

VOLUME XXXVI - No. 5 - September/October 2003



# The Bromeliad Society of Queensland Inc.

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#### Contents

Society OfficialsP	age	1
ContentsP		
Cover PhotographsP		
Society DiaryP	age	4-5
Presidents NotesP	age	6-7
RNA Display ReportP	age	7
Editors DeskP		
Growing Guzmanias		11-17
Book Review Bromeliads for the Contemporary GardenP	age	18
Fire Ant UpdateP	age	19
Let Us Get It Straight!P	age	20-21
Trading PostP	age	24
Advertisers		
M. J. Paterson	age	22
Pinegrove BromeliadsPag		22
Raemur Plant Farm P	age	22
Brisbane Bromeliad Centre	age	23
Forest Drive NurseryP	age	23
The Olive Branch	age	23
BROMMADF		

# The Bromeliad Society of Queensland Inc.

# **Society Badges**

ARE NOW AVAILABLE \$5.00 EACH

#### CONTACT Mr. CHESTER CUTCLIFFE

Ph 07 3386 0505 or contact him at the meetings

#### Bromeliaceae COPY DEADLINES

## Cover Photographs

Front Cover

*Tillandsia carlsoniae* This plant was purchased in Melbourne about 3 years ago. Knowing it was a high altitude plant (2300-3000 in Chiapas, Mexico), I expected it to be offended by the Brisbane summers.

I have a large area where 50% shade cloth is suspended about 40 cm below 70% shade cloth; an area used primarily for guzmanias. The photographed plant was hung to one end of this area where it was hoped it would get extra shade and a lower temperature but still with reasonable air movement.

After the first summer, hope; the second summer, confidence; the third, worry about drooping leaves until I read the description; then total confidence as the beautiful bracts and flowers developed.

This plant, like all my non-terrestrial bromeliads is grown in a mixture of medium radiata pine bark and charcoal (abt. 16:1). In theory, it is fertilised fortnightly with ABS Bromeliad Fertilizer, calcium nitrate being added between September and April.

\*\*Grower Mike Symmons\*\* Photographer Doug Upton\*\*

#### Rear Cover

Guzmania 'Gwendolyn This is one of the new hybrids from Cornelius Bak in the Netherlands. I obtained my plant from Collectors World in Victoria. The plant has attractive pink-purple bracts and white petalled flowers. The bracts retain colour for over two months. I grew the plant under medium density shade cloth in an orchid bark potting mixture.

Grower Bob Reilly Photographer Doug Upton

BOOKS FOR SALE	
Bromeliads Next Generation by Shane Zaghini	\$33.00
Tillandsia Handbook by Hideo Shimizu and Hirouli Takizawa	\$58.00
Bromeliads for Everyone 2 by Bea Hansen	\$11.50
Growing Bromeliads by The Bromeliad Society of Australia	\$21.50
Genus Tillandsia by Paul Isley III	\$3.00
International Check List of Bromeliad Hybrids by B.S.I	\$1.50
A Bromeliad Glossary, 1977 Edition, by B.S.I	\$3.50
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	
A Guide to Beautiful Neoregelias by S. Zaghini	
1985 Bromeliads III Conference	
1993 Bromeliads VII Conference	

Inquiries: LIBRARIAN, Ms. Noela Tucker, Ph (07 ???? !!!!)

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# Society Diary

**NEWS** 

REPORTS

**EVENTS** 

GENERAL MEETINGS are held on the Third Thursday of each month except December, at the Uniting Church Hall, 52 Merthyr Road, New Farm, Brisbane, commencing 8 p.m. Classes for beginners commence at 7.30 p.m.

FIELD DAYS are held regularly in the gardens of members as advised. MEMBERSHIP FEES Family \$20, Single \$15 pa The BSQ Web Page can be accessed at the WWW.BSO.ORG.AU

#### **Competition Results**

July Min-Show

Novice

Class 4

First Neoregelia 'Gee Whiz' J. Green

Intermediate

Class 4

First Tillandsia duratii

Second Neoregelia 'Everlasting'

P. O'Dea Y. Daniels &

L. Gerchow

Advanced

Class 1

First Billbergia elegans Billbergia elegans Second

D. Upton C. Basic.

Class 3

First Neoregelia 'Wim' Second Neoregelia 'Turmoil' M. Symmons M. Symmons

Class 4

Guzmania 'Lantra Star' First Guzmania 'Marlbeca' Second

M. Symmons M. Symmons

August Popular Vote

Novice

First Cryptanthus sp. Second Neoregelia 'Amazing Grace'

B.& A. Kable B.& A. Kable

Intermediate

Neoregelia 'Strawberry Roan' First

Y. Daniels & L. Gerchow

Second Neoregelia 'Pink Delight'

Y. Daniels & L. Gerchow Advanced

First Tillandsia punctulata Second Tillandsia tectorum

D. & J. Upton D. & J. Upton

#### Program

September General Meeting

Beginners Session Start 7.30 PM:- Bromeliad Nutrition Peter Paroz Tillandsia aeranthos An Audio Visual Presentation by Arno King Popular Vote Plant of the Month Ursulaea

CORRECTION —Please note that the bus departure points were incorrectly listed in the previous Bromeliaceae.

