

Bromeliaceae



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The Bromeliad Society of Queensland Inc.

P. O. Box 565, Fortitude Valley
Queensland, Australia, 4006

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 in the Program

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The Bromeliad Society of Queensland Inc.

Society Badges

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CONTACT MRS. NORMA DAVIS

COPY DEADLINES for *Bromeliaceae*

March / April.....February 20, 2002

May / June.....April 18, 2002

Please forward all copy to

The Editor, 3 Derribong St., Boondall, Qld, 4034

Phone 07 3265 1547

Email pparoz@powerup.com.au

Electronic copy in RTF or MS Word 7.0 or earlier- Times New Roman

Photographs to Doug Upton, 101 Jerrang St. Indooroopilly, Qld, 4068

Cover Photographs

Front Cover

Aechmea romeroi (Platyaechmea)

This moderately large plant has an open rosette of broad unmarked dark green leaves. It's height including an erect inflorescence is approximately 530 mm. Each of its eleven, 110 mm long bracts is flushed with a yellow/orange colour. A progression of pure white flowers completes a beautiful long lasting inflorescence.

The plant photographed was cultivated under 75% beige shade cloth with good bright light; only 200 mm above a gravel floor. Passed experience with this particular clone has indicated this is the preferred position.

Grower: Doug & Joy Upton Photography: Doug Upton

Rear Cover

Guzmania blassii

A variable spectacular species resembling *Guzmania zahnii* in foliage, but much redder, with a spectacular, dense, red-bracted, pyramidal inflorescence sporting many bright yellow flowers.

Guzmanias have a lot to offer the collector. Most of their habitat range suits our temperate to sub-tropical climate; both in the garden or shade house. Their size and water requirements make these plants amenable to easy culture; and their foliage quality, rosette symmetry and inflorescence colour can be spectacular. Grower: Peter Tristram Photography: Peter Tristram

Tropical Foliage Festival

On Sunday, 25th of November, The Bromeliad Society of Queensland Inc, The International Cordyline Society, The Brisbane Heliconia Society and The Palm and Cycad Society (South East Queensland Branch) combined to stage the inaugural **Tropical Foliage Festival** at the property of Nancy & Trevor Crawford, 120 Kingfisher Rd., Mt. Cotton.

Plants for sale began arriving early, and general attendance commenced at 10:00 am. There was a constant flow of people throughout the day and a large number of plants were sold by all the societies. Some very unusual masks were seen adorning the palm trees; I wonder whose they were?

Each society gave informative and well attended talks on the culture of their specialised plant families in different parts of the gardens. The day was slightly shortened by "Mother Nature", as she tried her best to blow and wash away everything that was left; but after much scurrying around, all was safely "tucked up" without too many getting soaked. It was a great day, with lots of comments that "we should have many more".

Gaylon & Jay Jacobs

Society Diary

NEWS

REPORTS

EVENTS

Program

Members are requested to bring a plate to each field day that they attend.

Field Days -2002

Saturday 27th April 9.00 am - 2.00 pm

The Olive Branch

Olive & Len Trevor's Nursery, 232 Canvey Road, Ferny Grove

Phone 07 3351 1203

Plant sales, cultural talks, morning tea.

Saturday 29th June 9.00 am - 2.00 pm Bus Trip

Home of Linda & Graham Percival

1 Purcell Road, Bells Bridge via Gympie

Phone 07 5483 1634

Plant sales, morning tea. Bring your own lunch

Bus pickup:- 52 Merthyr Rd. New Farm 6.30 am

Cnr. Gympie Rd & Webster Rd 7.00 am

Return approx 5.30 pm

Saturday 7th September 9.00 am - 2.00 pm Bus Trip

Home of Cheryl Basic

130 Valdora Road, Valdora.

Phone 07 5446 6637

Plant sales, morning tea, BBQ lunch

After 2.00 pm, on to a Palm Nursery & Tropical Garden

Bus pickup:- 52 Merthyr Rd. New Farm 7.00 am

Cnr. Gympie Rd & Webster Rd 7.30 am

Return approx 5.30 pm

Saturday 26th October 9.30 am - 2.00 pm

Home of Phyllis & Arnold James,

1115 Oakey Flat Road, Narangba

Phone 07 3359 5970 Mobile 0411291913

Plant sales, morning tea

Monthly Meetings

January 17st Slide Evening - Conference and recent bus trips

Mini Show

Class 1 Aechmea species and hybrids

Class 2 Vriesea species and hybrids

Class 3 Pitcairnia species & hybrids

Class 4 Mature plant Any other genus; species & hybrids

February 21 st **Annual General Meeting**

Plant of the Month: Encholirium, Fascicularia, Fosterella, Greigia

Notice of the Annual General Meeting

MEMBERS ARE HEREBY NOTIFIED that the Annual General Meeting of the Bromeliad Society of Queensland Inc. will be held on Thursday 21st of February 2002, commencing at 8 pm in the Uniting Church Hall, 52 Merthyr Road, New Farm.

