopsis* revealed sufficiently distinct characters to warrant the establishment of a new genus, *Racinaea*. The new genus, named in honour of Racine Foster, consists of forty six species and fifteen varieties.

For a listing of *Tillandsia* moved to the genus *Racinaea* refer to Bromeliaceae Nov/Dec 1994 issue, Vol. XXVII, No. 6.

In 1995, Jason R. Grant, Department of Botany, University of Maryland USA., resurrected the genus *Alcantarea* from the *Vrieaea* subgenus *Alcantarea*. The

genus contains ten species. Varieties the reader is most likely to come across are; *Alc.geniculata*, *Alc.imperialis*, *Alc.regina* and *Alc.vinicolor*. *Alcantarea* is restricted to the Brazilian states of Rio de Janeiro, Espirito Santo and Minas Gerais. In August 1993 Jason R. Grant removed twenty six species from *Vriesea* and placed them into *Tillandsia*. Many of these varieties we know as the silver *Vrieseas*.

In August 1997, Elton Leme published the first book in a three part series, the book is called 'Bromeliads of the Atlantic Forest'. In this publication he has reclassified some *Canistrum* into the new genus *Edmundoa*. The varieties placed into *Edmundoa* are the large rosette types like *Ed.lindenii*, *Ed.lindenii*, *var.rosea*, *Ed.ambigua* and *Ed.perplexa*.

Edmundoa lindenii is terrestrial or saxicolous, its leaves are suberect to spreading. The involucral and primary bracts turn from a yellowish white to greenish towards the apex as the inflorescence ages.

Edmundoa lindenii var.rosea, the leaves of a immature plant can be reddish and become mottled with irregular dark green spots in bright sunlight. Primary bracts are rose to reddish in colour.

Edmundoa ambigua an epiphyte with leaves suberect to spreading, forming a dense funnel form rosette. They are green both sides with darker green spots towards the apex. The involucral and primary bracts turn bright pink sometimes almost red at the onset of flowering. As the flowers open, the colours fade to a dull rust colour.

Edmundoa perplexa, epiphyte, leaves subrigid in texture, suberect, also forming a dense funnel form rosette. Scape bracts broadly elliptic, apex apiculate, a single one near the base of the scape with the remainder beneath the inflorescence. The varieties left in *Canistrum* are more tubular forms eg, *C.fosteriana*, *C.seideliana*, *C.triangulare* plus other varieties.

The plant we call *Canistrum* *Leopardinum* has been identified as *Wittrockia gigantea*.

The plants we know as *Wittrockia amazomica* and *Wittrockia campos-portoi* have been dropped from *Wittrockia* and will be dealt with by Elton Leme in the monograph on the genus *Nidularium*.

The genus *Wittrockia* now consists of five species. *Wittrockia surperba*, *Wittrockia tenuisepala*, *Wittrockia cyathiformis*, *Wittrockia gigantea*, and *Wittrockia spiralipetala*.

In the second Elton Leme book came the genera *Canistroopsis*, it contains fifteen different species and forms. The varieties we are most likely to have in our collections are ; *Canistroopsis burchellii*, *microps*, *seidellii*, and *billbergioides*. Both *Can.seidellii*, and *billbergioides* are quite variable.

Bromeliads Are Not The Culprits – James L. Giddings

"They triumph like queens when placed beside the marvellous orchids from which man has derived so much pleasure. After the rains and the clouds, they provide the orchids with an atmosphere saturated with humidity, and give them hospitality even as far as admitting their roots to the wells which they form. Often they prosper and grow to such an extent that the weight of their aquariums imperils the stability of the trees that carry them, and then the unexpected occurs for them. A rupturing of the tree's roots or the sudden cracking of a limb tumbles them into the abyss, spilling everything that was hiding in the liquid medium. They suffer great damage thus, but if they are not completely buried, they realign themselves and continue growth where they have landed."

Of course those words were penned offering the reader an insight into the wonder of bromeliads. Many people have written of the family Bromeliaceae, and because of my interest in these incredible plants I have accumulated a collection of their work. My list of books is perhaps no larger than any other enthusiast, but given time and future publications, there is every possibility bromeliad books could dominate my library.

As a society member I look forward to each issue of our journal and take pleasure in contributing whenever I can. I am an absolute fan of the 'All and Sundry' pages and having submitted several questions one has to appreciate the detailed replies, they are never stilted nor abrupt. My copies of 'Bromeliaceae' are an important addition to my library.