Coffs Harbour Bus Trip Saturday 27th Sunday 28th of September Departure:- Roma Street, Bus Stop Opp. Police Station at 5.00 AM Pick-up:- Bus Stop, Palmdale Shopping Centre at 5.15 AM Please advise Mrs. Kickbusch which point you are departing from.

Contact Mrs. Nancy Kickbusch (07) 3300 1704

#### October

Beginners Session Start 7.30 P. M. Doug Upton Fertilizers Guzmania lingulata Bring along your clone of this most variable species for observation and comment.

Plant of the Month Vriesea species and hybrids

Trainee Judges Class Saturday 25th October at 232 Canvey Road, Ferny Grove after the Study Group Meeting. Topic:- Revision

#### November

BSQ Sales & Display Weekend Nov. 1st 8AM - 4PM Nov. 2nd 9AM-4PM

Plant Collection of Cheryl Basic Saturday 8th November Cost \$25 Including a BBQ lunch.

This is a Society Function. BSQ Members only. Members with private transport must purchase a lunch ticket for \$3. Private transport is not recommended;

Parking is extremely limited and is reserved for the bus.

Departure Uniting Church Hall, New Farm at 7.30 AM

Pickup:- Bus Stop Cnr. Webster & Gympie Roads at 7.45 AM

Please advise Mrs. Kickbusch which point you are departing from.

Contact Mrs. Nancy Kickbusch (07) 3300 1704

The Royal Horticultural Society of Queensland Inc.
Garden Spectacular
Mt Coottha 18 & 19th October

#### PRESIDENTS NOTES

#### The RNA Exhibition

The Society display at the 2003 'Ekka' was again awarded the blue ribbon for Best Display by a Specialist Society. Show Organiser, Bob Cross is to be congratulated for another successful display. The Society is grateful to those members who contributed plants and time to assist with the set-up and the stewarding of the display. It was particularly good to see some of our newer members involved.

#### Meeting Venue

To ease congestion our monthly meetings will be conducted in the Church opposite our present hall for the remainder of the year. The hall has been retained for use each at each meeting and plant sales will move into the hall with the library. Plant competitions and raffles will be conducted in the Church. Members will be asked to empty all water from their plants before bringing them into the Church to prevent water damage to the carpeted floor. This arrangement will be reviewed for continuation next year if satisfactory.

#### Monthly Meeting Programme

There are vacancies for Popular Vote commentators and Beginners Class leaders in our programme for the remainder of the year. Members who would like to volunteer for any of these roles can contact the President or Secretary. These roles are open to all members and provide an opportunity to share in the development of knowledge and understanding for our beginners.

#### **RHSQ Show**

The Royal Horticultural Society of Queensland Inc. has again invited our Society to take part in their annual Garden Spectacular at Mt. Coottha on 18<sup>th</sup> and 19<sup>th</sup> October this year. A number of horticultural societies will be taking part and our Society will be providing a display and plants for sale. All members are invited to take part by providing plants for the display and for the sales and by attending as stewards to assist with the running of the show over the weekend.

#### **Tropical Foliage Festival**

We have been advised that this event will be conducted again this year. We are awaiting details from the organizers and will advise members as soon as these details are received.

#### Society Sales & Display Weekend

A sub-committee has been formed to organize a Society Sales and

Display Weekend starting in November this year. We will need the support of all members to ensure the success of this new activity. Full details are contained in the enclosed flier.

John Higgins

## **RNA Display Report**

A small but keen band of members turned up with their plants on the Wednesday afternoon before opening to assist in the assembly of the Society display at the 'Ekka'. Earlier in the week, Show Organiser Bob Cross had put up the epiphyte tree, and had put in place the Buddha statue, the oriental dogs, the water feature, pine bark and white quartz stones.

The members set to, mounting plants, arranging, discussing and rearranging the plants well into the night. Finally, after some last minute adjustments, the display was completed and we could only trust that our efforts would find favour in the eyes of the judges. The society stewards in attendance next morning phoned through the results as soon as their shift was finished – we had again been awarded the first place for specialist societies, making all the effort worthwhile.

