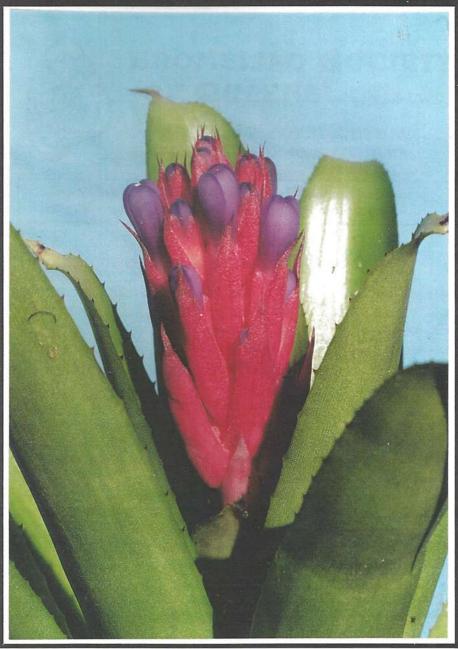
# Bromeliaceae



VOLUME XXXIII - No. 1 - JANUARY / FEBRUARY, 2000

## Bromeliaceae

VOL. XXXIII

Number 1, January / February, 2000

Price: \$3.50



## BROMELIAD SOCIETY OF QUEENSLAND INC.

P.O. BOX 565, FORTITUDE VALLEY QUEENSLAND, 4006, AUSTRALIA

General Meetings are held on the Third Thursday of Each Month Except December at the Uniting Church Hall, 52 Merthyr Road, New Farm, Queensland, commencing at 7.30 p.m.

## OFFICE-BEARERS, 1999-2000

PRESIDENT	Mr Bob Cross	Phone: (07) 3265 4364
		Phone: (07) 3207 4606
		Phone: (07) 3394 4134
		Phone: (07) 3266 1700
		Phone: (07) 3857 6570
		Phone: (07) 3399 5296
LIBRARIAN		• • • • • • • • • • • • • • • • • • • •
SHOW ORGANISER	Mr Bob Cross	Phone: (07) 3265 4364
IMMEDIATE PAST PRESIDENT.		
MANAGEMENT COMMITTEE	Mrs Jeanette Henwood	, Mr Eddie Rush,
	Mr Neville Ryan, Mr Per Mr Doug Upton	ry Smith, Mrs Olive Trevor,
COMBINED SHOW COMMITTE	E. Ms Cheryl Basic, Mr Bo	b Cross, Mr Neville Ryan,
	Mrs Dorothy Cutcliffe, A	
	Mr Eddie Rush, Mr Dou	
LIFE MEMBERS	Mrs Grace Goode, Mr P	eter Paroz, Mr Bert Wilson

Copyright: Permission is granted for reproduction provided no contrary advice is included by original authors, and provided proper acknowledgement accompanies each item when published.

Opinions expressed in this publication are those of the individual contributors and may not necessarily reflect the opinions of the Editor or the Bromeliad Society of Queensland.

## FRONT COVER: Ae. caudata v. eipperi or "Grace's Blue"

OUGHLY five years ago I wrote in *Bromeliaceae* about this plant and shortly after I received an offset from Olive Trevor and seed from Grace Goode. The plant flowered and the seed germinated. Grace had got the seed from a plant Harry Luther had verified was *Aechmea caudata var. eipperi*.

Photographs of the now-flowering offset from Olive were investigated by Peter Franklin and myself and linked in very closely with Grace's plant. Our only gripe was why it was not called Ae. eipperi in the first place! Reitz said the plant looked like an Ae. caudata but Lyman Smith thought it looked like Ae. organensis! Readers may be interested to know that photographs on the Internet web sites suggest that the Americans do not know what a true Ae. caudata var. eipperi looks like (except Harry Luther)!

This year, Grace's seedlings flowered and it appears that pollen from an *Ae. recurvata* had sneaked into the floral bed and done naughty things. Clearly they are F1 hybrids because they all look alike and I have decided to call them Ae. "Grace's Blue". One reason for this is the blue petals and another reason will make Grace smile because she is known for her jokes.

I handed out seedlings to growers around Australia with the comment that "these look a bit *Ae. recurvata*-ish to me but tell me what you get at flowering time!" So if you have this plant please change its name. Grace may also have sent seed to others as well — so beware.

Plant grown by DEREK BUTCHER.

Photographed by DEREK BUTCHER

## BACK COVER: Vriesea Philippo-coburgii (Wawra), 1880

HIS SHOWY PLANT is indigenous to Southern Brazil where it grows in full light in the tree tops of cloud forests at elevations of 600 to 750 metres (Padilla).

I have been growing this Veresia for 15 years and it has flowered at least three times, the last time in 1995 when the clump delighted us with six brilliantly flowered spikes which remained in colour for about five months. It has been grown under 70% green shadecloth 250 metres from the sea shore. The plants grow up to 1 m in diamater, has soft but tough green leaves to 2.8 m long and 70 mm wide with maroon tips.

A fact of some intrigue has emerged over the years in south-east Queensland is that when *Vr. philippo-coburgii* flowers for one grower it usually flowers for most other growers. Could it be that a combination of cultural factors trigger off the flowering process?

Plant grown by BOB PAULSEN

Photographed by BOB PAULSEN

## CONTENTS

Society Officials	1	
Cover Photographs	2	
Quilling, from the Internet	4.	5
Hybrids and Cultivars, by Derek Butcher	5.	6
How Good Are Your Plants, Part Three	71	to 10
The Continuing Story, by Ray Nicko	11.	12
More about Fertilizers, by Peter Paroz		
Society Diary: November Meeting Report, Break-up		
January 20 Meeting Page		
February 17 MeetingPage		
Study GroupPage	14	
Notice of Annual General Meeting	14	
1999 Competition Winners	14	
Combined Show Committee	15	
Show and Tell Table Page	15	
Successful Open Day	15	
Competition Schedule for 2000 Page	16	
Editor's Mailbox: New Mini Show Class	17,	18
White Oil and Scale	19	
Ants and Bromeliads Page	19	
Species and Hybrids	20	
Patented Broms	20	
Beware: CCA Pine	21	
Polinators		
Basic Books on Broms		
What Broms Where Page 2		
Advertisers: Forest Drive Nursery	18	
The Olive Branch	19	
M. J. Paterson	20	
Pinegrove Bromeliads Page 2	21	
Raemaur Plant Farm	22	
Brisbane Bromeliad Centre		
Bromagic Bromeliad Nursery	24	

## PUBLICATION DEADLINES for Bromeliaceae

Please send all contributions to:

The Editor, Ray Nicholson, 11 Malory St, Balmoral, Qld. 4171.
Phone (07) 3399 5296

## **Quilling** . . . From THE INTERNET

NE PROBLEM of concern to bromeliad growers is quilling. There seems to be very little attention given to this phenomenon which is not surprising because it is not really common.

