ILLAWARRA BROMELIAD SOCIETY INCORPORATED

NEWSLINK

January 2007



Aechmea comata var. makoyana

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- The Society is, by the holding of meetings, displays and competitions, to provide a forum for the people of the Illawarra region who are interested in the culture and collection of bromeliads.

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ILLAWARRA BROMELIAD SOCIETY INCORPORATED

CORRESPONDENCE TO BE ADDRESSED TO:

The Secretary Illawarra Bromeliad Society 92 Brighton Street BUNDEENA, NSW 2230 E-mail: stagra7@ozemail.com.au

MEETINGS - The Society meets at 12.00 NOON on the first Saturday of each month (except January) in the Laurel Room at the Ribbonwood Centre, DAPTO.

MEMBERSHIP SUBSCRIPTIONS - SUBSCRIPTIONS ARE DUE JUNE 30 EACH YEAR: \$8.00 Single/\$12.00 Family

SOCIETY FORMED - February 1992

*NEWSLINK IS A QUARTERLY PUBLICATION - DISTRIBUTED: January, April, July and October - Also available at: <u>http://www.bromeliad.org.au</u>

VISITORS ARE ALWAYS WELCOME

NEWS IN BRIEF ...

POINTS SCORE WINNERS FOR 2006: Congratulations to the Points Score winners for 2006 who were awarded their trophies at our Christmas party. Thanks also to those members who compete regularly throughout the year and we look forward to seeing more of your beautiful plants in 2007.

Open: Novice: Tillandsia: Alan Kirkby Neville Wood Ted Clare

MONTHLY RAFFLE PRIZE ROSTER: We will again be using the roster system for providing prizes for our monthly raffles, and while you will see below that four members have been rostered each month for supplying these prizes, the guidelines will remain the same. That is, if you are unable to supply a bromeliad then items such as potted herbs, cuttings, spare fruits/vegetables from your garden, gardening tools, etc. are acceptable.

If you are unable to attend the meeting—and/or are unable to supply a raffle prize when rostered—it would be appreciated if you would either 'work a swap' or speak to Elizabeth about getting a fill-in for your month.

As our membership fees are kept very low, we rely on these raffles to help defray the costs involved in the running of our Society, and so your support is very necessary, and very much appreciated.

March	-	Martin/John Carthew/Beth/Carolyn Buxton
April	-	Neville/Val/Sylvia/Janice Cluff
May	-	Eileen/Jenny/Laurie/Alan
June	-	Nina/Ailsa/Meri/Rena
July	-	Sharyn/Janine/Doreen Netting/Lucas
August	-	Jarka/Naomi/Russell/Joan
September	-	Steve/Warwick/David/Pat Alton
October	-	Phillip/June/Bruce/Rhonda Patterson
November	-	Fred/Peter/Jake/Colette

BUS TRIP: Beth and Pat are organising a bus trip for us in March and there will be details available at our February meeting. Parklea Markets was one of the places we thought might be a good place to visit. Phone Beth: (02) 4447 2214/Pat: (02) 4447 3119.

COMING EVENTS ...

April 5 - 18	Bromeliad Society of New South Wales – Display and Competition at the
	Royal Easter Show - HOMEBUSH
April 21 - 22	Collectors' Plant Fair, 'Woodgreen', 27 Powells Road, BILPIN
April 21 - 22	Bromeliad Society of Queensland Show and Sale of Bromeliads - Mt Coot-
	tha (Brisbane) Botanic Gardens.
	Further information: Bob Reilly: (07) 3870 8029/bob.reilly@nrm.qld.gov.au
April 28 - 29	Bromeliad Society of New South Wales – Autumn Show - Concord Senior
	Citizens Centre, 9-11 Wellbank Street, CONCORD
Sept. 6 - 9	Central Coast Bromeliad Society – Spring Show – Flora Festival, KARIONG
Sept. 8 - 9	ILLAWARRA BROMELIAD SOCIETY – SPRING SHOW, CORRIMAL
Sep. 21 - 23	BROMELIADS 14 – BEACHSIDE, Rydges Resort Hotel, PORT MACQUARIE
Oct. 27 - 28	Bromeliad Society of New South Wales - Spring Show - CONCORD
2008	
June 24 - 30	'BROMELIADS DOWNUNDER' - The 18th World Bromeliad Conference,
	CAIRNS, QLD. Visit the Web Site at: <u>www.bromeliadsdownunder.com</u> for
	both the 2007 and 2008 Conferences.