Over the next ten days of the show, there was a great deal of interest by the public in the display and the plants. Of particular interest were the spherical arrangements of *Tillandsia ionantha*, which were in flower with deep purple petals and red flushing in the leaves. Also of interest was a large plant of *Alcantarea imperialis* with deep reddish-purple leaf colouration.

A 'Totem Pole' was also featured which was mounted with a selection of new vriesea hybrids produced by the Seed Raising Group. Congratulations and the appreciation of the Society go to Bob Cross and his band of helpers for their efforts in winning a well deserved award.

John Higgins

You may consider buying a plant based on a description or a colour photograph of it. However, the plant you buy, while accurately named, may not closely resemble either the description or the colour photograph.

One reason this occurs is because there is usually considerable natural variation in both species and hybrids. For example, particular plants (known as clones) of one species may have an inflorescence twice the size of other clones. Similar variation can occur in foliage colour.

So, if possible, either buy a plant in flower or an offset from a flowering plant which you have seen.

Bob Reilly

#### The Editors Desk

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

Authors are responsible for the accuracy of all information in their articles.

The editor has been mildly castigated for the rather conspicuous blank spaces in the last *Bromeliaceae*. The reason, apart from bloody mindedness was a dearth of suitable copy.

The editor continually needs new copy, about 5000 words per issue.

If you set the page width to 120 mm, one page is about 40 lines and 420 words in Times New Roman in 11 point type. Articles of all lengths are required from short notes to sagas; half to one page submissions would be most welcome. Long articles may be serialised. B & W line drawings to illustrate the text would be well received.

The preferred method of receival is Email to pparoz@powerup.com.au in RTF or on a floppy disk. Typewritten articles are easily copied. Hand written articles will not scan easily (generally not at all) and require typing in; a slow process for a two finger typist.

Ed

Mr. Chester Cutcliffe Sec. Bromeliad Society of Qld

Dear Chester.

I just wanted to thank you for your welcome to the Society, as, because I live I00 miles west of Dalby it is unlikely I will ever get to the club meetings or show. Thank you for the sample copy of Bromeliaceae which I enjoyed. It was particularly appropriate as it contained an article on using white oil which interested me greatly. When I first grew some bromeliads (before I heard otherwise) I drowned them in white oil for scale. None actually died but after sitting in a pool of the stuff the new young leaves were a bit deformed. I must admit I still use a little on a brush or cotton bud and now I feel vindicated.

The second thing I read was not to take offsets and pot them up in the cold. As I was just about to do so, I decided to take the advice and wait till warmer weather. Thank you!

My daughter from Brisbane introduced me to Broms and now thinks

she has created a monster; but I was so grateful when I found something that actually did well out here that I couldn't help myself. Up until now, the only thing I've been successful at growing in my alkaline clay soil was trees and they are very handy now. I've tried roses, natives, daylillies and others to no avail. They all flourish at the neighbours but their soil is different and I think they water more.

The next problem was finding some bromeliads to buy. I managed to find a few at Kmart and BIG W in Toowoomba but until a friend who knew my frustration ran into Ivan Hole at a weekend show less than a year ago and gave me his number I had no other sources. Now, no trip to Toowoomba is complete unless I visit him and squash a few treasures into my car. I originally planted them all in the soil which was rather like cement with worm holes through it, thus giving quite good drainage, but to the relief of both the plants and Ivan, I now have most in pots. I have a wonderful time prowling round my rather small and scrappy garden. The only thing is that in summer I have to be on the look out for snakes as they think it is a great hunting ground for frogs and I have plenty of those. There are a few koalas that visit too and they haven't heard that Neoregelias shouldn't be fertilized too much.

I now have my second Bromeliaceae and look forward to receiving many more.

Many thanks

Penny Murphy

#### Letter to the Editor

The Editor, Bromeliaceae, 15/8/03

Dear Peter.

Derek Butcher's reply to your Dorothy Dix question on hybrid versus species is confusing.

First he says "it is true that any crossing within a species is not considered a hybrid" but then, for some reason I do not understand, he goes on to say "this hybrid philosophy seems to prevail in the Orchid fraternity". Surely he means "species philosophy" for that would be their classification. Later in paragraph 3, "therefore they should check against a standard in the same way they would a species" seems to indicate he considers it a hybrid. Indeed, a confusing answer to a simple question.

Your "ancient information" is correct. The plant in question is and remains the species Tillandsia ionantha. If similar to T. ionantha 'Pink Champagne' it could be so labelled. If different, and worthy of a cultivar name, one should be registered. Despite Derek's abhorrence of the use of formula, I find it valuable as a description. Should the plant you mention be not worthy of a cultivar name I would label it *T. ionantha* (*ionantha* x *ionantha* 'Druid') just as I have, in the past, used *Cattleya bowringiana* var. *coerulea* (light blue x dark blue) and *Dendrobium speciosum* ('Sunrise' x 'Sunset'). In the future, such information could be of value to a breeder using them as parents.