In the March/April 1997 issue, R.Smythe MSc. put forward some interesting theories and observations in his articles 'Bromeliads and Mosquitos' and his follow-up in the next issue. Entomologists have studied the many insects and wild life in the cups of bromeliads, most have published engrossing papers on their findings, Mr.Smythe is to be congratulated for passing his knowledge to Health Officials, in particular, the World Health Organisation, (W.H.O.) dengue programme in Geneva.

Years ago Mr.F.C.Hoehne wrote an article 'Treetop Aquariums'. It was published some 45-50 years ago in the 'Bromeliad Society Bulletin'. Mr. Hoehne was the Director of the Institute de Botanica S.Paulo, Brazil, at that time. The introductory paragraphs at the top of this page are taken from Treetop Aquariums, the following is also Mr.Hoehne's work.

"Many plant and animal lovers find great pleasure in keeping aquariums. However, they never realize that in nature, in addition to the refuges for aquatic life afforded by brooks, rivers, lakes and ponds, there are aquariums on rocks

and in tall trees. These are made and distributed by marvellous plants and are much more interesting than the man-made product because they are automatically aerated and are so constructed that the water which they contain remains fresh and drinkable without being circulated or chemically purified."

"In the midst of hanging gardens composed of hundreds of species of plants, these bizarre aquariums provide the habitat for many more plants which could not otherwise exist there. In these aquariums, many species of plants reproduce and animals of various classes breed there and live in partnership or competition like mankind over the face of the earth."

"The life of these funnel-shaped receptacles has been a field of constant research for biologists. Some of these study their contents in order to gain knowledge of small frogs. Others empty them to find new species of algae, bacterial fungi, etc. Entomologists search in them for insects: new species of beetles, mosquitos, flies and such. There are also botanists who discover in these water containers new species of mosses and even carnivorous plants that function there as controls, eliminating small insect larvae, eating minute algae and worms, and finally, thanks to such excellent nourishment finding the energy to produce a scape with marvellous big red-purple flowers that much excel the products of an artificial aquarium."

"Mulford B.Foster and Lyman B.Smith, two well known Yankees, have travelled through the dense Brazilian jungles, hiked through the caatingas (chaparral) and climbed the summits of high mountains to collect many of these aquariums in order to study them systematically to determine the genera and species to which they belong. The interesting contents of the aquariums however, does not concern them. They clean this out and carry away only the plants that have made the aquariums."

"The men in the Public Health Service fight a war of extermination with these beautiful plants for the benefit of mankind simply because they are accomplices as excellent constructors of aquariums. But they are not the culprits – it was nature itself for giving them such an interesting function to create conditions vital to themselves, and in consequence, causing them to be exploited undeservedly and abusively by the anophelines and kindred mosquitos."

"Thus the meritorious one pays for the abuses of the exploiter. What to do?"

"Man was made ruler of this planet. He commands and nature trembles and obeys."

"What is the remedy?"

"He aids the greater force. However, there still remains for the terrible conspirators against human life, the hollow trunks of trees, the depressions in rocks, the sheaths of fallen palm fronds, the ample bracts of Cecropia

inflorescences, the canes of bamboo perforated by woodpeckers, and dozens of other receptacles that abound in the jungles to receive daily rainwater. There the mosquitos will continue to survive and multiply. The struggle against them, no matter how intense will be a prolonged one."

Rochedale, Qld.

Tillandsia erecta – Derek Butcher

April/May is that time of year when few *Tillandsias* want to flower, but it is the time to expect *T.crocata* with its bright yellow flowers and delightful perfume to perform. Also we see the bright blue of *T.bandensis* and at this time of year we can also expect a grey petalled flower in similar shape to the flower on *T.bandensis* and having 3-4 flowers per inflorescence. The plant although similar in shape is a bit smaller. No doubt you have this plant as *T.erecta*.

The interesting part is that this plant is NOT *Tillandsia erecta* but is certainly a hybrid with one of the parents being *T.bandensis*.

A true *T.erecta* is a smaller plant with an inflorescence having only one erect flower. The petals are a dirty yellow and remain erect, rarely opening.

Back to our grey petalled plant hereafter referred to as *Tillandsia* 'Grey Power' for obvious reasons. I have considered Queensland Blue for equally obvious reasons because this problem originates in Queensland and the trail peters out there. They are very good poker players up there! The plant was in existence in Queensland before Rolly Reilly started his seed raising campaign but I could not find out if the plant had been imported or grown from imported seed.

While a cross between *T.bandensis* and *T.crocata* would probably produce grey flowers, hybrid vigour would probably ensure a larger plant than either of its parents. In this case the plant is slightly smaller than *T.bandensis* so I felt the other parent had to be smaller too. It could even be *T.erecta* but more likely *Tillandsia funebris* (its very close cousin!) if it were a natural hybrid.