According to the Bromeliad Society International's *A Bromeliad Glossary*, quilling is "a condition in certain thin-leaved bromeliads in which the centre leaves form a tight tube, the leaves adhering to each other by means of a glutinous substance. Sometimes due to lack of adequate moisture".

The following appeared on the Internet from a bromeliad grower called "Jatlee": "I have a problem with some young *Vriesea heiroglyphica* seedlings that perhaps someone can help me with. They are around 4 to 8 cm high in 5 cm pots. The central growth has become a tight tube and the new leaves are not opening as they should. I've been told the problem is known as quilling but what's the cause and what can be done to get them to grow normally again?"

John in NM replied: "I have an aechmea that tends to quill (I guess I can use that as a noun). I am not convinced that quilling is temperature related nor is it light related. I think it's humidity related. Now humidity is also effected by temperature. At low temperatures the air cannot hold all that much water. The air molecules are too close together, shivering.

"When the temperature goes up and the molecules get further apart there is more space in-between for humidity, *i.e.* water molecules. If the plant's leaves are tightly curled, vertically, there is not a lot of space for humidity to get in-between and reach the surfaces. Thus they tend to cling together (how's that for an amateur observation?). I also think some specific plants are more prone to this affliction than others.

"I have addressed the problem by treating each individual plant—a time-consuming effort. First, I separate the leaves as best I can. Second, I move the plants to the most humid location in the greenhouse. Third (the important part), I try and heavily mist the plants every day for about two weeks, along with a lot of air turbulence that helps keep the leaves apart. It seems to cure the problem, until it sends up new babies that again have the problem and the same treatment.

"If anyone has any ideas or suggestions I for one would certainly like to hear about them. This quilling can be a serious problem that has not been adequately addressed or discussed. Suggestions please."

Another reply to Latlee came from Andrew Maloy from New Zealand, who writes: "Thanks for all your tips and ideas on what may be

the cause of quilling. I had several hundred *Vriesea heirglyphica* around 5 to 6 cm high (2 inches for those not yet metricated) that I was getting very anxious about.

"Following some advice from a couple of people, I watered them liberally with a half teaspoon of Sunlight dishwashing liquid in 4 litres of water, making sure it washed down into the foliage. Then an hour later I washed them out with plain water. Within days you could see the difference—the tightly-packed leaves began to open and now, three weeks later, they're well on the way to coming right. One or two larger plants with the same symptoms I watered with the same solution into central vase, allowing it to overflow into all the leaf axis, and washed it out again after half an hour or so. Again the same result: three weeks later they're looking great.

"The cause of quilling is obviously unclear or perhaps it's caused by a variety of environmental factors, judging by people's responses. In my case I feel it was probably cold temperatures (we had several nights this winter when it went down to zero) and lack of water as I had been keeping them dryish because of the cold. Anyhow now Spring is here and they are much happier—me too! Thanks to all who offered advice."

## Hybrids and Cultivars By DEREK BUTCHER

FEW YEARS AGO we had a flourishing Round Robin type discussion group where we looked at photographs. This fell into the proverbial hole and we didn't see any publication of our views. We found, among other things, what was being grown in one state was appearing in another state under another name or mistakes were being perpetuated. Peter Franklin of Raymond Terrace in NSW and I still swap photographs and have discussions! The latest crop has brought up a few queries which should be shared around.

1. A true *Vriesea acuminata* is now a *Werauhia* with its odd and generally night, flowering. A plant named *V. acuminata*, which came from Queensland(?), has acuminate leaves. Acuminate means tapering compared to the more normal strap-shaped Vriesea leaves. When the plant flowers you immediately think of the hybrid *V.* "Komet" which we know has been "grown" from seed in Australia! Remember a true "Komet" can only be obtained by offset or meristem. So we would expect some variations around. One extra good form is one I call "Raemaur Flame" which came from Maurice Kellett. So please change your label to "Komet" or aff. "Komet" not *acuminata*.

- 2. Portea "Joe" was a name used by Bill Morris because he had to put something on the label. It's probable this plant came from Qld but is widespread in the Hunter district. It has flowered (again) and we looked at it a bit closer. Seedlings have been raised but not flowered (to see if it"s a hybrid). First it isn't a Portea because it does not have a pedicel but does have peduncles (a pedicel is a stem between the floral bract and ovary; a peduncle is a stem below the floral bract and can also be called a rhachis). The inflorescence resembles a slender form of the old genus Gravisia (eg. A. mulfordii). We know Foster did hybridise this group with Portea in the 1960s in USA. You may recall me offering Portea "California Blue" (my sense of humour at the time) which seemed to have links with Foster's hybridising programme. I don't know who else got this plant but I do know it was growing in Mullumbimby and the owner was not impressed with its inflorescence. "Joe" seems to have links with Portea leptantha and I suggest we call it XPortea "Joe". Perhaps it will go the same way as Portea "California Blue"!
- 3. Also on the subject of large plants we have a Portea which came via June Bennett in Cairns. It has short pedicels exceeded by the floral bracts and does not key out to any current species. The leaf sheaths are distinct from the blades which are green with many black teeth. The inflorescence is tripinnate, lax pyramidal, with orange scape and axis, bright green ovary with white sepals and pale blue petals. I feel we should call it *Portea* "June" to identify it for future investigation.
- 4. Aechmea nudicaulis "Giant". Seed was distributed from Elton Leme and collected on the Rio Janeiro coastline. Peter Franklin says his are 300 mm high. We are growing the same batch up to 600 mm so we think the name must be correct! The inflorescences look the same.
- 5. Aechmea nudicaulis "Porta Limon". This seed came from the Bromeliad Society International's seed bank a few years ago and we assume it has been grown by others apart from us in South Australia. Some are now flowering like an Aechmea nudicaulis should but at least one plant has pale blue petals. We have decided to call it "Blue Nude" to differentiate.
- 6. Aechmea "Charles Allen". This is another from NSW where little is known about the plant or who it was named after. After a lot of research, we've traced this person to New Zealand and who did several hybrids. One form seems to be close to a pale form of A. recurvata v. benrathii and it may be a hybrid or a selected clone. When we overcome the reticence of Kiwis to divulge their efforts in hybridising we will be seeing some interesting cultivars.