Derek's statement "what happens if it is decided by one botanist that a variety is really a separate species?!" is too negative to contemplate. Every plant ever used as a parent has the potential for name change. One should

only worry about that if and when it happens.

The second part of Derek's letter is, I expect, looking for a response, to generate discussion. His apparent criticism of the BSI (he is after all, Registrar) and the World Conference is unusual and confusing. Is he advocating two distinct sections in every Show? One division for breeders exhibiting hybrids not yet released ( with, perhaps a declaration by the breeder that not one plant had been released) and a second division for growers in which all unregistered hybrids would be banned. If so, I think we could say goodbye to the competition table. Would judges carry a lap-top to check all plants and names they were unfamiliar with, to ensure they were registered? I think not.

There are many problems ahead. If we take the extreme example of what we somewhat quaintly refer to as "Foliage Vrieseas" we may wish that we had never abandoned the Grex system. Many thousands of these hybrids are being produced, few if any will be destroyed and there is incredible variation. The sheer weight of numbers make it inconceivable that every variation will be registered either before or after release. Is it realistic to believe that all not registered plants should be destroyed or that all not so registered, be denied a place in a Bromeliad Show. By refusing to accept a formula label, we risk having many plants with unregistered names made up by their owners.

It will be a great shame if, through unreliable labelling, those nurseries that sell their plants with a pictorial label and no identification win the day.

Mike Symmons, Ormeau.

(The editor has for some time wondered where the decision to head down this track was made. There does not seem to be any record of correspondence between BSI and BSQ; which presumes a unilateral decision. This is peculiar as in times past the Americans had a very strong aversion to "Taxation without Representation"!!)

If a potting mixture is made up of a mixture of coarse and fine particles e.g. large pine bark chips and humus, the fine particles will, over time, tend to accumulate in the bottom of the pots. There, they may form a "sludgy" mixture which bromeliads dislike. So, try to avoid large range in particle size in your potting mixture

\*\*Bob Reilly\*\*

#### **GROWING GUZMANIAS**

Guzmania was established as a genus in 1802. While there are about 200 species, many beautiful hybrids have also been developed. Virtually all hybrids have been developed in either Europe or the United States of America. Guzmanias are mainly grown for their spectacular and long-lasting inflorescences. For those people who have internet access, pictures of many of these plants are available in the Photo Index section of the Florida Council of Bromeliad Societies' website (http://fcbs.org).

Flowering guzmanias can be brought inside the home for several weeks without affecting them. This also applies to air conditioned premises. Their desirability for this use is enhanced by their lack of spines.

In nature, they are usually found in heavily shaded areas of humid rainforests. Virtually all grow as epiphytes, rather than terrestrials. These two factors are the key to growing them successfully.

Guzmanias perform best when grown in pots in a shadehouse, although a few of the hardier ones will be happy in well shaded (but not dark), damp areas in a garden. They like to be covered by 70 to 75% shadecloth for most of the year with some additional protection, if possible, during the hottest part of the year (mid November to end of February in southern coastal Queensland). If it isn't practical to provide some extra shadecloth during the hottest part of the year, try relocating them to the shadiest part of the shadehouse, for example, where a tree shades the shadehouse from early afternoon onwards. Plants which have a "bleached" appearance are receiving too much sunlight.

Guzmanias prefer to be spaced out so that the leaves of plants are just touching each other (if the bottom leaves of a plant are dying off, they are probably too crowded). This density helps to achieve good air circulation which guzmanias, given their epiphytic nature, strongly prefer.

During winter, one heavy watering a week is sufficient. Over summer, two heavy waterings per week are necessary and, desirably, daily light waterings as well when the maximum temperature exceeds 30 degrees Celsius. (A heavy watering results in the "vase" formed by the plant's leaves overflowing for several minutes, while a light watering is sufficient to fill the vase and wet all of the plant's leaves). During winter, aim to water plants between 8am and 10am (and then only on warms days), while in summer water between 6am and 8am or 4pm and 6pm. Try to keep the humidity high in the shadehouse at all times (covering the floor with pine bark chips which are regularly watered helps achieve this outcome).