I could find no reference to a hybrid occurring in this situation either man made or natural. I wrote to Dr. Walter Till of Vienna who is the world authority on these extra small *Tillandsias*. He confirmed my views on it being a hybrid and suggested another possible parent – *T.myosura*. He was unaware of this plant as a natural hybrid! I can assure you that this small plant with petals a delightful grey offsets well and is widely spread in Australia. BUT, please change its name from *T.erecta* to *T.'Grey Power'*. Perhaps it should have been retired years ago!

Fulham S.A.

My Bromeliad Story

How I Became Interested in Bromeliads – Des Andersen

This November 1998 will celebrate one hundred years of bromeliad growing in my family. I inherited the growing of bromeliads from my maternal grandmother. My first recollection of these plants has always been clear to me, I remember I was just a child four or five years of age when my family moved to a house next to my grandmother, and it was from here I would accompany my father through my grandmother's garden each day he went to work. I remember I would farewell him as I sat on the front steps and admired the beautiful inflorescences of the garden plants.

From memory my grandmother had a collection of *Billbergias* and *Aechmeas*. I can still see the bright gaudy show of her *B.pyramidalis* var. *concolor* and *B.nutans*. I recall her *Aechmeas* having yellow heads (bracts) and there were others called *Aec.willandra*, I believe this aechmea was the forerunner of *Aec.weilbachii*, anyway, in my early years I was not interested in correct names. Later, when one begins to seriously cultivate bromeliads correct naming becomes important.

Now, a feature I must point out, all of her bromeliads were grown as garden plants, that is to say they were all grown in soil. This was not like your regular bromeliad area, plants generally growing in shade houses, my grandmother dispersed her bromeliads everywhere throughout the yard. In truth, she was a remarkable gardener. Almost the entire yard was under cultivation, something else I have inherited from her.

My grandmother grew all sorts of annuals, vegetables and shrubs. In the yard there were a number of huge trees, some were Camphor Laurels. She is the only person I've known to grow a garden under such trees. She grew other trees, Jacaranda, Pomegranate, Locquat, a range of citrus and a coffee tree from which she ground her own coffee (as I do today).

All of her plants were mixed together, bromeliads growing among the flowering annuals among vegetables and trees, it was all in together, and quite beautiful. For me, something never to be forgotten.

I have grown and cultivated bromeliads for over fifty years, I tended the plants my parents grew on their area of land and I remember the time I grew a pineapple in an old rusty four gallon (20 litre) kerosene tin. West of Pittsworth on the Darling Downs, winter temperatures plummet below zero on occasions, a difficult area to grow pineapples. I needed to show some children where the fruit grew on the pineapple plant (to those people who do not know me, I was a school teacher before I retired). Many of the children had never seen pineapples growing or

where the fruit was situated on the plant. The exercise was not successful the plant never produced fruit. It continued to grow in the kerosene tin for a number of years, the winter cold set it back and the summer would rejuvenate it, but not enough to set fruit. I love all types of plant life and I guess I am what is known as a plant collector with my bromeliads holding a very high place in my love of flora. An inheritance I've never regretted.

As I have said, one hundred years this month, November, but I am not assured I can vouch it will go much past that. My daughter has said when I die she will get rid of the plants and concrete the whole yard. I do not really believe this, she has quite a good knowledge of plants when she puts her mind to it. Hopefully some of my plants will survive and perhaps a genuine love of bromeliads may take over her thinking. Here's hoping.

I hope everyone who grows bromeliads gets as much enjoyment out of them as I and my family. I wish you all good growing and much pleasure from your bromeliads for the next one hundred years. Oh! yes, Merry Christmas.

Caloundra, Queensland.

Bigeneric Hybrid Names – Derek Butcher

We know that bigeneric hybrid names are a combination of part of the name of the genus of the seed parent and part of the name of the genus of the pollen parent. There are therefore a few changes in bigeneric names which will take some getting used to. Regrettably the same principle of first come first served applies to bigeneric names too and some were ignored when the International Check List was produced in 1979. Luckily, we in Australia have not been greatly affected but there are two you should be reminded about.

First we do have to change our ideas of calling *XNeolarium* because there is a new name *XNiduregelia* which is not easy on the tongue. AND, we have quite a few of these hybrids in Australia.

The next problem is an interesting one because I was slowly getting used to that horrible name *XNeoistrum* and was pleased that it had been changed to *XCanegelia*. However, Maurice Kellett's hybrid 'Nidhurst' has to have a name of its own because the seed parent is now a *Wittrockia*. Then we will call it a *XNeorockia* before anyone else gets ideas.