## How Good Are Your Plants? PART 3

Edited extracts from the BSI's Handbook for Judges

## Criteria for Judging the Genus Aechmea

HE MOST POPULAR BROMELIAD with florists is Aechmea fasciata, which has been in cultivation in Europe since 1826. Aechmeas are good plants for the beginner because almost without exception, they are hardy, robust plants that do well when cultivated. They are grown by the extensive collector because they offer spectacular blooms and great diversity of form. Victoria Padilla, in her book, Bromeliads, says, "Several factors account for the popularity of aechmeas—the beauty of the foliage, the lasting quality of the inflorescence (often in good color for many months), their adaptability to pot culture and average home conditions, their overall hardiness, and their frequency in producing offshoots. But not a small part of the appeal of this genus is its almost infinite variety. Of all the bromeliads, the aechmeas have the most diverse plant forms and inflorescences."

The name of the genus *Aechmea* comes from the Greek, *Aechme*, and means spear-point. This refers to the points on the perianth (the sum of sepals and petals).

Seventy-five percent of the aechmeas are epiphytic. C. L. Duddington, noted English botanist, in his book *Beginner's Guide to Botany* says: "Epiphytes are plants that grow on other plants. They take advantage of the height of the host plant to gain altitude without having to grow a long stem for themselves . . . A true epiphyte has no parasitic relationship with its host plant. It simply uses the host as a convenient platform by which it can gain height . . . An efficient seed-dispersal mechanism is essential to the life of an epiphyte, which may need to have its seeds carried to the topmost branches of a tree. Only two dispersal agencies can do this regularly and efficiently: wind and birds. Nearly all epiphytes rely on one of these two methods of dispersal."

Aechmeas all have spiny leaves, and the ovary is inferior. All have baccate (berry-like) fruit and unappendaged seeds. Not only are the berries of the aechmeas botanically efficient and necessary, they are also beautiful and long lasting. Arrangement of leaves in tank rosettes is the usual rule, with the form of the rosette varying from the open bowl type to the tall, urn type.

Of the 29 genera in the Bromelioideae subfamily, *Aechmea* is the most varied and interesting. Perhaps one-fourth of all the species within

the Bromelioideae belong to the genus *Aechmea* and three-fourths of these are epiphytes. Aechmeas vary widely in size and shape. Some are very small, i.e., *Ae. recurvata*, *Ae. brevicollis*, while some are very large, i.e., *Ae. mexicana*, *Ae. mariae-reginae*. Aechmea shapes are typified by their diversity. They can be vase shaped, e.g., *Ae. chantinii*, bottle shaped, e.g., *Ae. bracteata*, tubular, e.g., *Ae. nudicaulis*, or anything in between.

The one characteristic which is common to most aechmeas and which can be easily recognized by a judge is the erect inflorescence or bloom spike which bears the flowers, or the subsequent colorful berries. Only a few aechmeas have a spike which is pendant rather than erect, e.g. Ae. Fosteriana and Ae. Weilbachii Penduliflora.

#### **CLASSIFICATION OF AECHMEAS** (with examples)

- A. Light Requirements: 1. Full sun, Bracteata. 2. Almost full sun, Fosteriana. 3. Bright light, Chantinii. 4. Moderate light, Caudaia. 5. Subdued light, fulgens.
- B. Shape of Plant: 1. Vase, Chantinii. 2. Bottle, Orlandiana.
   3. Tubular, Purpureo-rosea. 4. Semi Tubular, Pubescens. 5. Thin Recurving Leaves, recuruata.
- Size: 1. Very Small, recurvaia var. benrathii. 2. Small, racinae.
   Medium, fosteriana. 4. Medium Large, 'Burgundy'. 5. Large, bracteata. 6. Very Large, Mexicana.
- D. Foliage Coloration: 1. Reddish or Maroon, bracteata. 2. Pinkish, lueddemanniana. 3. Silvery, fasciata 'Silver King'. 4. Marbled, orlandiana. 5. Banded, chantinii. 6. Variegated, caudata var. variegata.
- E. **Width of Leaves**: 1. Narrow, *recurvata*. 2. Medium, *fulgens*. 3. Wide, *serrata*.
- F. **Type of Inflorescence**: 1. Pendulous, *lasseri*. 2. Branched, *chantinii*. 3. Bunched Clusters, *fulgens*. 4. Compact Cluster, *calyculata*. 5. Cone Shaped, fasciata. 6. Low in Cup, *recurvata*. 7. Layered, *nidularioides*

Cultural Perfection: Is the plant a good cloner? Is it in good condition? Does it show signs of neglect or abuse, such as dirty, torn foliage, brown tips and untidy pot and mix? Cultural perfection in bromeliads in most cases is reflected by compact growth. Except for those varieties that are naturally droopy, foliage should not be rank and lax. Two common faults in large aechmeas are the excessive removal of damaged bottom leaves, which exposes the caudex (base) and thereby

detracting from a pleasing appearance, and bent down, drooping lower leaves that spoil the silhouette and rosette shape of the plant.

The dark aechmeas, such as Ae. 'Black Panther' and Ae. 'By Golly', should be wiped clean with a soft cloth, for they have a tendency to collect dust and mineral deposits from the water and present a dulled surface finish if this is not done.