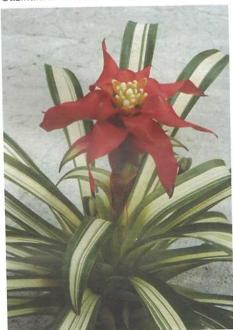
Guzmanias need a potting mixture which drains readily, but retains moisture between waterings. One mixture, which achieves good results, is

## SEPTEMBER/OCTOBER 2003

#### Bromeliaceae



Guzmania 'Denise'



Guzmania lingulata 'Broadview'



Guzmania 'Ostara'



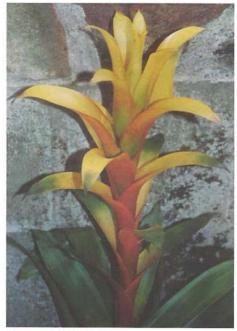
Guzmania 'Torch'



Guzmania 'Kaphoa Fire'



Guzmania 'Gwendolyn'



Guzmania 'Marjan'



Guzmania 'Twist'

composted pine bark combined with some peat moss or Cocopeat (Composted pine bark can be bought from some landscaping centres. You can make your own by buying some of the smaller sizes of commercially – available pine bark and allowing it to "weather" in the open air for 6 to 12 months). A continuous release fertiliser such as Osmocote or Nutricote should be added to each pot, when the plants are potted.

Another good mixture is bark chunks, such as those used to grow Cymbidium orchids, which have been treated with a special type of fertiliser dissolved in water. (The bark chunks can be bought in 50 litre bags, while the fertiliser is sold by the Bromeliad Society of Queensland). The mixture can be improved by adding charcoal to it, in the ratio of 1 part charcoal to 7 parts treated bark. However, this potting mixture is more expensive than the other approach.

So far, the approach described for growing guzmanias is similar to that used for many ferns. However a major difference is the use of liquid fertilisers once the plant is potted. Guzmanias could be described as the liquid fertiliser "guzzlers" of the bromeliad family. They love it! Use a liquid fertiliser such as Phostrogen (in the concentration recommended by the manufacturer for indoor plants) at least once a fortnight. Ideally, foliar feed them every week. Not only will this give strong, healthy plants but it is essential to achieving large inflorescences. Apply liquid fertiliser throughout the year, but ensure the plant's leaves are wet beforehand.

Guzmanias have few pests and diseases, although sometimes they are subject to scale attack. Scale can be treated with insecticides such as Folimate.

Guzmanias reproduce readily through offsets. Offsets should be one third to one half the height of the parent plant when they are removed. Avoid the coldest, and hottest, times of the year when removing offsets. The best times (in southern coastal Queensland) are: October to early November and mid February to late March.

Guzmanias usually produce two "batches" of offsets. Give the parent plant a continuous release fertiliser such as Nutricote or Osomcote after removing the first batch of offsets. Continue to apply liquid fertiliser, and a second batch of three to four strong offsets will often be produced. Plant the offsets directly into one of the potting mixtures described previously, ensuring they are firmly held by the mixture.

There are over a hundred species and hybrids available in Queensland. The plants described below are: in most cases, readily available, easy to grow, usually produce three to five offsets, and have long lasting inflorescences (all stay in colour for at least two months).

Relative to the number available, there are few species listed. This is because the colour of their inflorescences usually fades after two to four weeks, while some are also difficult to grow. However, some are spectacular when in bloom even if the "show" doesn't last long (an example is the broad leaved form of *G. sanguinea*).

In the description of some inflorescences, the term "torch" has been used. North Americans typically use this term to describe a length of burning wood, rather than a battery powered device which produces light. Because many of the published descriptions of guzmanias follow the North American's approach, it has been used in this article.

Plants are described under three size categories: small, medium and large. The actual sizes you will achieve depend upon your growing conditions. In a few cases, the plant's names may not have been officially "registered". However, they are commonly sold under these names.

#### Small.

(Plants are typically up to 25cm wide and 25cm high. Grow in a 100mm "squat" pot).

G. lingulata v. minor. This plant has up to 30 thin, light green leaves forming an "arching" rosette. The inflorescence is at the end of a short stem (floral scape) and appears just above the leaves. It is shaped like a small cup and is about 40mm in diameter. There are several forms of this variety. The inflorescence's colour ranges from red to orange. Variegated forms also occur, with the hardiest having a red/orange inflorescence.

'Empire' Around 20 leaves, about 15mm wide, form a rosette 30cm across. The star-shaped inflorescence is red, shading into orange, in colour. It is about 125mm in diameter. It is a form (cultivar) of *G. lingulata v. minor*.

G. lingulata 'purple'. Similar plant to Empire, except the inflorescence is a dark purple.

G lingulata "white". This plant has about 15 leaves. Its white, star shaped, inflorescence is about 100mm wide and rises above the plant's leaves.