Business to be conducted will be:- Confirmation of the Minutes of the 2001 AGM, The Presidents Report, The Financial Report, The Election of the Management Committee and the Election of the Auditor. Nomination forms for all positions are available from the Secretary on request; and will be available prior to commencement of the AGM. Nominees for positions on the management committee must be financial members of the Society. In the event of insufficient written nominations being received prior to commencement of the meeting, nominations will be called from the floor.

Competition Results

The winners of the Mini Show and Popular Vote competitions for 2001 were announced at the November Christmas party meeting as follows:-

Mini Show

Novice	1st	Jay & Carole Jacobs
	2nd	Yves Daniel & Lindsay Gerchow
Intermediate	1st	Chester & Dorothy Cutcliffe
	2nd	Michael & Patricia O'Dea
Advanced	1st	Bob Cross
	2nd	Mike Symmons

Popular Vote

Novice	1st	Bob Cross
Intermediate	1st	Chester & Dorothy Cutcliffe
Advanced	1st	Keith Dawson

The Editors Desk

The committee is in the process of reviewing the Constitution ('Model Rules') of the Society to conform to the revised draft rules developed by the Department of Consumer Affairs. This revision simplifies the rules, eliminating many of the sections in the previous version without changing the essential requirements. In addition, there are a number of minor changes which need to be made. In conjunction with this review, the committee will review the By-Laws.

Once the review has been completed, the revised documents will be referred to a general meeting for comment and ratification.

Members are invited to contribute to the review of the Rules or By-Laws. All submissions should be made in writing to the Secretary.

.....
Annual Membership Fees were due and payable on the 1st of January. Unfinancial members will be ineligible to nominate for the Management Committee or to vote at the AGM.

Letters to the Editor

Dear Peter, Re Bob Reilly's excellent 2-part "Importing Bromeliads" articles (July/Aug, Sept./Oct. issues 2001), several extra comments are relevant. Determining if a particular species clone is truly self-sterile isn't easy. Factors include weather conditions, lack of natural pollinators or timing if hand-pollinated. Ordering a "different" species clone can be largely guesswork unless proven it is wild-collected.

Re transit time: Assuming all plants leave in good condition, how a particular plant handles the lack of light, aeration, moisture and nutrients when boxed up largely determines its condition on arrival. Immersing dehydrated plants in diluted liquid foliar fertiliser (Phostrogen, Bloombooster etc.) for several hours works for interstate orders so possibly importers could pre-arrange this procedure through their respective AQIS/ quarantine systems; survival rates after gassing would surely increase.

Requesting photos in advance of ordering isn't practical or possible with most overseas nurseries but better achieved through private collectors. For such an expensive outlay, one must research books, web site photos and local shows/ collections in determining which rarities are worth importing if by mail, phone, fax or e-mail; and other importers can often tell you the best sources for special items.

Geoff. Lawn

Tillandsia narthecoides

T. narthecoides is a loose open rosetted plant consisting of 20 - 30 narrowly triangular green leaves 8-10 by 200-300 mm in an open rosette. The flower spike is distinctive: erect to upright on a slim stem with numerous fragrant white flowers arranged alternately in two ranks. There is a colour variant in local cultivation with leaves that have a permanent dark reddish colour.

Some years ago, I acquired a plant of this tillandsia and, not having any cultural information, mounted it on a cork block. It survived without thriving. When I was eventually able to divide the plant, I mounted one offset on a piece of tree fern fibre and the other was potted in coconut leaf fibre in a small (75 mm) terracotta pot. Both plants are grown in a bushhouse with regular watering and a weak foliar spray of Phostrogen every 7 - 10 days.

After fifteen months, when the plants flowered in November, the potted plant has clearly outgrown the mounted specimen. The number of flowers and offsets for the potted specimen was thirty six and four respectively; compared to twenty and one for the mounted plant; a convincing case for potting at least for my cultural conditions.

Peter Paroz

Peter Paroz

Bromeliad Society of Queensland Inc.

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	\$18.50
Bromeliads -- A Cultural Manual by B.S.I	\$5.00
Distributional Checklist of the Genus Tillandsia by Lloyd Kiff	\$20.00
A Guide to Beautiful Neoregelias by S. Zaghini	\$20.00
1985 Bromeliads III Conference	\$10.00
1993 Bromeliads VII Conference	\$18.00

Inquiries: LIBRARIAN, Mrs. Mavis Paulsen, Ph (07) 5493 3677
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Plant Sales Table

A feature of the Society's monthly meetings is the opportunity for members and visitors to purchase a wide range of bromeliads at reasonable prices.