**Conformation:** The leaves of many aechmeas elongate excessively and tend to droop if grown in less than optimal light. The typical shape of aechmeas is varied—bottle shaped, vase shaped, tubular, and some even have the appearance of tillandsias with narrow leaves that recurve. When assessing conformation in aechmeas, radial symmetry (balance of leaves around the plant when viewed from above) is usually a circular pattern of many leaves. A few members of the genus show a slightly oval form when viewed from above, i.e., Ae. 'Black Jack', Ae. 'Foster's Favorite.' Ae. orlandiana and all its hybrids have a characteristic droop to the bottom third of the leaves. This is not a fault. Penalize droopy leaves and gaps in symmetry. The silhouette of the plant, when viewed from the side (lateral symmetry) should be straight, not bowed. Penalize any plant whose cup is pulled off center. Check to see if the plant's leaves are the correct width and shape.

The inflorescence should have the typical appearance of the plant being considered. Penalize lack of branching in a branched variety, and ascertain that the rhachis has the correct attitude and length for the plant being considered. Are the scape bracts and floral bracts characteristic for the species or hybrid?

**Color and Marking:** Judges should review the chapter on point scoring, especially that section on color and marking which apply aptly to the genus. Particular attention should be paid to the very dark species and cultivars which require specialized lighting conditions to develop their most intense color. A typically 'black' plant such as Ae. 'Black Panther' should never be shown when it is bleached to an objectionable maroon color, which often happens with excessive exposure to light. Muddying and bleaching of color is frequently seen in Ae. 'Foster's Favorite Favorite' when the light is too intense.

Typically recurved plants such as Ae. recurvata tend to lose this curvy characteristic if light is insufficient. Penalize damaged scurf on those plants which are noted for the beauty of the banding of heavy scurf such as Ae. fasciata 'Silver King,' and Ae. chantinii.

**Inflorescence—Quantity, Quality, Color, Size:** Aechmeas can be entered in the flowering section not only when in flower (this period

is very brief) but also when in berry. The berrying stage is perhaps the most attractive stage for exhibition because it is at this time that aechmeas are most mature. Many aechmeas produce shiny, deep blue berries, which fade to a less attractive, washed out, dull blue on aging. Points should be deducted if the inflorescence appears aged. Penalties should be assessed if spent flower petals, or scape or floral bracts are in evidence.

**Size of Plant:** Because *Aechmea* species vary so greatly in size, the judge must be thoroughly familiar with the *Aechmea* genus so that he can know what is optimal size for a particular species or hybrid. Many aechmeas display a tendency to become large and floppy if overfertilized or if grown in poor light. The judge is cautioned that this overgrown condition should not be rewarded. Very often an inexperienced judge will not realize that the large plant before him is actually a one-third grown pup of a very large plant.

## POINT SCORING

As a guide to the importance of all the above, the BSI has adopted the following scale of points for judging (this applies not only to Aechmeas but to all genera):

**Blooming Plants** (must have inflorescence): Cultural pefection 25; Conformation, including inflorescence, 20; Colour and marking, exclusive of inflorescence, 20; Inflorescence, size, quantity, quality, colour, 20; Difficulty of cultivation, rarity, 10; Maturity of plant, 5. Total possible for the perfect plant, 100.

**Foliage Plants** (plants should not have inflorescence): Cultural perfection, 25; Conformation, 30; Colour and marking, 30; Difficulty of cultivation, rarity, 10; Maturity, 5. Total for the perfect plant, 100.

## A Note from the Editor

Y THANKS, especially to Doug Upton and the Committee, for all the help I've been given since Doug resigned and I took over as Editor. I invite all members to give me their suggestions for Bromeliaceae. Most importantly, I look forward to your contributions, either photos or articles. If you think you can't write an article, just send me a few notes (11 Malory Street, Balmoral, Qld 4171) or phone me (3399 5296) with your thoughts and I'll do the rest. Please remember, your Bromeliaceae will only be as good as you, the members, make it. May your broms bloom better in 2000. — Ray Nicko

## The Continuing Story

By RAY NICKO

ACK IN AUGUST, 1998, I submitted an article to the former Editor, Mr Doug Upton, re my "Ramblings of a Very Amateur Brom Addict". I thought then that my troubles and inexperience might have come to an end—silly me . . . that was only the start and I've been in strife ever since!

Someone told me that broms love frogs and frogs love broms. So my sister, knowing a frog-lover, gave me a container full of tadpoles. Then a well-intentioned neighbour gave me a styrene box of the little things. In no time at all, I had been given no less than seven broccoli boxes of tadpoles—I reckon there must have been about 749,382 of the little wriggling things. It was fun watching them develop into little frogs, some brown with cream stripes, some green, some all colours in between. I've lost count of the number of times I've become a father—it seems like every third or fourth morning my ponds contain frogs' nests (or whatever you call them) with thousands of little black wriggling things in white bubbles. I must have done something right because the chorus under my bedroom window at night is not really conducive to a good night's sleep! Broms might love frogs but I'm not sure I do!

Even though I've lost a few broms with all this wet weather, those remaining must have liked the rain because it seems they all have three of four pups which need potting. But where the devil do I put them? All three shadehouses are full, as is the rockery, and there's quite a few outside under flimsy shadecloth frames. I thought I'd shift all the dracemas, dieffenbachias and cordylines to make more room for the broms. Easier said than done because they don't like full sun all day either! A few smokes and a few stubbles later I had another brainwave (I often have them, but they don't always work!): Why not throw a piece of shadecloth from the window sills over to the fence on the north side? I'll never run out of room then because that's about 3 m wide by 10 m long. On second thoughts, I shouldn't say things like that—I have been known to be wrong before.

Since the start of Spring, I've spent a lot of time potting pups at the bench in Shadehouse No.1. But by 11.30 the sun is so strong I've had to quit. I had the bright idea I'd throw a tarp over the business end of the shadehouse to give me a bit of protection and also so I could keep potting when it's raining (90% of the time lately). So just for fun, I'd suggest you all try throwing a tarp over your shadehouses when there's

a bit of a westerly blowing . . . it's most entertaining—for the neighbours! Then the ropes get twisted up in next door's rambling climbing rose. Next, the ladder joins in the fun by slipping on the lawn which results in a busted knee and no bark left on my shins. But I'm a determined bloke so by this time next year I'll have the tarp on—maybe!