<u>February 3, 2007</u> :	The Healthy Earth representative will bring products to our meeting.
<u>March 3, 2007</u> :	Topic: Potting Demonstration
<u>April 7, 2007</u> :	Topic: Neoregelias

MEETINGS ...

October 7, 2006: Plant Results

<u>Open:</u>

<u>open</u> .		
1 st	Alan Kirkby	Neoregelia 'Rosy Morn'
1 st	Rena Wainwright	X <i>Neophytum</i> 'Galactic Warrior'
2 nd	Ailsa McDonald	Neoregelia 'Painted Desert'
2 nd	Ailsa McDonald	<i>Neoregelia</i> 'Small World'
3 rd	Ted Clare	Orthophytum 'Warren Loose'

<u>Novice</u>:

1 st	Rhonda Patterson	Billbergia
2 nd	Neville Wood	Neoregelia 'Thunderbird'
2 nd	John Carthew	Guzmania wittmackii
3 rd	Neville Wood	<i>Neoregelia</i> Dr. Oeser 'Special Red'
3 rd	John Carthew	Guzmania 'Torch'
3 rd	Jan Stammers	Neoregelia concentrica

<u>Tillandsia</u>:

1 st	Ailsa McDonald	Tillandsia recurvifolia var. subsecundifolia
2 nd	Rena Wainwright	<i>Tillandsia bergeri</i> (A beautiful specimen 35 years old)
3 rd	Sue Burrows	Tillandsia bulbosa

November 4, 2006: Plant Results

<u>Open</u>:

1 st	Alan Kirkby	Neoregelia 'Oh! No!'	
2"	Alan Kirkby	Neoregelia 'Inferno'	
3 rd	Alan Kirkby	Neoregelia 'Lambert's Pride'	

Novice:

1 st	Neville Wood	Neoregelia Dr. Oeser, labeled 'Special Red']
2 nd	Neville Wood	Aechmea orlandiana cv 'Ensign'	
2 rd	Laurie Dorfer	Vriesea flammea (A huge clump mounted on wood)	
3 rd	John Carthew	Neoregelia concentrica	
3 rd	Neville Wood	Aechmea orlandiana	

<u>Tillandsia</u>:

1 st	Lucas Morgan	Tillandsia xiphioides
2 nd	Lucas Morgan	Tillandsias – mixed, including T. bergeri and
	· · · · · · · · · · · · · · · · · · ·	<i>T. aeranthos –</i> mounted on log
3"	Graham Bevan	Tillandsia caput-medusae
3 rd	Graham Bevan <i>Tillandsia albertiana</i> (Mounted on paperbark, but	
		Graham commented that the paperbark tends to
		rot away too quickly!

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ZEOLITES IN HORTICULTURE

By Eric Jordan¹, Illawarra Bromeliad Society

What are Zeolites?

Natural zeolites are robust, insoluble and chemically stable aluminium silicate minerals that were formed millions of years ago from the "glassy" component of volcanic ash. They have a unique structure, with a well-defined internal porosity of cavities and channels that can host ions, water and other molecules.

Zeolites increase water-holding capacity while keeping the growing medium open and aerated. Tilled into the soil, they will add a permanent water reservoir, providing prolonged moisture-holding power between natural rainfall events or interrupted irrigation cycles.

Benefits of Zeolite

Natural zeolites can perform a variety of functions due to their high ion exchange capacity, adsorption/desorption energies, propensity for regeneration and recycling. Frequently zeolites can reduce production costs and increase yields in horticultural production, while reducing environmental pollution.

Zeolites are Nature's slow release fertilizer. The very high cation exchange capacity attracts, holds and slowly releases beneficial plant nutrients such as nitrogen (N) and potassium (K). They also have high plant availability of silica.