To save confusion to readers by listing all the new bigeneric names I suggest that if a hybridist succeeds with bigeneric hybrids using the correct new genera names they refer to The Bromeliad Cultivar Register produced in the USA in June 1998. OR, they could contact me!

Fulham, South Australia.

NEWSLETTER

🌿 Forthcoming Events 🌿 Member's Forum 🌿 Show Reports
🌿 Society News

Monthly Meetings

18th November (see page 13)
Final meeting for the year
Break-up celebrations, Members are asked to bring a plate.
Mammoth plant raffle
Open plant display
No plant of the Month will be conducted because of break-up.

December – No meeting.

21st January 1999 Mini Show

Class 1: *Aechmea* species & hybrids
Class 2: *Vriesea* species & hybrids
Class 3: *Pitcairnia* species & hybrids
Advanced- Intermediate- Novice
Plan t commentary by Judges. Novice growers class -Len Trevor 7.30pm sharp. 'My First Plant'. Members are asked to bring to the meeting their first Bromeliad. Members will be asked to talk about plants that began their collection.

Study Group

Christmas break-up meeting
7.00an 28th November 1998
Venue: 232 Canvey Rd, Ferny Grove
Ph: 3351 1203

Show Reports

Popular Vote 17th September
Advanced: 1st D&J Upton-*T.bulbosa*
2nd N Ryan-*T.argentina*
Intermediate: 1st R. Cross-*Guz.musaica*
2nd R. Cross-*Guz.'Margarit'*
Tie 2nd N. Symmons-*T.seferiana*
Novice: 1st I&D Hole - *Neo.'Whim'*
2nd C&D Cutcliffe -
Guz.'Vulcan' Xgloriosa

Show Reports

Mini Show – 15th October
Advanced- Intermediate- Novice
Advanced
Class 1: Miniature *Neoregelia*
1st: D&J Upton – *Neo.Freckles*
2nd: L&O Trevor – *Neo.lilliputiana*
X Fireball
Class 2: *Tillandsia*
1st: Barry Genn – *T.deppeana*
2nd: L&O Trevor – *T.geminiflora*
Class 3: No entries
Intermediate
Class: 1 Miniature *Neoregelia*
1st: M.Symmons – *Neo.Nugget*
2nd: M.Symmons – *Neo.Fireball X*
ampullacea
Class 2: *Tillandsia*
1st: M.Symmons – *T.streptophylla*
2nd: R. Cross – *T.didisticha*
Class 3: *Hechtia*
1st: R.Cross – *H.texensis*
Novice
Class 1: Miniature *Neoregelia*
1st: I&D Hole – *Neo.Little Faith*
2nd: I&D Hole – *Neo.Small World*
Class 2: *Tillandsia*
1st: I&D Hole – *T.atroviridipetala*
2nd. I&D Hole – *T.ionantha*
Class 3: No entries

Plant of the Month

The next 'Plant of the Month' will be conducted at the February monthly meeting, 18th February 1999. Each month, excepting those when Mini Shows are conducted, members are invited to table plants from genera starting with consecutive letters of the alphabet for display and commentary.

ATTENTION!**ATTENTION!!****ATTENTION!!!**

Due to building alterations at our meeting venue, the end of year celebrations and activities will be held in the main building adjacent to our usual meeting place. Please note the date is now **WEDNESDAY 18th. NOVEMBER** at 7.30pm instead of the usual Thursday. Don't forget to bring a plate of goodies and don't forget your cash for the mammoth raffle. See you there.

AN EARLY REMINDER OF OUR SOCIETY'S ANNUAL MEMBERSHIP FEES.

The schedule of fees is : Single - \$15.00. Family - \$20.00. Overseas - A\$20.00. Members are reminded that annual membership fees are due by the 31st January 1999. Members whose application for membership was accepted in October or later will be financial for the following year, 1999. Publication deadlines and advertising in Bromeliaceae, see page 24.

Schedule for Mini Shows - 1999

January	Class 1: <i>Aechmea</i> species and hybrids Class 2: <i>Vriesea</i> species and hybrids Class 3: <i>Pitcairnia</i> species and hybrids
April	Class 1: <i>Cryptanthus</i> species and hybrids Class 2: <i>Guzmania</i> species and hybrids Class 3: <i>Dyckia</i> species and hybrids
July	Class 1: <i>Billbergia</i> species and hybrids Class 2: <i>Vriesea</i> species and hybrids Class 3: <i>Pitcairnioides</i> (other than <i>Pitcairnia</i> , <i>Dyckia</i> , <i>Hechtia</i>)
October	Class 1: <i>Neoregelia</i> species and hybrids over 200mm Class 2: <i>Tillandsia</i> species and hybrids Class 3: <i>Hechtia</i> species and hybrids

Roster for Raffle Plants - 1999

January - Barry Genn, Viv & Jan Duncan. February - Bob Cross, Eddie Rush.