#### Medium.

(Plants are typically up to 50cm wide and 50cm high. Grow in a 125mm squat pot)

G. lingulata "Cardinalis". The plant has about 20 leaves forming a relatively "flat" rosette. The leaves are about 50mm wide. The floral scape raises the star-shaped inflorescence well above the leaves. The inflorescence is red to orange in colour, about 125mm wide, and has about 40 tightly packed yellow flowers in the centre.

There is a variegated form of this plant known as 'Broadview'. Each leaf has a creamy stripe or stripes running down its centre. It is a spectacular plant when in flower.

G. lingulata. "Clarity" About 60 thin leaves, 25mm wide, form an upright rosette. The floral scape raises the round inflorescence well above the leaves. Tightly-packed white flowers form an effective contrast with the inflorescence's red bracts.

'Orangeade' This plant has an "erect" growth habit and reaches 50cm high. The inflorescence starts above the leaves and is about 50cm long. It looks like an orange "torch" and is about 100mm wide.

'Gwendolyn' Similar to 'Orangeade' except the inflorescence is pink in colour.

'Twist' Similar to 'Gwendolyn' except the inflorescence is a mixture of white and purple in colour. White is the predominant colour towards the inflorescence's top.

'Amaranth' This plant has up to 20 leaves. It has a purple, torch-like inflorescence, which is about 100mm wide and 30cm long. The inflorescence is raised above the plant's leaves.

'White Grape' Similar to 'Amaranth' except the inflorescence is creamy white in colour.

'Samba' Similar to 'Amaranth' except the inflorescence is yellow in colour.

'Torch' The plant has around 30 semi-erect green leaves. The inflorescence, which looks like a small "Olympic" torch rises above the plants leaves. The top of the "torch" is about 75mm wide, is orange-red in colour and has yellow-petalled flowers.

#### Large.

(Plants are usually more than 50cm high and wide. Grow in a 150mm, or larger pot)

'Watermelon' A somewhat larger version of 'Orangeade', except the inflorescence is coloured "watermelon pink".

'Lemon Blush' Similar to 'Watermelon' except the inflorescence is lemon yellow in colour, fading to orange over time.

G. (peacockii x danielli) This plant can be grown in well protected, shady areas of the garden as well as in a shadehouse. The leaves are thicker than is the case for the "typical" guzmania, and are red underneath. Each of the 20 or so leaves is 50mm wide and forms a loosely arching rosette about 70cm high and wide. The torch-like inflorescence rises above the leaves and is about 50cm long and 100mm wide. It is orange in colour.

'Red Star' The 20 or so leaves form a relatively flat rosette about 70cm wide and 50cm high. The leaves are about 50mm wide. The inflorescence rises above the leaves and is a red "torch" which fades to pink over time. It is about 40cm high and 150mm wide.

'Symphonie' The 30 leaves are about 50mm wide and form a loosely arching rosette. The light green leaves have a large number of markings which look like thin red pencil lines. They make the leaves appear as if they are "flushed" with red. The cup-like inflorescence rises above the leaves and is about 100mm wide. It is light red in colour.

'Ostara'. About 20 green leaves, form an open rosette. The plant has a torch-like inflorescence, red-orange in colour, which rises about 40cm above the plant's leaves.

'Marjan' The plant has a yellow-orange inflorescence which rises about 40cm above its leaves. The flowers have yellow petals.

'Kaphoa Fire' Around 20 leaves form an open rosette. The lower surface of the leaves, particularly towards their base, have numerous, thin red stripes. A yellow, "club"-like inflorescence rises well above the leaves on a red-coloured scape The inflorescence is about 120mm wide.

'Denise' About 20 dark green leaves form an open rosette. A torch-like inflorescence, which is pink-red in colour, rises well above the leaves. The inflorescence is about 20cm across, and 35cm long.

I thank Olive Trevor for help in preparing this article, and Doug Upton for taking the photographs used to illustrate it.

Bob Reilly

If you buy plants through the mail, they will usually be sent without any potting mixture around the roots i.e. they will be sent "bare root". Plants sent this way may become somewhat dehydrated.

To deal with this condition, immerse the plant in a container of water for 24 hours. Adding liquid fertiliser to the water at the concentration specified by the manufacturer for fertilising plants, will also help. (Some people recommend adding sugar at the rate of 1 tablespoon per 10 litres of water, instead of the liquid fertiliser, but I have not tried this approach).

Your growing conditions e.g. the amount of light your plants receive, may be very different from those of the person from whom you purchased a plant. So, don't be surprised if your recently purchased plant changes foliage colour. If this happens, and you are unhappy with the result, change the plant's location.

Bob Reilly

## **BOOK REVIEW**

# BROMELIADS FOR THE CONTEMPORARY GARDEN

Rromeliads for the Contemporary Garden is written by Andrew Steens. and published in 2003 by Florilegium, St Johns Road, Glebe, NSW 2037. It can be purchased from the publisher for \$40 (including postage within Australia), or \$36 plus postage from the Society. The book can be borrowed from the Society's library.