Zeolites lower water and fertilizer costs significantly by retaining beneficial nutrients within the root zone (again downward leaching and bacterial activity).

They are also very environment-friendly. Zeolites lower fertilizer costs while reducing harmful leachates (the products of leaching action) entering ground and surface water. They also sustain air-filled porosity and improve the structure of compacted soil.

Many horticultural applications are established, including for hydroponics growing systems and as an inert medium for plants—for instance as an orchid-growing medium growers might find them valuable for soil amendment and as a beneficial component for potting mixes and in propagating media. For such uses, a fine grade of, say, 3 mm particle size or less should be appropriate. Coarser sizes, such as the 5 mm to 8 mm grades used in orchid mixes, might be considered for inclusion in growing media.

PINE GROVE BROMELIAD NURSERY WARDELL

16 km south of Ballina on the far north coast of New South Wales

Ross Little has taken over the old Buchanan's nursery at Wardell, a favourite stopping-off place for many as they carried a fabulous collection of bromeliads at affordable prices. Web Site: www.pinegrovebromeliads.info

¹ Eric Jordan's background is that of a professional nurseryman. Over the years he has worked with many groups of plants, and in particular he has propagated and done much work with the hybridising of azaleas and vireyas.





Aechmea comata var. makoyana

Aechmea 'Pie'



Aechmea 'Pie in the Sky'



Aechmea pimenti-velosoi

AECHMEA 'PIE IN THE SKY'

By Peter Franklin

(Reprinted from our January 2000 Newslink, the article originally appearing in the Bromeliad Society of Australia's BROMELETTER (date not provided)).

It may seem repetitious since Derek Butcher wrote a similar article to this in January/February 1996 but it seems there is still sufficient confusion in Australian growing circles to warrant another 'Pie in the Sky' article.

Aechmea 'Pie in the Sky' is a name that has been coined to identify a variegated plant that is commonly grown as Aechmea *pimenti-velosoi variegata*. The name *Aechmea pimenti-velosoi variegata* is in widespread use around Australasia. I suspect this name is used world-wide. The reason that a new name was needed was that the plant has very little in common with any description or botanical drawing of the real *Aechmea pimenti-velosoi*.

Aechmea pimenti-velosoi was first described by Raulino Reitz in 1952 from a plant collected in 1951 in the State of Santa Catarina, Brazil. This type plant was supported by another three collections later in 1951 and then by a further two. They were eventually named Aechmea *pimenti-velosoi* var. *glabra*. The plants were placed in subgenus *Ortgiesia* in Smith's 1979 monograph. This is the subgenus that includes *Aechmea recurvata*, *Aechmea gamosepala*, *Aechmea caudata* and so on.

I have been able to find only three illustrations of *Aechmea pimenti-velosoi* in the literature. A colour drawing is in Reitz (1983). Another is a line drawing in Smith and Downs (1979) which seems to have been a copy of the painting in Reitz. Descriptions appear in both these publications. Baensch (1994) has a photograph of an *Aechmea pimenti-velosoi* var. *glabra* (but in reality this seems to be a non-variegated 'Pie in the Sky'. There have been mentions of *Aechmea pimenti-velosoi* from time to time in the BSI Journal but no description or illustration has ever been included.

The distinguishing feature of *Aechmea pimenti-velosoi*, as compared with 'Pie in the Sky' is the scape that is 'wholly covered by the leaf sheaths'. This is the characteristic that is used in Smith's key to Ortgiesia and is evident in the illustrations of Reitz and Smith. Therefore, the real *Aechmea pimenti-velosoi* looks rather like a slightly larger *Aechmea recurvata* var. *benrathii* in terms of overall plant shape and conformance—i.e., with the flowering part pushed down in the throat of the plant. The leaves are relatively narrow. The petals are pale yellow with a reddish-violet tip.

On the other hand, *Aechmea* 'Pie in the Sky' in cultivation has a scape that greatly exceeds not only the leaf sheaths but also the leaf blades. The leaves are relatively broad. The petals are yellow with no extra colour at the tip. There is a strong similarity between *Aechmea* 'Pie in the Sky' and *Aechmea comata*, except that 'Pie in the Sky' is about half the size of even the smallest cultivated *Aechmea comata*.