When the February, March, April and May 2001 meetings are considered collectively, plants from more than 10 genera or bigenerics were available over this period. Over 250 species or hybrids were on sale. Variegated bromeliads were available, as were many rarer species and hybrids. This situation provides a strong incentive to attend the Society's monthly meetings.

Nancy Kickbusch who is responsible for organising this activity supplied the following description of how the system works.

All society members are eligible to sell bromeliads. Plants sold in pots should be well rooted, while offsets may also be sold. Plants and offsets must be free of disease and insects, and any water drained from them, prior to being presented for sale.

All plants and offsets must have a special label securely attached to them by the seller. Labels can be purchased from Neville Ryan. In addition, each plant must have a permanent label with its name on it.

The name and sale price of the plant and the seller's name should be on the upper part of the label, with the seller's name and purchase price repeated on the lower part of the label. All information should be clearly printed using a black waterproof pen.

If sellers would like an idea of how much to charge for their plants, Nancy is willing to discuss this with them. Sale prices must be set in multiples of 50 cents to minimise the amount of change which the Society needs to provide. For example, a sale price of \$6.00 or \$6.50 is acceptable, while \$6.70 is not.

The plants are available for sale at the break which occurs about halfway through each monthly meeting. People wishing to purchase plants select them and take them to Nancy who removes the bottom half of each plant's label and receives the purchase price from the buyer.

Ten percent of the total amount due to each seller is deducted by Nancy and Gwenda and becomes a contribution to the Society. The remainder is rebated to the seller. Any plants left unsold at the end of the meeting are removed by their owner.

A similar system operates at Society field days and the Combined Bromeliad and Cactus Show in June. However offsets cannot be sold at

these functions.

Thanks are due to Nancy for her efforts, and the other society members who also assist in this activity from time to time. The willingness of those Society members who bring their plants along to sell is also much appreciated.

Bob Reilly

Building a New Shadehouse

HAVING made one of life's major decisions — selling the old home and buying another — the next consideration was building the “ideal” shadehouse for my bromeliad collection.

I spent some considerable time observing the bromhouses of experienced bromeliad addicts and, in particular, the growth and colour they achieved with their plants. With a few innovations and “improvements” of my own, I came up with the following.

As I was always running short of space in the old home, I was constantly adding new bits of shadecloth to accommodate the ever-growing collection. So I decided in my new home, I would “go for broke”—the new bromhouse covers the entire back yard: from one side fence to the other and from the back deck to the back fence, a total area of about 68ft by 80ft.

Realising good light and air circulation are very important factors for bromeliads, I settled on 7ft 9in high sides with the centre rising to 11ft 9in. This height results in far better light distribution than the low roofs of my previous structures. After much consideration, I figured the pros and cons of having shadecloth sides and decided against side walls as this would allow the best possible air circulation, but does allow the entry of insects! However before next winter, I will cover the western side with cloth to stop the westerly winds blowing the pots over.

The next hurdle was the framework's construction material. Metal or plastic was far too expensive and CCA treated timber is a definite “no-no” for bromeliads. My mates in the building industry solved the problem by suggesting untreated iron bark posts with the bases creosoted and set in concrete to support the tension of the wire holding up the shadecloth roof. The whole structure has only four posts on each side and three in the centre.

Probably the most important consideration was the choice of shadecloth. I had previously experimented with different colours of shadecloth and judging from other growers' results and my own limited experience, the sandstone

colour seemed far better than all others.

My main reasons for choosing the sandstone colour were:- The colour temperature of the light under sandstone more closely resembles normal sunlight than does green; and there is more reflected light coming through the sandstone than through green, giving more light for the plants. These two factors mean the light reaching the plants is a warmer, more natural colour than the greenish, darker light coming through the green cloth.

My choice seems to be justified because I now have far richer colours in my plants than before. In fact I have one *Neoregelia* which under green cloth had only plain green leaves (and I was going to toss it out!)—but it now has beautiful brownish spots on the leaves and a red centre. All plants appear to be far healthier and seem to be growing faster, larger and stronger than before even though I have not foliar fertilised for eight months; and all this during the winter months!

I think the sandstone colour cloth, for the same reasons as above, could be better for cordylines and caladiums and I will be experimenting with them during the summer. Conversely, I think green cloth would be better suited to calatheas, *diffenbachias*, etc, as they prefer a shadier, greenish and cooler light.

Initially, the big headache was installing a watering system. However this proved to be very simple. As I use a lot of galvanised water pipe posts with wire brackets to hold the pots, I adapted this for a watering system. I divided the whole area into four equal quarters and placed a 6ft high pipe in the centre of each quarter and ran an underground hose from the control tap to

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these posts. Into the top of these four posts I place an impulse-type circular sprinkler. This has proved to be a simple, cheap, quick and most efficient watering system.