Gotta go now because there's a big day ahead as I've just had another brilliant brainwave — I'm going to shift all the necessities for living (the bed, the fridge and ash tray) from the house into Shadehouse No. 1, then pulling the house down and having one big shadehouse on the whole block — I won't run out of room now (???).

## **More About Fertilizers**

By PETER PAROZ

HERE IS NOT as much published information about the use of fertilizers, foliar or otherwise, as there is for other aspects of the culture of bromeliads. As a starter, I would suggest *The Biology of the Bromeliads* by David Benzing; and John Wilkins *Nitrogen, Friend or Foe* from Bromeliads Ill. Whether these would be regarded as authoritative sources is a moot point.

All plants including bromeliads, requite N., P. and K. (nitrogen, phosphorus and potassium), calcium, magnesium and other elements for growth. If the plant does not get these elements, it will not grow. Bromeliads generally, and some species specifically, have evolved to survive and grow in microclimates of very low nutrient availability, on the smell of a compost heap as it were. The penalty is slow growth; an extreme example is *Puya raimondi* which is reputed to take 150 years to mature in the wild and about half that in cultivation.

To fertilise or not to fertilise is one of the many cultural decisions that a grower has to make. There is probably as many responses to this question as there are bromeliad growers. It is essential that a grower has some objective in mind when contemplating a fertilizer supplement whether foliar or via the roots. For pineapples, the objective is to maximise the yield of fruit and the fertilizer programme has been optimised to this end. However, if the objective was maximum number of offsets for the propagation of a new variety then a different fertilizer programme would be used. For the ornamental bromeliads, the object may be quicker growth (to maturity), larger inflorescences, size, colour, etc. Astute growers vary the composition of the fertilizers depending on the stage of maturity of the plant.



## Report of November Meeting (Christmas Break-up)

There was no competition. The giant progressive raffle resulted in over 700 tickets being sold for the 43 bromeliad prizes. Len and Olive Trevor brought in some magnificent neoregelias from their private collection for the Show and Tell table; Barry Genn and Neville Ryan also displayed some of their tillandsias. Competition point score winners for 1999 were announced (see separate article). A tasty supper was enjoyed while members socialised after the meeting.

#### January 20 Meeting

HERE ARE FOUR CLASSES in the Mini Show this year with sections for Novice, Intermediate and Advanced members in each class. This month's Mini Show: Class 1 Aechmea, species and hybrids; Class 2 Vriesea, species only; Class 3 Dyckia, species and hybrids; Class 4 Any other bromeliad. Plant commentary will be by the judges appointed at the meeting. As usual you are invited to display plants on the Show and Tell table (non-competitive). Len Trevor's novice growers' class commences at 7.30 p.m. and the meeting proper at 8 p.m. Please ensure your 2000-2001 membership fees are paid.

## February 17 Meeting

EMBERS are requested to make a special effort to attend this most important meeting which is also the Annual General Meeting (see AGM Notice). According to our Constitution and Incorporation rules, if your membership has not been renewed before this meeting you will not be eligible to vote, your name may be removed from the roll and you may not receive future copies of *Bromeliaceae*. This is your last opportunity to pay your membership fees—before the meeting. The competition is Popular Vote: Any Genus, Any Species in sections for Novice, Intermediate and Advanced. Bring your plants for the Show and Tell table (non-competitive). Len Trevor's novice growers' class commences at 7.30 p.m. and the meeting proper at 8 p.m.

## **Study Group**

LIVE AND LEN TREVOR will host the group's first meetings of the year at their home, 232 Canvey Road, Ferny Grove, on Saturdays, January 29 and February 26, at 7.30 a.m. Members are invited to join in a fun brekkkie and discussions on broms. For those who haven't been before: come along and sample what goes on . . . you're sure to want to come again.

## **Notice of Annual General Meeting**

of the Bromeliad Society of Queensland will be held on February 17 at 8 p.m. in the Uniting Church Hall, 52 Merthyr Road, New Farm. The election for office-bearers for 2000-2001 will be held. With the exception of the Combined Show Committee and the Judges' Panel, all positions will become vacant and members are invited to nominate for the positions. Nomination forms are enclosed with this edition—please complete and forward to the Returning Officer c/- Secretary. If you require more, please phone Ray Nicholson on 3399 5296. Nomination forms will also be available before the meeting starts.

## 1999 Competition Winners

INNERS of the combined point score for 1999 were announced at the November meeting. The following members were presented with their trophies:

MINI SHOWS — Advanced: L. and O. Trevor 1<sup>st</sup>, B. Cross 2<sup>nd</sup>. Intermediate: C. and D. Cutcliffe 1<sup>st</sup>, no second. Novice: I. and D. Hole 1<sup>st</sup>, L. McKinnon 2<sup>nd</sup>.

POPULAR VOTE — *Advanced:* D. and J. Upton 1<sup>st</sup>, L. and O. Trevor 2<sup>nd</sup>. *Intermediate:* C. and D. Cutcliffe 1<sup>st</sup>, E. and N. Weir 2<sup>nd</sup>. *Novice:* L. McKinnon 1<sup>st</sup>, I. and D. Hole 2<sup>nd</sup>.

#### **ADVERTISING RATES in Bromeliaceae**

Available to all members and interested persons at the following rates:

Annual Rate.....\$30 for 6 issues of Bromeliaceae

Size of advertisements is restricted to ONE-THIRD OF A PAGE.

New adverts appear in the first issue after payment has been received.

The Society reserves the right to refuse publication of any advertisement.

Please send all Advertising Copy and payments to:

The Secretary, Mrs DOROTHY CUTCLIFFE, 1 Duhig St, Coorparoo, Qld 4151

Make Cheques Payable to The Bromeliad Society of Qld. Inc.

#### **Combined Show Committee**

EPRESENTATIVES of the Bromeliad Society of Queensland are requested to attend the next meeting of the Combined Show Committee at the home of John and Marie D'Alton, 39 Agnes Street, Torwood (phone 3371 3707) at 7.30 p.m. on Tuesday, February 22.