I believe that there are plants of the real *Aechmea pimenti-velosoi* in cultivation (in NSW at least), almost all of which are simply labeled *Aechmea* unknown, *Aechmea*? or *Aechmea recurvata* hybrid? They match the drawings and descriptions of *Aechmea pimenti-velosoi* perfectly Unfortunately no one seems to know where these unnamed aechmeas came from).

Aechmea 'Pie in the Sky' is a nice little plant worthy of a spot in any collection. It may be a species or a hybrid—we may never know—but whatever the case, we shouldn't use the *Aechmea pimenti-velosoi* name for it, particularly when the real *Aechmea pimenti-velosoi* exists in collections.

TAKE TIME TO SMELL THE BROMELIADS

[Reprinted from the Central Coast NSW Bromeliad Society Inc.'s 'Bromelia Post', October, 2005]

Some of the bromeliads make sure that you know they have a fragrance, others are more subtle. There are those whose aroma is stronger in the daytime—sometimes choosing AM or PM hours—others who prefer to tantalise you in the evening hours. Colour of flowers does not seem to be a factor; they can be yellow, white, green or blue.

Tillandsia usneoides has a pale green flower than can be difficult to distinguish among the foliage, but if you are anywhere in the area around the middle of the day, your nose can lead you unerringly to the source. *Tillandsia cyanea* has clones with large cerulean flowers that emit a delightful spicy aroma. It is not a potent odour, and you miss it if you don't check with your nose. I have found that not all clones have a fragrance, or else was so faint that I couldn't detect it.

Tillandsia crocata has small yellow flowers that remind me of an expensive perfume. If it is grown in an enclosed area, even a few flowers will perfume the air. *Tillandsia mallemontii* is amazing!! This tiny plant should be allowed to become a clump and the aromatic blue flowers will seem to appear almost throughout the year. The fragrance is much stronger in the late afternoon.

Tillandsia caerulea and *Tillandsia humilis* must not be forgotten—they won't allow it! They are both delightful. *Tillandsia nuptialis* and *monadelpha* have little white flowers. Their fragrance is only slight, but is more noticeable in the early evening.

Tillandsia cacticola is very perverse (I used to think that if there was no fragrance, that was one of the identifying features). There are only random clones with a fragrance. I have five different clones and only one has ever had an aroma.

All the *Tillandsia xiphioides* I have seen have had white flowers; however, in *Flora Neotropica, Monograph No. 14*, Lyman Smith and Robert Downs, it states that the flowers can be either white or violet. This is a GREAT PLANT. The silvery foliage is pretty and the beautiful white flowers with an aroma are a welcome bonus. This one beckons with its odour for some distance. *Tillandsia streptocarpa* and *duratii* could never be ignored. Their fragrance is strongest during the day, but they will emit an odour in the evening. Their lavender flowers even seem to retain some of the odour after they have wilted.

Although the largest number of perfumed flowers are found in the Tillandsia, they don't have an exclusive on this feature. *Billbergia horrida* is one of this elite group. It is not an outstanding aroma—not offensive, but rather bland. Some have compared it to the odour of lvory soap.

Some of the vrieseas with white flowers that usually flower at night have a fragrance. I haven't found one that really intrigued me, but I would guess it is Mother Nature's way of notifying the proper pollinators that the flower is ready for pollinating. There is a small catopsis with a yellow flower that has one of the most captivating fragrances I have found. It has absolutely no odour during the day, but is delightful in the evening. I suspect there may be other catopsis with a fragrance, but I just haven't caught them at the right time.

Reprinted with acknowledgement from The Bromeliad Hobbyist, October, 1989

² When reprinted in the New Zealand Journal (December 2005/January 2006), a footnote mentioned the pronounced fragrance of *Neoregelia odorata.*

FRAGRANCE IN BROMELIADS

Greg Payne

[Taken from The Journal of the Bromeliad Society, November-December, 1994 Vol. 44 No.6 – it first appeared in the February 1994 issue of The Bromeliad News, the newsletter of the Sacramento Bromeliad Society]

A while back I was asked about how one locates fragrant tillandsias. I responded that there was no one complete source, that sources were scattered across the country and, in my experience, there wasn't even a good list of what to look for. Although true, I was not comfortable with that response. There had to be a better answer.