As a weed-control measure, I covered the whole area with six sheets of newspaper and covered that with weed-control cloth.

Because I elected to have open sides, maintaining humidity could have been a problem. To overcome that, I covered all the paths with up to four inches of forest mulch. This is most successful as the mulch holds excess moisture from the waterings; and creates far better humidity than does gravel as it holds moisture rather than draining water into the ground. Forest mulch is also more natural looking and a lot easier on bare feet!

Designing and building your own bromhouse to your own specifications and requirements is far cheaper and much more satisfying than buying a commercial product — you end up with exactly what you and your bromeliads require rather than what manufacturers think you should have.

Ray (Nicko) Nicholson

GROWING TILLANDSIAS FROM SEED

Part 2 of 2

*T*illandsia seed is designed to be dispersed by the wind. It consists of a very small seed attached to a white “parachute” similar to a dandelion. Therefore, if you don’t harvest the seed pod before it opens, you may not have any seed. If you are not sure when it will open, consider loosely wrapping a piece of nylon pantyhose around the seed pods. This will “trap” the seeds when the seed pods open.

Barry says that you can usually tell if the seed is likely to germinate by its appearance. If the seed is brown and “plump”, and the “parachute” is white in colour and silky in texture, then it is highly likely to germinate well. Seed which is withered in appearance and attached to a brownish or discoloured “parachute” is unlikely to germinate. A bundle of unviable seed, when viewed from a distance of 30 cm, will also often have a “ropey” look.

Sow seed as soon as possible. It usually only remains viable for up to two months. Storage life can often be extended for a few more weeks by storing it in a paper envelope in the door of your refrigerator. (Make sure it does not get wet, and do not place the envelope in a plastic container).

Barry suggests that if you are storing seed, write the name of the female parent i.e. the one which produces the seed pod, the male parent i.e. the one from which you obtained the pollen, and the dates of pollination and

harvest on the envelope containing the seed.

Many different types of medium have been used successfully to germinate *Tillandsia* seed. However, it is important to consider what will happen when you try to transplant seedlings onto the next stage. Atmospheric *tillandsia* seedlings are easily damaged during transplanting compared with "tank-type" bromeliad seedlings. For example, if you've sown *Tillandsia* seed onto a *Callistemon* or *Leptospermum* branch, they will germinate well, but can be quite difficult to transplant successfully as they will have sent roots deep down into the bark.

Barry has modified a method which has been successfully used by *tillandsia* growers in southern Queensland for many years. His approach involves: obtaining a piece of flat, polystyrene foam, about 10 to 25mm in thickness. Fruit and vegetable boxes are a good source for such material.

Place a 5 to 10 mm layer of coconut fibre (coir) on one or both sides of the foam block. The coir can be obtained from hanging basket liners made out of coconut fibre, or small bags of such fibre which are also sold for lining baskets, or coir - filled mattresses (although these are difficult to obtain). Bind the coconut fibre into position by wrapping fishing line around it at 20 - 30 mm intervals.

Drill a hole through one end of the block and attaching a hook to it. At the other end attach a fishing sinker or heavy nut. (This stops the polystyrene block from being blown about in the breeze and possible dislodging the young *Tillandsia* seedlings).

Sow the *Tillandsia* seed onto the surface of the coconut fibre. The bundle of seed needs to be "teased out" so that individual seeds are, on average, 3 to

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5 mm apart, if possible. (In practice some seeds will stay in small clumps, but don't worry about this situation).

Depending on how much seed he has, Barry places the seed of several species on the one 'block'. The seed of each species is sown in a horizontal band across the block, with a space of at least 20 mm between each band.

The seed of the smallest growing species is placed at the top of the block, with the largest species being placed at the bottom. (This approach will result in the largest growing species' seedlings receiving the most water, which they need, and not shading the smaller seedlings).

The seed will usually adhere to the coconut fibre once water is sprayed onto it. You can further reduce the chances of the seed blowing away by wrapping some more fishing line around the seed - covered polystyrene block.

An alternative approach is described by Mark Dimmitt. It involves: Placing a piece of shade cloth on an open - mesh tray made out of plastic or metal. Spread the seed across the shade cloth in a similar manner to that described above. The tray is then suspended horizontally in a shade house or a similar structure with a solid roof (Dimmitt, 1990 b) :

Barry waters his seed twice a day in summer (morning and afternoon) and once a day in winter (morning). When dry winds occur, a plastic freezer bag can be placed over the block to help retain moisture. The bottom of the freezer bag should be aligned with the bottom of the block and left open.

The blocks should be suspended from a roof or branch. Ideally, they should receive filtered light, such as that provided by 70% - 80% shade cloth, for the entire day. A good flow of air around each block is essential.