Cairns Study Group Raffle Results

- 1st 'Botanica' - Pink Ticket No. 3
D. Doonan
47 Murrarar Rd, Towradgi NSW 2518
- 2nd Video 'Bromagic' - Yellow Ticket No. 3
Bromeliad Society NSW

Letters to the Editor

Knowledge of the influence of the parents upon the results of fertilization (cross pollination) is varied and uncertain. Some of my colleagues will argue the power of the male and female elements in the determination of the form of the descendants is entirely equal. Others affirm that only the strongest parent, the most virile, whatever may be the sex, makes the most powerful impression upon the hybrid. The practitioners have believed they could discern that the male parent influenced form and colour, with the female parent influencing robustness, steady growth etc. Yet another belief (which is quite possibly much nearer the truth) the transmission of the characteristics is a quality of the individual, and it belongs neither to one sex nor the other.

A predominant influence in the transmission of certain morphologic characteristics in bromeliads can be seen in the foliage. The leaf can have a particular texture, shape and colouration that can unmistakably be attributed to one parent. Even then it is not possible to formulate this as a general rule. One of your readers asked the question, "Why is it difficult to reproduce the vibrant colour of one plant to the perfect shape of another?" (Bromeliaceae, Vol.XXX1, No.4, page 19.) Your reply is creditable, offering instruction and suggestions that will certainly satisfy the reader. Permit me to strengthen your reply, not with conjecture, but still without sufficient evidence for proof.

Let us suppose a case where comparable genes on a chromosome pair influence the lack of vibrant colour on the foliage of our plant. Let us hypothesise that one chromosome has a gene for vibrant foliage which is recessive and on the homologous chromosome the comparable gene for non-vibrant foliage is dominant. In this plant, as we see it, the dominant will appear to us as non-vibrant foliage and we will not be aware of the recessive gene due to masking of it by the dominant.

This plant, if it flowers, will produce a new organism. A mature reproductive cell(gamete), some of which will have only the gene for non-vibrant foliage, while others will have only genes for vibrant foliage. The fertilization involving any gamete with a gene for non-vibrant foliage, it being dominant, will mask any gamete having the gene for vibrant foliage, but should the fertilization be between two gametes having the recessive for vibrant foliage, then the progeny will express this vibrant foliage characteristic

St.Lucia, Brisbane.

You see, this is what makes the world go around. We can all be different, we agree or disagree, love or hate, laugh or cry and decide yes or no. I just have to write a few words about the article, "Complicated and too Technical" written by an

Letters to the Editor - continued

unknown person and Derek Butcher in the July, August issue on page 5 of our Journal. What interesting people and what an interesting piece of work. Here we have two persons with differing theories and opinions both sharing a love of bromeliads.

After reading the article and reading it again, I have to ask, who could dislike either one. Who can truthfully say one is right the other wrong. I consider both are enthusiasts and bromeliads can only benefit because of them both. The unknown writer, joyous with the different shapes and colourations, tells us his enjoyment could never be deminished because of insufficient information, while Mr. Butcher with his 'why is it so' attitude, cares about correctness. His Checklist of Australian Bromeliads should be in every library. Our unknown writer talks of the stress of reclassification, Mr. Butcher finds articles on soil mixes too technical, so be it, as with each of us they have some dislike or another. As I've said before, this is what makes the world go around, or as Mr. Butcher tells it, the Bromeliad World. Go read the article again, I'm sure you'll enjoy it.

Peter Carrol, North Queensland.

Forgive me, I can't sign my name as my husband would kill me and I hope he'll never guess who wrote to you. I've heard it said "Once the little woman gets going it's hard to shut her up." Without a doubt the male of our species conjured that statement after discovering we females are smarter and more capable. I can hear the howls from our male members, but before they become too vocal let me point out a few facts concerning Bromeliaceae. Take away the articles from Derek Butcher and those of Des Andersen and it becomes difficult to find other male contributors. Doesn't say much for our male members does it. Oh! yes Harry (My name is Harry) but I can take just so much of him. (I wonder if you'll print that) Anyway, as far as Bromeliaceae is concerned, let me say to our male members, without articles from female members it would amount to just a few pages. I list the following to validate my comments. Great articles from Grace Goode and Olwen Ferris, Joni Simpson's battles with insects, Rhonda Symonds *Tillandsia* interest, Joan Selnes in praise of the non-active member, Margaret Draddy waiting a lifetime for her *Vriesea* to bloom.