Andrew Steens grows bromeliads in New Zealand. Not surprisingly, the book reflects this perspective. Thus elements of the book, for example the author's comments on the sun-hardiness of particular bromeliads, need to be treated with caution, given the significant climatic differences between coastal Queensland and New Zealand. (However, this may not be as significant an issue for growers in the colder parts of Queensland.)

The book is a comprehensive introduction to growing bromeliads. In my view, it is one of the best books available on this topic today. Experienced

growers will also find much of interest in it.

Bromeliads for the Contemporary Garden has 198 pages and 300 high quality photographs. A high standard of accuracy in matters such as plant names and descriptions has been achieved. In the first chapter, an overview is given of the bromeliad family, and their native habitats. An informative chapter on landscaping with bromeliads then follows.

The bulk of the book is a listing of 24 commonly encountered genera and 4 bi-generics Over 200 species and hybrids are described in non-technical language. Many of these plants are illustrated with colour photographs. Most of these bromeliads are available in Australia. Of particular interest to myself, is the description (and photographs) of species from some of the genera, for example Fascicularia, Ochagavia, and Puya; which do not always flower well in coastal Queensland.

The next chapter deals with bromeliad cultivation. Caution is needed before applying some of this chapter's recommendations, given the different climatic conditions between coastal Queensland and New Zealand. However, most of the material is applicable. All of the major topics relevant to growing bromeliads, for example, watering schedules, pest/disease recognition and control, and fertilising; are well covered in non-technical language.

The book concludes with a short chapter on bromeliad propagation and a comprehensive index.

Bromeliads for the Contemporary Garden is excellent value for money. The photographs alone are worth the purchase price. However, this book is much more than a compilation of photographs. Overall, it is highly recommended Bob Reilly

#### FIRE ANT UPDATE

All members in Restricted Areas should have received their Fire Ant Information kit from the Society. In order to meet the requirements of the Department of Primary Industries we are required to obtain acknowledgement of receipt of this information. Could I ask that all members who are in receipt of the kits and that have not either signed the documentation at the meetings or returned their signed acknowledgements please do. The Society is very diligent about the state of Fire Ants in our community, and as Co-ordinator, I ask that members be the same.

On that note, I recently attended the Education Program offered by the Department of Primary Industries for persons interested in Fire Ants. As Fire Ant Co-ordinator and also as a member of the community living in a Restricted Area, I attended one of these sessions. I would like to encourage all members of our Society to attend one of these sessions even if you don't live in a Restricted Area.

The session that I attended was 98% council and industry and 2% members of the community. The session really related to the "Brisbane Experience" of Fire Ants, detailing information on local people and their gardens along with the effects fire ants have had on their lifestyle. In one particular section of the session it showed a garden before fire ants and afterwards, truly amazing. The session goes for over an hour which is why it is too long for us to have it repeated at our Society (I did ask); at the completion of the session you have the opportunity to ask questions and also to visit a site in Wacol to actually see fire ant nests. For me personally, while I found our sessions that the DPI had given to our Society most informative, they were not in the same league as the one I attended. It truly was the Brisbane Experience on Fire Ants, so I suppose I could relate to it more than seeing photos of overseas gardens.

Contact details for members who wish to enrol is 3310 2913 or 3310 2914. If you live in a restricted area and you wish to sell or move plants to outside that area, it is a DPI requirement that you complete the Education Program prior to obtaining a Site Inspection Number.

If you have any queries about fire ants you can either contact the DPI directly on 13 25 23 or forward your query to me and I will do it on your behalf.

NORMA DAVIS FIRE ANT CO-ORDINATOR

Old Quote:- "Where there's life there's hope"

20th century Quote;- 'Where there's life there's Hope"

Reporter "Who would want to live to 100?"

Bob Hope "All the 99 year olds that I know!!"

# Let Us Get It Straight!

This is much like I have written before plus a little bit of a brain teaser for those so inclined.

My name has been turning up quite a lot in the bromeliad literature lately. I remember when I was a cub leader and I whispered a message into one boy's ear he was to pass it on in a whisper to the next cub but could only say it once. By the time it went the whole circle it was unrecognizable. I am reading things I have said that are starting along this road. I know my good friend Derek loves to find things that are wrong and correct them but this time I wish to remove this opportunity from him.

#### Next subject is Aechmea discordiae.

No one has received a plant of this from me. I have released plants of an Aechmea that keys out as A. discordiae but I always say that I have not got a plant description to confirm its correctness. It was grown from seeds imported by the Townsville Botanic Gardens. From the seed one was A. callichroma and after consulting with Derek he said it was as good as we have in this country for this species. The other keyed as A. discordiae but I have not been able to confirm this.