If seed has been sown on both sides of the block, and one side receives more sunlight the other during the day, rotate the block every two to four weeks. This will "balance up" the amount of sunlight received by the seedlings on each side of the block. An alternative used by some growers is to place a fishing line swivel immediately above the block's top, so it swings around in the breeze.

The seedlings should receive liquid fertiliser at the same time, and at the same strength, as your mature *Tillandsia* plants. (Apply the fertiliser throughout the year - at least, in southern coastal Queensland). The only problem which is now likely to arise for several years is the growth of algae on the coconut fibre. This will only occur if the fibre is kept too wet. It can best be treated by allowing the coconut fibre to dry out more often. This will kill the algae, but should have no long-term adverse impacts on the seedlings.

Let us go two to five years into the future. By this time, the seedlings should be about 10 to 15 mm high. They are now ready for transplanting.

Barry uses the following approach:- Remove the fishing line, if it has not already rotted away. Place a sharp, flat bladed knife between the coconut fibre and the surface of the polystyrene block. Slide the knife forwards so the coconut fibre mat, and seedlings, are separated from the block. (Some of the seedlings may have rooted into the block, so some force may need to be applied to the knife). Pull apart the coconut fibre mat. It should separate quite easily, with little damage to the seedlings.

Attach each seedling to a mount, using the following process:

Obtain callistemon or leptospermum branches which are 25 to 40 mm wide and 30 to 60 cm long, or strips of cork of a similar width and length. Leaving a gap of about 25 mm between the outermost leaves of each seedling, tie the seedlings onto the branch, using thin strips of nylon pantyhose.

Depending upon the ultimate (flowering) size of the plants, this process may be repeated several times before the plants flower. A variant of this approach is to remove every second seedling, mount them separately, and allow the remainder to reach flowering size on the original strip of cork or wood. Each transplanting becomes easier to undertake, as the plants are larger and consequently, easier to handle.

At the second or subsequent transplanting, consideration can be given to putting the seedlings into individual pots, with a potting mixture used for orchids, rather than onto a length of wood or cork. Suitable species for this treatment include: *T. fasciculata*, *T. capitata* and *T. seleriana*.

Another approach is outlined by Mark Dimmitt. In his method, seedlings are transplanted onto a plastic or galvanised open mesh tray with a shade cloth lining. A similar spacing can be used to that described above. The trays are then suspended horizontally in the same manner used by Mark Dimmitt

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for freshly sown seeds. (Dimmitt, 1990 b)

Once the plants flower, repeat the whole process again!

Bob Reilly

BIBLIOGRAPHY

Dimmitt, M.A (1985), Intraspecific Variation in Tillandsia: Selecting Superior Forms, Journal of the Bromeliad Society, v.35 (3), May-June 1985, pp 101 – 132.

Dimmitt, M.A (1990 a), Artificial Pollination of Tillandsias, Journal of the Bromeliad Society, v. 40 (2), March – April 1990, pp 72 – 80.

Dimmitt, M.A (1990 b), Growing Atmospheric Tillandsias from Seed, Journal of the Bromeliad Society, v. 40 (1), January – February 1990, pp 17 – 29.

THE SMALLER NEOREGELIAS

Neoregelias come in a range of sizes. They vary from 2 centimetres to 150 centimetres or more in diameter. This article looks at some Neoregelias which are up to 20 centimetres in diameter, at maturity. Like virtually all Neoregelias, these are easy to grow. The only pest which is likely to cause some problems is flyspeck scale which can be treated with an insecticide such as *Folimat*.

When grown in pots or hanging baskets, they will need a finer mixture than used for larger Neoregelias. They have been grown successfully in composted pinebark, and other potting mixtures which drain well but retain moisture. Another such potting mix is composed of equal parts peat moss and coarse sand. A long term e.g. of 9 to 12 months duration, slow release fertiliser such as Osmocote should be added to the potting mix. Foliar feeding isn't recommended. It can cause plants to lose colour, and also result in their shape becoming "unbalanced" or asymmetrical in appearance.

These Neoregelias can be grown in pots, hanging baskets, as "borders" in garden beds, or attached to wooden stumps or branches. They can also be made to "climb up" a tree fern trunk. Attaching the plants to a wooden branch or stump can be achieved by tying them on with strips of nylon pantyhose or gluing them on. A liquid glue such as one of the various types of "liquid nails" can be used. However, use solvent-based rather than water-based, glues as the latter can disintegrate before the plant is rooted to the wood.

This article describes eleven of the many miniature Neoregelias; virtually all are readily available, although one or two are rare.

Large plants (rosettes are 15 to 20 centimetres wide)

'Fireball' This plant grows well in hanging baskets and in garden borders. It needs filtered sunlight rather than full sun. The leaves turn a

glowing maroon colour in strong light. A single plant will form a clump of five plants within a year, in good growing conditions.

'Firewheel' A hanging basket plant. It takes two to three years to form a clump of five plants. In filtered sunlight, the leaves are maroon with linear cream/pink stripes.