What about Liz Rowland's small green frog, another Liz, Liz Weir her editorial of a group's activities. Articles and comments from our sisters in the USA. Mrs. Reeve, Moyna Prince, Margaret Rock and the brilliant 'Hybridizing' from Kathy Dorr. I rest my case.

X, Queensland.

No comment other than to thank you for your letter. ED.

Letters to the Editor – continued

Perhaps I can kill two birds with one stone. Does Derek Butcher ever get replies? (Bromeliaceae, Vol.XXX1, No.5, Sept/Oct.'98.page 15). Sometimes no, sometimes yes, sometimes now, sometimes later. Naming of plants is a never ending pastime which is why I enjoy this part of Bromeliad growing because there is always something around the corner. The saga of *Neoregelia macwilliamsii* versus *compacta* will continue for some years yet, which is why I try to get people really looking at their plants and querying "Why is it so?"

Plant naming is fraught with difficulties and perhaps one rule is never to accept what is printed in another Newsletter as gospel. It needs to be checked out. There were a few errors in the article by Phillip Robinson that should be brought to everyone's attention. Botanists do move plants around and when they give reasons for changing relationships I find this interesting. Thus I find Leme's latest books interesting. Some don't give reasons. For example, Lyman Smith reduced *Streptocalyx* to being an *Aechmea*, but then illogically brought the subgenera of *Aechmea* e.g. *Orgiesia* up to genus status. This move lasted about six months! So even the greatest can make mistakes. Some changes take longer, in fact the *Pepinia* versus *Pitcairnia* discussion is still going on after ten years.

I do suggest strongly that ALL groups or Societies big or small should hold a current copy of Harry Luther's 'Alphabetical List of Bromeliad Binomials' obtainable from the Bromeliad Society International in the USA. The 6th Edition has just been issued. This gives the current view and we would all be consistent in our approach. Secondly an Editor can check up on the correct spelling of species plants.

Derek Butcher
Fulham South Australia.

The article 'The Naming of Plants' by Phillip Robinson reprinted in Bromeliaceae Sept/Oct 1998 from the Illawarra Bromeliad Soc. Inc.'Newslink' July 1998 contains a very fundamental error.

In the text Phillip Robinson writes "The grex name also applies to any crosses between the progeny of a cross with either parent. Unfortunately the progeny of such crosses will be variable in their features. This is confusing to have the same applied to quite different looking plants." There will of course, be great variations, but Phillip is wrong to say they will have the same hybrid (grex) name. A x B and B x A carry the same name, but when crossed back to either parent they most certainly do not. Further into the article in 'Some Examples of Naming' Phillip writes, "*Aechmea* Bert represents a hybrid or grex between any of these crosses:

Aechmea orlandiana and *Aechmea fosteriana*
or *Aechmea orlandiana* and *Aechmea* Bert
or *Aechmea fosteriana* and *Aechmea* Bert."

Letters to the Editor - continued

The same mistake again. *Aechmea orlandiana* x *Aechmea* Bert and *Aechmea fosteriana* x *Aechmea* Bert would produce two new quite different hybrids.

A hybrid (grex) name should only ever be used if that name has been registered. Otherwise labels should carry detail of parentage (eg. *Ae. orlandiana* x *Ae. Bert*). Once registered the name is carried by all of the progeny of the particular crossing; the progeny of a reverse crossing; the progeny of the same crossing; done by anyone anywhere; a self pollination of any of the progeny (F2); a cross between any two of the progeny (F2 – sibling cross); between any two of the same hybrid (F2 – out-cross).

Maybe the confusion arises from the fact that a cross between any of the progeny and one of the parents can be referred to as a F2 back cross* (the word back cross must be used) but the progeny still carry a new hybrid name. Of course with the move to only register cultivar (clonal) names, the name will only apply to divisions of that one plant.

* This is according to the chief of plant genetics at Queensland University.

I would have called it an F1 1/2.

Mike Symmons, Ormeau, Queensland.

I think you were a bit hard on your correspondent 'Complicated and too Technical' July/Aug. 1998. When your correspondent says "Walking through the shade house and delighting at the different shapes and colourations of each plant is always quite enjoyable, it could never be diminished because of insufficient information" I can, in part, understand.