#### Show and Tell

EATURED at all meetings is the Show and Tell table. All members, especially new or novice members, are invited to bring plants which may have a story behind them and share it with others. If you have a "problem" plant, bring it in for the experts' advice—you may also help others. Maybe you don't know the name of a plant: bring it in for advanced growers to identify.

## Successful Open Day

HYLLIS AND DON HOBBS hosted a very informative field day at their home in Cleveland. Almost 40 members and visitors availed themselves of the hosts' hospitality in their garden and shadehouses. Phyllis and Don were ably helped by Ruth and John Higgins, Jan and Vic Duncan (refreshments) and Neville Ryan who helped by showing the visitors around the grounds and answered endless questions about successfully growing bromeliads. Many members expressed the hope that more Field Days can be arranged—shows the day was a success.

## Bromeliad Society of Queensland Inc.

#### **BOOKS FOR SALE**

Bromeliads for Everyone 2 by Bea Hansen	\$11.50
Growing Bromeliads by Bromeliad Society of Australia	
Genus Tillandsia by Paul Isley III	
International Check List of Bromeliad Hybrids by B.S.I	
A Bromeliad Glossary, 1977 Edition, by B.S.I.	
A Bromeliad Glossary, 1998 Edition, by B.S.I	
Bromeliads—A Cultural Manual by B.S.I.	
Distributional Checklist of the Genus Tillandsia by Lloyd Kiff	
Die Bromelie-The Red Flowered Tillandsia from Brazil by R. Ehlers	
A Guide to Beautiful Neoregelias by S. Zaghini	\$20.00
1985 Bromeliads III Conference	
1993 Bromeliads VII Conference	

CONTACT LIBRARIAN, Mrs MAVIS PAULSEN, Ph (07) 5493 3677

ALL PRICES PLUS POSTAGE

## Competition Schedule for 2000

Novice, Intermediate and Advanced Sections in Each Class and in the Popular Vote

#### January — MINI SHOW

Class 1 AECHMEA Species and Hybrids

Class 2 VRIESEA Species only

Class 3 DYCKIA Species and Hybrids

Class 4 ANY OTHER BROMELIAD

February — POPULAR VOTE ANY GENUS, ANY SPECIES

March — POPULAR VOTE ANY GENUS, ANY SPECIES

## **April** — MINI SHOW

Class 1 NIDULARIUM Species and Hybrids

Class 2 GUZMANIA Species and Hybrids

Class 3 PITCAIRNIA Species and Hybrids

Class 4 ANY OTHER BROMELIAD

May - POPULAR VOTE ANY GENUS, ANY SPECIES

June - POPULAR VOTE ANY GENUS, ANY SPECIES

#### July — MINI SHOW

Class 1 BILLBERGIA Species and Hybrids

Class 2 VRIESEA Species and Hybrids

Class 3 PITCAIRNIODEAE Species and Hybrids

Class 4 ANY OTHER BROMELIAD

August — POPULAR VOTE ANY GENUS, ANY SPECIES

September — POPULAR VOTE ANY GENUS, ANY SPECIES

October - MINI SHOW

Class 1 NEOREGELIA Species and Hybrids, up to 200mm (Miniature).

Class 2 TILLANDSIA Species only

Class 3 HECTIA Species and Hybrids

Class 4 ANY OTHER BROMELIAD

November — POPULAR VOTE ANY GENUS, ANY SPECIES

**December** — No Competitions, Christmas Party.

## **Bromeliad Society of Queensland Inc.**

Society BADGES are now available. \$5.00 each

CONTACT SECRETARY, Mrs DOROTHY CUTCLIFFE, Ph (07) 3394 4134



#### **New Mini Show Class**

AM WRITING to explain why it was decided by the committee to add the extra class, "Any Other Bromeliad", to the Mini Show schedule. But first I would like to thank Mr John Higgins for his work in compiling the original schedule we've used for four years and will continue to use with the addition of this new class.

The Mini Show and Popular Vote competitions are set up to encourage as many members as possible to participate so they will also want to enter their plants for competition in the June Combined Show.

Mini Shows are also used to keep judges in touch with the many new varieties of bromeliads and are instrumental in the training of new judges. Your committee is trying to include as many members as we can by adding a new class "Any Other Bromeliad" to the Mini Show schedule. The other classes will not alter. Hopefully this new class will bring about more varieties of bromeliads for the judges to evaluate.

Many members who regularly attend meetings will know two of the Mini Show sections are not attracting as much participation as was hoped when the original schedule was set up. It is not out of a lack of appreciation of members' input, new and past, or the original concept of the original schedule, but of a need to encourage more members to enter their plants in competition.

If you take away the dozen or so members who support the current Mini Show competition, there would be no point in having this or any other type of competition. Our society would then be missing out on the opportunity to see and appreciate other members' bromeliads, which is often the main reason many members come to meetings.

With our membership, like many other societies, getting older, some major contributors to competitions could opt out for any number of reasons. In adding to the Mini Show schedule, it is hoped, as well as some new competitors, our members who previously competed will return.—Neville Ryan, B.S.A. and B.S.Q. Judge.

There's been some positive reaction from members to the introduction of this new class as they now have a chance to exhibit their plants in

competition. Not everyone has plants in show condition at the time the present schedule has classes for them.—Ed.

Y THANKS to the Committee for creating the new class "Any Other Bromeliad" in the Mini Show schedule. This means I now have more chances of competing because I, like most members, have plants in or approaching flowering most of the time; but not just when the schedule demands. Only once in the last year did I have a plant "flowering" when the competition for its class was judged. My plants do not read competition dates to decide when they come into flower!—
Future Competitor.

Join the club! I'm sure we've all had plants with excellent inflorescence, etc, at times other than when its class was on the competition schedule.—Ed.

HERE is one question which the judges may or may not have thought of about the additional class to the Mini Show schedule: How can a large naturally drab-coloured aechmea compete against a flamboyant guzmania, a small delicate tillandsia or a highly coloured and patterned neoregelia?—**Curious.** 

Plants will be judged and awarded points (as per BSI rules) as if they were competing against other plants in their own genus. The aechmea may be awarded 83 points out of 100 as an aechmea; the guzmania, 81/100 as a guz; the tillandsia, 86/100 as a till; and the neoregelia 79/100 as a neo. Therefore the tillandsia, with the most points, will win.—Ed.