There's good news and bad news. First, we'll dispense with the latter. Fragrance among bromeliads can be considered a novelty, with probably fewer than one percent of the species falling into this category. There are, however, more fragrant Tillandsia species than in any other genus, which is good news as they are generally more available and more practical for collecting. Among these tillandsias, the xerophytic species tend to possess the stronger fragrances.

My exposure to fragrant tillandsias was the highlight of my first bromeliad show. Apart from the fantastic shapes and colors, those fragrances made a strong impression. I started a want list culling likely candidates from shows and references in magazines, books, and catalogs. The desired plants were slow to come by. So slow that fragrance eventually took a back seat to choices of shape and color. Whenever I saw a bromeliad I like, I would ask if it was fragrant. It rarely was, of course, but another plant, which was fragrant, was sometimes suggested. There were easier hobbies but I persisted. The want list grew faster than the list of those found.

Serendipity factored in a few plants I bought simply on account of their shape. It was more than a pleasant surprise when I discovered the fragrant blooms. One, *Tillandsia scaligera*, which was not on my list, I acquired at the 1992 BSI World Conference from California Gardens. A couple of *Catopsis* species proved to be very fragrant. They were among miscellaneous, unidentified Mexican species from Pamela Koide of Bird Rock Tropicals. An otherwise unassuming plant with a fragrant bloom can become a quiet charmer.

Since we are thinking about a poorly defined subject, let me offer my observations about methods of pollination and fragrance. Most bromeliads are pollinated by birds. These plants produce larger amounts of nectar and have no fragrance. Their colors are shades of red and orange. The remaining bromeliads are pollinated by moths, bees or butterflies, and a few other insects. Among these are the fragrant bromeliads whose colors tend to be paler: whites, yellows, and yellowish orange, lavenders, olives, and browns. Moth-pollinated species are nocturnal bloomers having larger blooms and a fragrance that is strongest from dusk to dawn. Those pollinated by bees and butterflies and the like have smaller flowers but also may possess the more intense fragrance. Among these, the xerophytic tillandsias are well represented.

Although the appeal of fragrance is universally observed, an individual's measure of it remains colored, in no small way, by personal preference. Our sense of smell is inextricably influenced in the present by environmental factors, sentiment, matters at hand, etc. More subtly, it becomes linked to memories elicited: things tied to a prior time, place, and emotion. We do not have the same olfactory references. What is enjoyable to one, might bring nausea to another. It seems a stretch that the same nose that savors an eye-smarting slice of limburger cheese can appreciate the bouquet of a rose. Apart from such extremes, we have varying delights within that range. Unlike the quantitative traits of color or sepal characteristics, the description of a fragrance remains a personal observation and can be related only in general terms. Personal preference is hard to judge.

The English language holds us at a slight disadvantage as well. It is easier to describe an unpleasant odor than a pleasant one. Unpleasant adjectives far outnumber pleasant ones. Disagreeable odors can be a source of humor and practical jokes, of derision, or even an indicator of ill health. Pleasant odors, on the other hand, connote ease and well-being and are just pleasant—unless overbearing, and then they stink.

Consider the foregoing and compound this muddle with bloom times and variables of humidity, temperature, and wind, which affect the perceived fragrance. Add to this the thoroughness exhibited by the taxonomist and we have some idea for the casual information on fragrance among bromeliads.

Not all bromeliad odors are equally engaging. Should you want a plant with a meaner air, consider *Billbergia horrida* whose scent has been compared to urea. Another charmer is *Vriesea jonghii*. Werner Rauh has likened its bouquet to opossum. Some of the not-so-fragrant Dyckias remind me of a snout full of back-road dust. The fragrant neos are intriguing, but their delicate scent must compete with the algae present in the cup. The nose is quick to note the spiny-edged leaves.