He/she is not saying they are not interested in learning and from the letter they obviously know a lot about their plants. If he/she is saying they can enjoy them without knowing all their names, then unfortunately, I am forced through circumstances not of my making, to agree with him/her.

Since coming to bromeliads around 3 years ago I have become increasingly frustrated with the slap-dash labelling of them. Some growers and breeders make up names without registering them, change names they have already given to plants sell the same plant with different names. In other words, unless I only grow species I can enjoy the plants but do not know on which labels I can rely.

I have a large number of orchids that have lost their labels or were mixed up in the laboratory. I can still enjoy them, even exhibit or sell them (at a reduced price) and feel better that I did not make up, or guess a name for them.

Derek's closing statement, "As a gardener your collection should grow at the

Letters to the Editor - continued

same rate as your knowledge of bromeliads. If it doesn't then I feel sorry for you." is rather patronising.

Stick to growing species only or enjoy your hybrids, but understand you may not be able to rely on their names. If only bromeliad growers had adhered to the rules of nomenclature as did orchid growers. Strange really when so many bromeliad growers are or were orchid growers.

Mike Symmons Ormeau, Queensland.

Just a few comments on the *Crypt.bivittatus* cv.Ruby featured last issue of Bromeliaceae (Sept/Oct '98). It should be noted that 'Ruby' is a shy bloomer and rarely if ever flowers for most growers. Mine colour up, pup nicely and reach a 'mature' size, but after seven generations, over fifteen years, there has never been an inflorescence, the rosette centre simply stops growing and eventually the plant multiplies.

I recently consulted NSW nurseryman Robert Larnach who has propagated hundreds of 'Ruby' over the years and he agrees that this cultivar has flowered for him but very rarely. His answer was that 'Ruby' is one of those exceptions which require a higher ratio than usual of potash when fertilizing assuming the light intensity is adequate. In Texan specialist grower Bob Whitman's opinion, 'Ruby' and *var.atropurpureus* are exactly the same clone (see *Crypt.Soc.Journal*, Aug.1996,page 17). Out of the 1000 plus cultivars listed in the 1992 Cumulative Reference of *Cryptanthus*, there is only a single reference to 'Ruby' having been used as a parent (producing C.Corrine), which to me indicated top growers and hybridists have trouble flowering this plant without artificial inducement.

Geoff Lawn Como, Western Australia.

I liked 'My Bromeliad Story' Mr.Nicholson wrote in the Sept/Oct'98 issue. I guess it's typical of most of us when we grow bromeliads. I can't write like he did, when I read what I have written it doesn't read too well. Mind you, I know what I'd like to say but it doesn't come out the way I want. I'm not altogether a non-contributing member, I've sent questions to you. I guess you've noticed there were no 'All and Sundry' pages in the last issue.

Should you be correct in saying your story 'doesn't read too well', a spot of editing may be all that is necessary. Put your story in the mail. Ed.

The Tillandsia Tree – Ed.

A regular feature at most of our displays is a bromeliad tree. This year at the Royal Horticultural Society's 'Garden Spectacular' our tree was somewhat smaller and low spreading, however it did allow show visitors a closer look at the many *Tillandsias* decorating each limb.

The smaller tree was never intended to be a part of this years display, a much larger specimen was first chosen and taken to the show venue. Alas~ the garden cleaning staff at the Botanic Gardens came across our briefly unattended tree, thinking it was litter that had dislodged itself from trees overhead dutifully put it through a munching machine. When informed of their mistake, the garden staff promised to supply something similar.

One would expect replacing our tree from the hundreds growing in the Botanic Gardens should be a simple matter. However as time passed we were informed something relatively similar could not be found.

Imagine the panic, our Show Organiser was almost in tears, an important focal point of our display reduced to a million chips of wood. Certainly there was little time to retrieve the chips and glue them back together, anyway, the cost of the glue would never be approved by Committee. So, what to do! Where could a suitable replacement be found ? and quickly.

Still in shock our Show Organiser unloaded the remaining show material from his truck, put his foot heavily upon the accelerator pedal and sped from the show venue.

A tree, a tree, not just an ordinary uninteresting thing, it had to be the right shape, have limbs that twist from a central trunk with the grace of an exotic dancer but, its appearance must be old and weathered its bark dry and rough to compliment a mass of flowering *Tillandsia*. Such a tree has to exist, it HAD, only an hour ago but now it's a part of a garden mulch.

Our Show Organiser searched the odd side streets and thoroughfares, the Governor's gardens and the local cemetery, there was nothing, nothing to suit his needs.