'Little Joy' Another hanging basket plant. Leaves are lemon green in colour with maroon spotting or "blotching". It likes filtered sunlight, and takes two to three years to form a clump of five plants.

Medium plants (rosettes are 10 to 15 centimetres wide)

'Chilli Verde' This plant grows well in hanging baskets and in garden borders. It like filtered sunlight. The leaves are a mixture of green and cream in colour, sprinkled with small red spots. The centre blushes red when the plant flowers. This plant can be quite variable in leaf colouration. It takes two to three years to form a clump of five plants.

'Strawberry Cream' The leaves are light green with a cream-coloured edge, and flush pink in good light. The plant's centre flushes red at flowering. It does well in hanging baskets and in garden borders. While it can take strong sunlight, full sun in summer will burn the leaves.

tigrina This is a species which does well in hanging baskets in filtered sunlight. The leaves are lemon-yellow in colour with maroon-coloured barring. It will produce a clump of five plants within a year, in good growing conditions.

'Zoe' This plant looks like a variegated *Fireball*. Leaves are dark maroon in colour with red/pink stripes. It needs filtered sunlight, and does well in hanging baskets. A recent import from Hawaii, it is likely to become

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generally available in one to two years time. It takes two years to form a clump of five plants.

Small plants (rosettes are less than 10 centimetres wide) many plants have a tubular growth habit)

(*lilliputiana* x Fireball) This unnamed hybrid, which is quite rare, reaches about 5 centimetres in height, and 2 centimetres in width. It produces offsets on stolons and has a tubular growth habit. It likes filtered light and grows well in a log or on a hanging pot. The leaves are maroon-red in colour.

'Night Spot' This plant grows to about 5 centimetres in height. It has a tubular growth habit. Its leaves are yellow-green in colour, with maroon barring/blotching. The plant likes filtered light and grows well on a hanging pot. Plants will be generally available in two years' time.

paucifolia There are two forms of this species, with the smaller form being about 5 centimetres tall. The plants have a tubular shape. The leaves are silvery-grey in colour with grey barring. The plants grow on long stolons. While they grow well in hanging baskets, they look even better if secured to a stump's top and allowed to "cascade down" over the stump's sides. The plant likes filtered light.

punctatissima There are several forms of this species. One form has yellow-green leaves with purple barring, while another has purple-red leaves with dark purple barring. They have a tubular shape and grow three to four centimetres tall. These plants prefer filtered sunlight and can be mounted on wooden branches or grown in hanging pots.

Good Growing

Olive Trevor and Bob Reilly

Round Robin

Recently, I had a call from Joni Simpson, one of our country members, who enquired about the possibility of the Society running a Round Robin via Email. I participated in a snail mail RR in the early days of BSQ / BSA. This was well partonised, lasted for some years and proved to be an excellent way of exchanging ideas and information.

Members interested in participating are invited to contact the editor at pparoz@powerup.com.au with a couple of questions / ideas / comments to get the RR started. As Round Robins function best with a limited numbers, I will look at running several Robins in the event of a strong response.

Present thoughts are to retain the RR type circulation and format even though it will slow down the turnaround.

Ed

Aechmea tillandsioides kienastii

At the March 2001 meeting, my *Aechmea tillandsioides kienastii* won first prize in the Novice Class, after it had been flowering for a few weeks. The plant is commonly called 'Stars and Stripes' or the red, white and blue plant. The plant had been producing white flowers for a month at this time and the bracts were still developing.

This same plant won second prize in the Novice Class at the 2001 Combined Show. (See "Bromeliaceae" issue July/August 2001 page 12 photo 2). The plant had been producing small white flowers over this time and the first two seed pods had swollen, turning bright blue and grown away from the stem.

At the June meeting, this same plant again won second prize in the Novice Class. The plant was then getting the usual broken leaves and damage from transportation and handling. The plant finally finished flowering at the end of July and the berries developed quickly.

The sparse, opposing, twelve long leaves up to about 500 mm long x 50 mm wide are brilliant glossy green in colour with large soft spines running along their edges some mm apart. The leaves are well dishd to almost half circles. The base of the plant is 30 mm diameter and the plant with flower stands about 500 mm from ground level. The red flower stem, 7 mm diameter vertical and robust, has a dense trichome (silver) covering and contrasts with the several bright red coloured bracts with some trichome covering

This gives a contrast with the white flowers, that can open simultaneously on several bright red bracts at once. These plants are self pollinating and berry development provides more colour contrast; the colours changing from white to bluish purple. The berries contain 30+ elongated brown seeds about 1 mm diameter by 4 mm long in a clear sticky gel. The seeds commence

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growing within two weeks with a very high rate of germination, and the small plants develop very quickly.