My list began with three plants: it now contains more than forty. Knowing what to look for helps immensely. With a bit of research, one might limit selections by size, flower color, or even requirements of culture, which range from xerophytic to terrestrial, full sun to shade. Nearly half of these plants are readily available, but perhaps not all from the same source. Some suppliers annotate their lists for fragrance. Among them are Holladay Jungle, Pineapple Place, and Tropiflora. With a sharp eye and a list you may be in for a welcome surprise at your local plant table or nursery.

The next time the questions about fragrant tillandsias arises, I will be better prepared. Meanwhile, for an added dimension to this esoteric pursuit, keep those olfactories prepared. You never know what a visit to the greenhouse or show might reveal.

Tillandsia arhiza	Tillandsia peiranoi	Cryptanthus odoratissimus
Tillandsia bandensis	Tillandsia polycarpa	
Tillandsia crocata	Tillandsia purpurea	Dyckia chlorosticta
Tillandsia cyanea	Tillandsia reichenbachii	Dyckia odorata
Tillandsia diaguitensis	Tillandsia scaligera	
Tillandsia disticha	Tillandsia straminea	Neoregelia chlorosticta
Tillandsia dodsonii	Tillandsia streptocarpa	Neoregelia laevis
Tillandsia duratii	Tillandsia usneoides	Neoregelia olens
Tillandsia dyeriana	Tillandsia venusta	Neoregelia oligantha
Tillandsia hamaleana	Tillandsia yuncharaensis	
Tillandsia kuehhasii	Tillandsia xiphioides	Vriesea fenestralis
Tillandsia mallemontii		Vriesea fragrans
Tillandsia monadelpha	Aechmea cylindrata	Vriesea cylindrata
Tillandsia myosura	Aechmea purpureorosea	Vriesea gigantea
Tillandsia narthecioides		Vriesea racinae
Tillandsia palacea	Catopsis nutans	Vriesea regina
	Catopsis wangerinii	3

PARTIAL LISTING OF FRAGRANT BROMELIADS

'GEORGE'S HOOKS': A SPACE-SAVING WAY FOR MOUNTING TILLANDSIAS

(Extracted from the November/December 2006 issue of the *Bromeliad Gazette*, the newsletter of the Bromeliad Society of South Australia)

A member of the South Australian Society (George) has taken up the idea he saw when translating some of the past editions of *Die Bromelie*—the German Society Journal. In Europe they grow tillandsias outside in the summer and bring them indoors or into a heated glasshouse for the winter, so that space is at an essence in the winter and if you can save hanging space so much the better. Using wire coathangers George twists into the middle part of the 'S' hook a wooden toggle which is hollow. Tillandsias can then be attached either end or both ends using the trusty sealant. While in Germany they can have long strings of these hanging one under the other we do suggest that in our conditions (Adelaide) you only have 3 or 4 at the most. See photo below.

Another member, Len Colgan, did try to stand up for the 'pot' brigade by saying that the Germans now recommend the growing of saxicolous species (those that prefer to grow on rocks) in pots rather than mounting. To each his own because we do know pot culture wastes space and the Germans do resort to using 'George's Hooks!

(On reading this, I did wonder where I might get the toggles, and further down in the Newsletter I found that if you're into wood turning—or have a friend in wood turning—then that would be the way to go!—Ed.)





HEALTHY FRUIT CAKE

(Submitted by Pat Alton)

500 g mixed dried fruit

- 1 cup apricot nectar
- 1 teaspoon honey

1-2/3 cups self-raising flour

- 1 teaspoon mixed spice
- 1 teaspoon bicarbonate of soda
- 1 cup cold mashed pumpkin
- Combine fruit, nectar and honey in a large bowl. Stand covered for 1 hour.
- Stir pumpkin into fruit mixture, then stir in sifted flour, spice and soda. Spread mixture into greased and base-lined 14 cm x 21 cm loaf pan. Bake at 180C for 1 hour or until cooked when tested with a skewer. Remove pan from oven and cover cake with foil. Turn cake from pan when cool.

Cake will keep for several days in an airtight container-or freeze for up to 2 months.





DAPTO RIBBONWOOD CENTRE VISITORS' MAP



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