It soon became apparent time was running out, he would need to go home and scour his own tree covered gardens. Cath (his wife) may not be at home so he could safely rummage the garden. At last he found a tree, not a complete tree, just a few twisted limbs and a section that looked like a trunk. Loading the truck he made a hasty return to the show venue.

With screws and wire each piece was bound together. The screws and wire were hidden with *T.usneoides* and the work of art was then stood in a holding platform. It was different, different than our usual *Tillandsia* display tree, but it WAS a tree, its limbs were low and spreading enabling masses of flowering

Tillandsias to be attached, some upright others pendent. Time now to complete the rest of the display under and around the tree.

The colour scheme for this years show was yellow. The pale yellow bracts of the *Vrieseas* with brighter yellows and golden yellows of the *Guzmanias*. The carefully chosen *Neoregelias* in various shades of apricot, pinks and reds, highlighted a clever arrangement of the predominant yellow bromeliads.

On the second week-end in October each year, our Society participates in this Garden Spectacular at Mt.Coot-tha Botanic Gardens Auditorium. This is the annual Showcase of the Royal Horticultural Society of Queensland Inc. and their affiliates, namely specialist societies like ours and garden clubs.

While our Show Organizer is forgiving, it is doubtful wood chips will ever be his favourite form of garden mulch.

All and Sundry

Q/. Can you explain pH. Everyone talks about pH levels that affect our bromeliads. I've been told the ideal pH for our plants is five or six, is this correct, and can you tell me where the five or six comes into it, what does it mean? Also you have told us everyone has a different potting mix, but I'm not sure you're right about that. Every pot I look into has bark and it all looks the same, the only difference some look more chunky than others. It makes me wonder if everyone is using bark why don't our plants all grow the same, why is there a difference, especially as you have said bromeliads can grow without potting mix. Does a chunky bark give more air movement to the plants roots with less chance of collecting fertilizers. Or does a fine bark allow less air movement but ensures the plant grows better because fertilizers are readily held in a fine compact bark mix?

A/. In past issues we have spoken on many potting mediums, generally it has been suggested growers have a basic mixture which can be modified to suit the different needs of our plants, I'm sure you will find answers if you look through our past issues. A good medium will retain adequate moisture and nutrients. The fine compact bark you speak of will not allow rapid draining of any surplus water and predisposes the mixture to water logging. pH, a measure of acidity usually used for aqueous (watery) solutions. Pure water has a pH of 7, acidic solutions have lower pH values and alkaline solutions higher values.

Don and Phyl Hobbs have answered your questions in the followig article.

Is pH Important – Don and Phyl Hobbs

From various articles perused on the subject, there appears to be a general consensus that yes, pH levels are important. The letters pH stand for POTENTIAL HYDROGEN and refer to the concentration of hydrogen ions. pH levels are measured on a scale of 1 to 14, neutral point being 7.

Most epiphytes, including bromeliads, appear to thrive best in an acid environment and it seems to be generally agreed that a level of 5.0 to 6.5 is a good range to aim for in cultivation conditions. It has been established that the optimum availability of nutrients to the root system of plants, pH levels need to be in the slightly acid range of about 5.5 to 6.5. There is a tapering effect of availability either side of the optimum.

Excessive alkalinity may lead to chlorosis of young leaves and an excessive acidity will cause poor root development and slow growth. Low pH levels will also increase solubility of calcium and magnesium leading to leaching of these important elements.

In considering all of this we should realize that many tap water supplies are inclined to be slightly alkaline. If this condition becomes excessive it can lead to deposits of disfiguring and injurious calcium or magnesium carbonates on the leaf bases.

The normal remedy for such conditions is to adjust the pH into the acid range by adding controlled amounts of citric acid.

Water supplies are not normally acid but some potting mixes can be, in fact they can be very acid, particularly if any coal ash has been incorporated.

Most bromeliad growers use pine bark as the bulk ingredient, to which they can add other material, peat moss, styrene granules etc. Pine bark, particularly if fresh, when subjected to moisture will form a very strongly acid mixture and is therefore, in conventional thinking, not really suitable for use in our mixes.

Finding a substitute is difficult and so we mostly endeavour to overcome the problems associated with its use. A part remedy is to use only old and dried out material.

The next step is to try to adjust the pH level by adding a little Dolomite, or to partially compost the bark using Urea and Dolomite. By trial and error a pH level approaching the slightly acid range will usually be achieved.

Cleveland, Queensland.

Our last Bromeliaceae for 1998. On behalf of the Bromeliad Society of Queensland Inc. Good health and Happiness, Merry Christmas and a Happy New Year.

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