The two offsets are well developed and about half the parent's size. Their sparse 12 long leaves up to 400 mm long x 42 mm wide are brilliant glossy green in colour with large soft spines 1.5 mm long. One of the offsets has a developed a variegation through the centre of its leaves.

The original parent plant with an old inflorescence and small offset was purchased on the Bundaberg bus trip in November 2000. The well developed offset was separated in January and the mother plant produced an offset which was separated in March, and subsequently produced two more offsets.

The plant was grown initially outdoors in direct sun for half the day and then in 70% shade house in summer. The 150 mm squat pots have a very open and extremely coarse pine bark mix and was grown relatively dry. Some foliar and slow release fertilizer was used in the growing stage. The white fibrous roots are strong and 3 mm thick at ground level. *Keith Dawson*

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Walk with me through my garden. I've seen better by far but this is MY garden and my delight.

My Aechmeas : Crowning all, as it prepares for spring, is *Ae. tessmannii* 'Rubra', not yet budding but in full bronze-brown splendour; beside it, already potted is an early offset. Hmm, some streaking in the leaf .. perhaps a kind neighbour will cut extra aeration holes in the pots for me. And over there is a purple leafed and banded *tessmannii* which once disgraced me before knowledgeable visitors by appearing so deathly and bedraggled --- then good fortune struck, for I came into possession of some tree fern pots. *Tessmannii's* hatred of wet feet was quelled- and here is a big fat crimson bud, it's first. (laugh with me, Doug Upton!)

Over there is an *Ae. blanchetiana* which sulks in the shade and grows incandescent in the sun; Here is *Ae. maculata*---how I've waited for this. Such grace in the curling leaves, how enigmatic the script that ornaments their undersides. The inflorescence lies to one side (as do most that are

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heavy), its serrated dusky cone protruding from furled pink bracts.

Faithful *Aechmea* 'Running Light' and 'Shell Dancer'; their towering branched displays lasting for some months long after the offsets are ready to be detached. Each year they produce their displays and I sometimes see that one particular plant might excel in every way its siblings--and yet was treated alike. Perhaps the first offset inherits the best genes. Could it be so?

And while you are giving me advice, do tell me why *Ae. nidularoides* is such a poor performer, making many narrow leaves, quite forgetting to develop a good root system.. To the right is *Ae. 'Fascini'*; poor thing it spent twelve months out of reach in a tree, forgotten and starved. I still hope for an offset before death claims it. An offset from a sick plant! It wouldn't be the first time continuance of a species comes from the mother heap or worse, now would it? Look at *Ae. caudata*, prolific with offsets, generous with colour; and the variants of *Ae. nudicaulis*, spikey 'Rubra', 'Silver Bands', 'Alba Margimta', var. *cuspidata* and even 'Rackett'.

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There are several promising plants of *Ae. fendleri*. There is some pleasure for the future, for a fendleri inflorescence is like a dessert of colour, not lost on the yellow-bellied sunbirds which hover at its flowers. These large plants harbour the unpleasant woolly garden spiders which race away on their eight legs while I retreat with all the speed of my two. I put my trust in the blue faced honeyeaters which spend long hours winking out spiders from their nooks and crevices.

Have a quick look at *Ae. fasciata*, 'Morganas' and so on; *orlandiana* with its brindled patterns glowing against the light (always bringing to mind the great endeavours of Mulford B. Foster); *chantinii*, green and bizarrely black: other smaller wonders:- *calyculata*, 'Purpurea', 'Hummels Red' and smaller by-ways of other species.

We'll not delay over the billbergia which share this crowded space but Muriel Waterman's ascending towers of banded grey cannot go unremarked. When sunsets afterglow descends, Muriel turns to purple.

One last look and I am gone for the day.

Joni Simpson

Seed Dispersal in Tillandsioideae

Seed of the tillandsioideae have a coma of fine fibre and have evolved for dispersal of the seed by wind. The mechanism for this is worth a quick review. Tillandsioideae seed develop in a three compartment 'seed pod', correctly called a dehiscent capsule. (dehiscent refers to spontaneous opening of the capsule at maturity).

As the seed nears maturity, the capsule starts to dry commencing from the end nearest the plant, with a faint change in the colour and texture of the capsule. Inspection of a capsule segment reveals that there are two distinct layers. The outer layer shrinks more than the inner layer as it dries creating tension. When the end dries and the tip releases, the tension causes the capsule to spring open and eject the seed. Its hard to estimate when a capsule will open and a mesh bag over the spike will contain the released seed.

With good quality seed, the coma will fluff out into a parachute. If the coma is limp and discoloured, it is unlikely to give good germination. If the capsule has commenced drying and water penetrates, the seed may ferment in which case it may have a distinct sickly sweet smell. This seed may have reduced germination, but can sometimes be rescued if the capsules are opened and the seed well washed with boiled and cooled water. With valuable seed, the best option is to put the plant under cover toward the end of the maturation period and avoid wetting the capsules.