## **FOREST DRIVE NURSERY**

Located at REPTON, South of Coffs Harbour, NSW

Specialising in species and varieties from mostly imported stock
Tillandsias to titillate even the most discerning fanciers
Beautiful Vrieseas (including Silver species), Guzmanias, Aechmeas,
Neoregelias, etc

Visitors Welcome, Please Phone First (02) 6655 4130

Mail Order List — Send S.A.E.

Peter Tristram, PO Box 55, Repton, NSW. 2454

#### White Oil and Scale

WAS MOST INTERESTED in Bob Smythe's comment on while oil as I had been experimenting in this area. Some months ago, I detected pin spot scale on a green leafed *T. tenuifolia*, a form without conspicuous trichome development. This was a surprise as I had previously found this scale on Aechmeas and Neoregelias. The plant was a large clump and I was able to submerge half in a commercial white oil emulsion and leave the rest untreated.

After 10 weeks, the treated portion did not show any sign of damage . . . and no damage apparent to the scale either! This plant is grown hard — full sun for about six hours a day in summer. I am experimenting further with stronger emulsions to see if there is a combination which will kill the scale but not damage the plant.

I am reminded of something I learned a long time ago: "There's no such thing as a safe insecticide, but there are safe ways of using insecticides".—**Peter Paroz.** 

#### **Ants and Bromeliads**

ECHMEA brevicollis and Aechmea mertensil are bromeliads commonly found in arboreal ant nests (reference, The Biology of the Bromeliads by David Benzing, with some excellent references to other papers on the subject).

This is a different situation to what I have observed with the pseudobulbous tillandsias: *T. bulbosa, T. caput-medusae* and *T. streptophylla* which often have ant colonies in the inflated leaf sheaths.—**Peter Paroz.** 

## THE OLIVE BRANCH

Len and Olive Trevor

232 Canvey Road, Ferny Grove, Qld. 4053

Specialising in hybrid Vrieseas, Aechmeas, Variegated Neoregelias, Skotak Hybrids, Aussie Dream and varieties, and other quality Bromeliads

SEND LARGE STAMPED ADDRESSED ENVELOPE FOR LIST

Phone (07) 3351 1203

Visitors welcome by appointment - Please Phone First

## Species and Hybrids

N RESPONSE to "A Species Devotee", I thought I would like to share the following experience: Many years ago at a Lismore Species Orchid Society meeting, a member, while rubbishing hybrids, said "Species are God's gift to Man"—and presumably should not be tampered with. I suggested "Then are not hybrids Man's gift to God?" Perhaps it is something to think about next time we see a really beautiful hybrid.

I would, however, still like to see a section for Neoregelia Species in our show . . . but that is another matter and I expect way down the track. — Mike Symmons.

There's always two sides to every argument and I'm sure we'll still be debating this one for the next million years. The committee is always reviewing competition and show sections.—Ed.

#### Patented Broms

WONDER how many members read what is offered in our society's library? It is a great source of information and because correctly spelt bromeliad name tags is of the utmost importance, I thought members would appreciate the following article which was published by the Bromeliad Society of South Australia in its *The Bromeliad Gazette*:

"Aechmea 'Friederike' — You must have noticed the different spellings of the name of this plant but we now have the correct way! You see, this plant was the subject of United States patent No. 5872 by Cornelius Bak in 1987, and I assume it is still current. This means that

## M. J. PATERSON

Large Range of Bromeliads For Sale . . . Rare Species and Hybrids

Neoregelias and Tillandsias

DO CALL IN IF YOU ARE UP THIS WAY BUT PLEASE PHONE FIRST

Phone (07) 5482 3308

M. J. PATERSON

212 SANDY CREEK ROAD, GYMPIE, Qld. 4570

this plant cannot be sold in the United States without the express approval of Cornelius Bak.

"I don't know if you have bought any Zygocactus from Target, but the label clearly shows you are warned against selling this plant without approval. These hybrids originated in USA. One wonders whether there are reciprocal arrangements between countries regarding patents and what could happen if you sold *Aechmea 'Friederike'* in Australia.

"It would only need one court case where the defendant had to pay court costs to really put the cat among the pigeons! Luckily we don't have any nursery actively selling this plant. Interestingly, the variegated form does not seem to be patented!" — **New Farm**.

Maybe all our budding hybridizers should patent their new plants — it could be worth while! But to my way of thinking this is taking things too far as it means all surplus plants would have to be destroyed unless sellers paid royalties to the patent-holder because the owner of the patent would not allow the sale of "his" plant unless royalties were paid otherwise he would not have patented it.—Ed.

#### **Beware: CCA Pine**

OME TIME AGO I increased the shelving in my shadehouse. I erected a framework and planked it with 90 x 15 CCA pine, suitably spaced for air movement and light penetration. Underneath this new shelf I placed many Guzmanias, Nidulariums, Billbergias and an asortment of newly potted-on Neoregelias, Aechmeas, etc.

All my plants looked OK at first, but then they started to deteriorate fast. I put it down to all the wet weather or maybe too much fertilizer, or

## PINEGROVE BROMELIADS

Specialising in Neoregelias, Aechmeas, Tillandsias, Vrieseas, Guzmanias, Rare Species and Hybrids

VISITORS WELCOME — OPEN 7 DAYS

Opportunity to view over 8000 different species and hybrids

SEND LARGE STAMPED ADDRESSED ENVELOPE FOR MAIL ORDER LIST

JUNE and JOHN BUCHANAN
P.O. BOX 61—PINE STREET—WARDELL, NSW, 2477

potting-on at the wrong time, etc. Then the penny dropped! All the other plants in the shadehouse were doing OK with the same treatment, but the plants in the drip zone of the new CCA pine were by now very sick. Most of the Guzies and Nids have now gone to the great garden up there and the others are struggling on in another location. I suspect the CCA treatment is the plant killer. — **Perry C.** 

Your suspicions are "dead" right! Bromeliads most definitely cannot tolerate copper and/or arsenic in treated timber and will turn up their toes in a very short time. Many people, including me, have fallen for the trap of putting broms in the drip zone of new structures (like pergolas, etc) which have been copper-treated. While copper is beneficial to some plants, it's a "no no" for bromeliads. — Ed.