After my studies this past summer with Ae. (Forest Fire x Self) and other related genera and hybrids, I have no faith in the Aechmea key anymore, as some of the features used are not stable enough to be used in a key. The main variant is the length of primary bract to length of primary spike. This varies dramatically with light conditions. I am now thinking that I have two forms of A callichroma.

#### Canola white oil.

Invented by me and now used world wide for treating scale on bromeliads. Anyone using this must understand it completely and read my earlier article explaining the chemistry. I hear of people using it for scale on orchids, palms, fruit trees (on TV), red spider etc. Used indoors it is just as dangerous to use as mineral white oil. I designed it for use with bromeliads grown outdoors in bright light.

White oil is phytotoxic in hot outdoor conditions and can kill all forms of plants. It blocks the stomata so plants can't breath, absorb and release gases and nutrients and most important cool the leaves. Necrosis will quickly occur if the oil is not washed off while the plant is in sunlight. Some plants are safe if you only oil the one side. These plants can survive with the stomata on the other side doing the work. Bromeliads are more susceptible than most other plants as they have the grey trichomes holding a thicker layer of oil on the plants.

Why have I suggested adding ammonia? White oil kills by smothering and softening scale. Ammonia vapours will displace air and ammonia is alkaline and can penetrate the softer scale changing their body pH and killing them. It has another well-known attribute and that is as a wetting agent, so it helps coverage of the oil.

Why use vinegar instead of ammonia in the colouring season. Firstly ammonia is out, as it would green up the plants too much. Vinegar is a weak acid and may assist the kill by changing pH but this is not how it came to be chosen by me. Before I discovered predators to control mosquitoes I was trying common chemicals in the vases.

I found that even though vinegar did not kill wrigglers, wrigglers did not appear in vases containing added vinegar. Secondly if vinegar can penetrate into the upper cell layers of the plant its chemical action on the anthocyanins could increase the red colour of the plant. Maybe it is only the oil cutting down reflection by the trichomes.

Why would it not be twice as good to use vinegar and ammonia? I warned about this, as it could be fatal to some plants as the two chemicals react together forming ammonium acetate. If there were no bacteria in the potting mix to convert ammonium to nitrate you could find you get ammonium toxicity. I worry about orchid growers telling me they use my mixture on orchids which are often grown bare rooted. A slip up changing from one formula to the other could cause problems. If in doubt throw it out.

The ammonia solution is mainly NH<sub>4</sub>OH; the vinegar is mainly CH<sub>3</sub>COOH. Mixed together it becomes CH<sub>3</sub>COONH<sub>4</sub>. It is the NH<sub>4</sub><sup>+</sup> that is possibly a problem. If it is a problem don't, use either additive. On a related topic, fertilizing broms, I feel it would be wise to look for nitrate based rather than ammonium based nitrogenous fertilizers especially for offshoots and plants without roots like Spanish moss.

Remember, spray for scale in autumn and spring. I only spray top surface unless I see scale. If you do get scale it, appears on the undersurface and to my surprise the oil on the edge of the leaf seems to stop the migration of the scale. That means I usually just have to take one plant aside and spray it according to the rules.

Rob Smythe MSc.

(Urea is widely used in the pineapple industry as a major source of nitrogen for the plants. When I queried the Golden Circle agronomist, his response was "The nitrogen in urea can be incorporated into plant protein with minimum energy use because it is in a highly reduced form" !!!)

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embers, especially country members are invited to list their hard-to-find items in the Wanted List. If any of the items are of interest, contact the member listed. Please contact the editor regarding changes to the list. Entries may be deleted after two issues. Key:- P Plant, O Offset, B Book, M Magazine, SI seedling, Date when plants or seed are available.

Member	Wanted		Phone
Michael Pascall	Aechmea gigantea	PS	07 4098 8253
Dorothy Cutcliffe	Neoregelia carcharadon (reddish)	P	07 3386 0505
Keith Pohlman	Neoregelia 'Absolutely Fabulous'		07 4151 5395
Doug Upton	Aechmea retusa		07 3378 3511
Keith Dawson	Vriesea zamorensis		07 3285 6710
Keith Pohlman	Neoregelia 'Bailey'		07 4151 5395
Bob Reilly	BSI Journal 1995-2002 (Any Issue)	M	07 3870 8029
	Available		
Hugh Kunze	Aechmea pectinata	P	07 3343 6780
Hugh Kunze	h Kunze Streptocalyx poepegii		07 3343 6780
Hugh Kunze	Portea kermersina		07 3343 6780
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