Ed

Nidularium cariacicaense

You had better start getting your tongue around this name because I think I have found this plant already in Australia. Peter Franklin of Raymond Terrace, often sends me photographs to challenge me because many are seedlings in the *Ortgiesia* group of *Aechmea*. But sometimes he comes up with more normal queries! One was of a photograph of *Nidularium scheremetiewii* which he said that Bill Morris said wasn't because Lyman Smith said so! This took me back 10 years or more, when I had obtained a *N. scheremetiewii* from Bill as well as a *Nid.* sp.

I felt the *N. scheremetiewii* generally agreed with the description in Smith & Downs after I had taken a flowering specimen to pieces. Then the *Nid.* sp. flowered and it was again dismembered and notes taken. Here, I referred my findings to Elton Leme and he said *Nidularium scheremetiewii*! So we had two *N. scheremetiewii* growing in our garden, one sensu Leme and the other sensu Butcher

Towards the end of 2000, Leme's *Nidularium* book arrived in Australia and I wonder how many have really read it. I seem to be the only one to comment on it. We now know that what we were growing as *N. innocentii* v. *wittmackianum* is now *N. longiflorum*. And we know that the long stolon *Nidularium* called *purpurea* is now *N. rubens*. My latest query from Peter had me referring to my records AND my new *Nidularium* book!

When all else fails you try the KEY to the species and MY *N. scheremetiewii* did not fit *N. scheremetiewii* but it did fit *N. cariacicaense*! This had me scrabbling for my worksheet and comparing it with the detail in the book. These fitted much more comfortably than before and what was the clincher was the bluish ovary. In the second part of the KEY, it shows that for this group of *nidulariums*, ovaries are always white except for *N. cariacicaense*!

I believe we have another species name to learn and if you want to see for yourself, check the photographs for both species in Leme's book. I am sure you will be convinced just from the photographs. What other goodies are in store for us in Leme's *Nidularium* Book? I'm still looking. Are you?

Derek Butcher

Ornithochory Regular dependence on birds for seed dispersal

Saxicole A plant that grows on rocks (a lithophyte)

Sciophyte A plant tolerant of deep shade

Trading Post

Members, especially country members are invited to list their hard-to-find items in the Wanted List. The Trading Post has recently been expanded to include wanted or available plants and seeds, books or magazines. If any of the items are of interest, contact the member listed. Please contact the editor regarding changes to the list.

Key: P Plant, O Offset, B Book, M Magazine, SI seedling, Date when plants or seed are available.

Member	Wanted		Phone
Dorothy Cutcliffe	<i>Tillandsia</i> 'Pamelae'	P	07 3386 0505
Dorothy Cutcliffe	<i>Hohenbergia catingae elongata</i>	P	07 3386 0505
Dorothy Cutcliffe	<i>Hohenbergia intermis</i>	P	07 3386 0505
Michael Pascall	<i>Aechmea tayoensis</i>	P	07 4098 8253
Michael Pascall	<i>Bromelia scarlatina</i>	P	07 4098 8253
Ray Nicholson	<i>Quesnelia</i> 'Tim Plowman'	P	07 3399 5296
Keith Pohlman	<i>Neoregelia</i> 'Absolutely Fabulous'	P	07 4151 5395
Keith Pohlman	<i>Neoregelia</i> 'Bob'	P	07 4151 5395
Keith Pohlman	<i>Neoregelia</i> 'Bailey'	P	07 4151 5395
Keith Pohlman	<i>Neoregelia</i> 'Aurora'	P	07 4151 5395
Dorothy Cutcliffe	<i>Neoregelia carcharadon</i> (reddish)	P	07 3386 0505
Doug Upton	<i>Aechmea retusa</i>	P	07 3378 3511
Bob Reilly	<i>Aechmea mexicana</i>	S	07 3870 8029
Bob Reilly	<i>Aechmea spectabilis</i>	P S	07 3870 8029
Keith Dawson	<i>Vriesea zamorensis</i>	P O	07 3285 6710
Keith Dawson	<i>Ae. tillandsioides kienastii variegata</i>	P O	07 3285 6710
Available			
David Brown	<i>Bromelia balansae</i>	O	07 3818 3133
Peter Paroz	'Grande (4)'	M	07 3265 1547
Keith Dawson	<i>Ursulaea macvaughii</i>	SI	07 3285 6710

Members with Internet access may want to visit the 'Bromeliad' site listed below. Members who do not have a home computer can check with their local library for Internet computer facilities. BCC libraries offer free access although you may have to book a time slot. A great way for an introduction to the Internet.

Start with www.fcbs -the site of the Florida Council of Bromeliad Societies- and follow the links to the many other sites.



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