#### **Pollinators**

OLLINATORS do a wonderful job in nature. Colourful plants attract birds and butterflies. Would these pollinators do the same job if the sweet honey-type nectar was not a temptation?

I'd like to suggest we have an evening talk on pollination. Perhaps one of the members in the Study Group would like to talk on this subject. Perhaps the member could also give a demonstration using plants with pollen. I'm very sure it would be an interesting and popular evening. Can this be arranged? — "Polly"

Your suggestion has been given to the Committee. A member is presently writing an article about hybridisation which naturally includes pollination. Watch for it in Bromeliaceae. — Ed.

## RAEMAUR PLANT FARM

## SPECIALIST GROWERS OF TILLANDSIA SEEDLINGS

Hard grown to suit All Australian conditions

Specimen Plants, Seedlings and surplus seed sold when available

Write for a Free Price List to:

RAEMAUR PLANT FARM P.O. BOX 115, HURSTBRIDGE, 3099

PHONE (03) 9718 2887

FAX: (03) 9718 2760

#### **Basic Books on Broms**

HENEVER I want to know anything about my bromeliads I get my information from our society's library which is open each meeting night. I find the BSI journals very helpful. Articles are varied and there are always descriptions of new plants.

I think I know bromeliads but it has taken me some years to gain my modest knowledge. I often wonder if there is a book that gives the reader a basic knowledge of bromeliads without having to wade through piles of cultural books and glossaries. You know, when one reads some bromeliad books, the task of learning the difference between each genera can become quite daunting. Surely there must be a booklet with a brief outline. Can you advise. — "Bookworm".

There are three publications available from our Librarian which may suit: Bromeliads, A Cultural Manual, by the BSI; Growing Bromeliads, by The Bromeliad Society of Australia; and Bromeliads For Everyone, by Bea Hanson.—Ed.

#### What Broms Where

IKE "LANDSCAPER", I would like to see a list of what bromeliads to grow where. It would be a useful guide but should be treated as such. There is no substitute for trial and error. I suspect that where you live (latitude) and hence the angle of the sun, may be an important factor with some plants.

While I was living in Port Morseby, I grew most of my orchids (if only I had discovered bromeliads!) on teak posts and also on hard glass-like rock outcrops in the lawn . . . and all in full sun. As well as the Vandas,

## **BRISBANE BROMELIAD CENTRE**

HUGE SELECTION of

Aechmeas, Vrieseas, Guzmanias, Neoregelias, Nidulariums, Tillandsias together with a variety of rarer species and Hybrids

BARBARA and LORRAINE

342 Becket Road, Bridgeman Downs, Brisbane, Qld. 4035

Phone (07) 3263 2516

VISITORS WELCOME

Dendrobiums and Encyclia were Oncidiums and even large exhibition-type Cattleyas . . . something I expect would not work in Brisbane. I do not see why the same should not apply to bromeliads. Some that grow in full sun in Cairns may give trouble in Brisbane and even more problems in Coffs Harbour.

There are some precautions that can be taken and it would be interesting to see if they work with Bromeliads. When placing orchids in full sun, one old trick is to use a soft sponge and wipe them with milk or a thin paste of Bon-Ami. This film acts as a suntan lotion for a couple of days. Many nurserymen and hobby growers use a spray product called Envy. This is a liquid plastic and very good when de-flasking seedlings, putting plants into full sun or transplanting. It also helps cool growers through hot spells. I put some orchids out when we were going into what turned out to be the hottest days I have experienced in over six years here. I mixed the Envy with milk and water (plastic milk!) and no burning occurred.

I realise orchid leaves are, on average, thicker than bromeliads and I have not tried these procedures with bromeliads but I must do some trials with Envy.—**Mike Symmons**.

Unfortunately, not all of us, especially beginners, have the number of plants to experiment with. When buying plants, most growers will tell you what conditions the plant likes; but this only applies when the grower and buyer live in the same area. An experienced member is presently working on a list of plants and the "sun conditions" they like. This will be published as soon as possible.—Ed.

## **BROMAGIC BROMELIAD NURSERY**

421 Hunchy Road, Palmwoods, Qld. 4555 (Australia)
Phone or Fax (07) 5445 0441

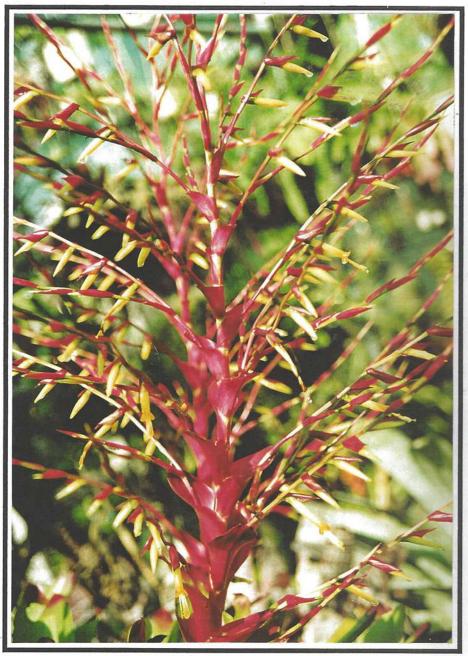
SPECIALISTS IN MAIL ORDER - SEND \$1 (STAMPS) FOR PRICE LIST

Quality offsets or advanced plants at affordable prices.

Always new varieties available

Visitors welcome by appointment - Bromeliad Videos Now Available

e-mail bromagic@ozemail.com.au - Web site: http://www.ozemail.com.au/~bromagic/



**Bromeliaceae** is the journal of the BROMELIAD SOCIETY OF QUEENSLAND INC. and is published bi-monthly

Printed by WORDS INTO TYPE, R. Nicholson, Prop.

11 Malory Street, Balmoral, Qld. 4171. Phone (07) 3399 5296

Print Post Number: P.P. 434327/0002