Bromeliaceae

VOLUME XLIII - No. 6 - Nov/Dec 2009

The Bromeliad Society of Queensland Inc.

P. O. Box 565, Fortitude Valley
Queensland, Australia 4006,
Home Page www.bromsqueensland.com

Editors Email Address: rossjanstenhouse@hotmail.com

Front Cover:	*Ae. brassicoides*	Photo by Ross Stenhouse
Rear Cover :	*Tillandsia 'Creation'*	Photo by Ross Stenhouse

Contents

Note from the Editor's Desk

Recently I spent a Saturday afternoon at the Society's Spring Show. What a great event, not only were there a lot of plants on sale, there was a great plant show to look at and enjoy. I did my usual thing with member Rob Reilly - photograph many of the outstanding plants. Rob would select which ones to photograph and I did the technical thing of operating the shutter. We took over 300 images of over 90 individual plants in two hours - hard work!

After the fun thing of a photographic shoot, the hard work began, I had to go through the images I have taken, rename the file name to reflect the plant genus and species and try to ensure that no errors are made. With the Spring Show shoot I tried to ensure that I included the label in at least one of the images. What I then did is look up the www.fcbs.org photo index to check that things are as they should be.

That brings me to a point that became obvious to me, if the plant is unregistered, it isn't on the FCBS site thus it cannot be easily identified and anyone can call their plant, what-ever-it-is, by any name. Coupled with unclear labels and mis-spelling, the result is the same, a hybrid ending up with different names. I found myself asking the question "Is this plant what the label says it is?" With a registered plant, a look at the image in the FCBS photo index and a degree of verification can be made. I will concede the point that some of the images on the photo index could be of a higher standard, however my experience is that poor as some of the images may be, most are a great help with plant identification.

Its simply a case of no registration, no official standing. Just speculating, maybe only registered plants should be eligible to be entered in plant competitions. That would "encourage" the registration of hybrids. You can anticipate such a rule would cause howls from many competitors. I suggest that the best interests of the majority of bromeliads enthusiasts would be well served by strong steps being taken to have hybrids registered!

Tillandsia barclayana var. *minor* - This is a scan of the original herbarium specimen made in 1888 and is almost lifelike. Such scans mean that anybody can look at these priceless artifacts without damaging them

Names and synonyms

by Derek Butcher 11/2009.

I think we all know that when a species is created it must be published in a 'recognised' Journal and at least one copy must be sent to Harvard so details can be entered in the IPNI (International Plant Names Index). Minimum information is that some of the description must be in Latin and there must be a holotype herbarium specimen.

But what about the situation when a taxonomist considers that the new named plant is superfluous and is synonymous with a previously described species or wants to change it to a different genus. This information must also be published in a recognised Journal to be valid but the reasons for such a move need not be given. The other problem is that this is considered to be only a taxonomic judgement and needs acceptance by most his peers for it to be accepted. Note there is no time restriction on this. With Bromeliads we have the Bromeliad Identification Centre under the auspices of the BSI and currently run by Harry Luther. Decisions made by Harry appear in the biennial Binomial Listings but there is no reference to synonyms. You pick these up when a name disappears from the following list.

I like to know where a name has gone to and as such, based the names appearing in the species data base on fcbs.org on this philosophy. If someone proposes a change I record this as well, with a note as to whether it was generally accepted by peer review.

When some moves are made especially in large batches errors are made and I note these too after telling the taxonomist concerned that I think they have missed something. I leave it to the taxonomist to correct these himself!

As an example we can look at Pepinia which has moved in and out of Pitcairnia and I and others have decided that Pepinia does not warrant genus status. In the move from Pitcairnia to Pepinia the taxonomists did not move all the plants concerned so you still have a Pepinia species but some of the varieties of that species still treated as Pitcairnia!. Confused? This is why I have noted these anomalies.

We now move to the main reason for this article. In 1993 and 1994 Jason Grant published the moves of the 'Colombian' Vrieseas that look like Tillandsias to Tillandsia. This was prompted by many factors but one was the fact that petal appendages were only significant at species level not to separate a genus. Yes, it has taken this long to process this move but recent pressure from Europe has helped my making a decision.

In my 'loving to ask questions' I found that Jason had missed transferring *Vriesea barclayana* var. *minor* and *Vriesea pereziana* var. *canescens*, and at his request I do this forthwith

Tillandsia barclayana Baker var. *minor* (Gilmartin) Butcher comb. nov. BASIONYM: *Tillandsia lateritia* Andre, Enum. Bromel. 6. 13 Dec 1888; Revue Hort. 60: 566. 16 Dec 1888. TYPE. Andre 4057 (holotype K, type of *Tillandsia lateritia* Andre, GH photo), Saballetas at foot of Chimborazo, Bolivar, Ecuador, Jul 1876.

I enclose a scan of the herbarium specimen courtesy of Kew Gardens.

Tillandsia pereziana var *canescens* Andre, Enum. Bromel. 7. 13 Dec 1888.

TYPE: COLOMBIA, Quebrada de las Juntas, "Ecuador," The only "Las Juntas" found in Andre's itinerary is in Valle, Colombia. Andre 4392 (holotype K, K photo 7439). *Vriesea pereziana* var *canescens* (Andre) Gilmartin, Fl. Neotrop. Monogr. 14(2): 1258. 1977

Premature Flowering of Bromeliads

Author: Peter Paroz

After returning from an interstate visit, I noticed that some immature offsets were developing flower spikes. On recollection, I recalled that there had been grass fires some weeks previously from burn-off of fuel prior to the bushfire season.

The premature flowering was very likely caused by the smoke from these grass fires; the causative agent being minute amounts of ethylene caused by the incomplete combustion of the grass. Ethylene is a simple hydro carbon that is quite phytoactive*.

Ethylene is used in the artificial ripening of pears, mangoes and apples. In bromeliads, in minute quantities, it causes the meristem (growing tip) of the plant to stop producing leaves and initiate flowering.

This effect can occur in quite immature offsets or seedlings; and can be damaging to plants which have not accumulated sufficient nutrient and energy reserves to mature a flowering stem. For valuable plants growers should consider removing the flowering stem as soon as it appears.

More detailed articles on flower initiation can be found in older issues of the BSI Journal and Bromeliaceae.

*Phytoactive: Having an effect on plant growth

The BSQ Web Site

Don't forget that the society has a web site. We place urgent and general information and information on the site.

The URL is:

www.Bromeliadsqueensland.com

Book Review: The Green-Blooming Small Grey Tillandsias from Mexico

(By Bob Reilly)

This book was written by Renate Ehlers, and published by Deutsche Bromelien-Gesellschaft e.V. in 2009. The English translation was done by Derek Butcher and Dr. Klaus Eistetter. (The book's complete text is in both English and German).

The book is 144 A5 pages and has over a 100 excellent, colour photographs. Maps illustrating the distribution of the tillandsias covered in the book are also provided.

The tillandsias' range and natural growing conditions form the opening component of the book. Information on growing conditions is particularly useful, as it provides insights as to how best to grow the plants in cultivation.

Renate then describes the botanical inter-relationships between the various species which have strong linkages to *Tillandsia plumosa.*

She then provides botanical descriptions, habitat information, and growing tips (for German growing conditions) for the following species: *plumosa, atroviridipetala, atroviridipetala v. yagulensis, atroviridipetala v. longepedunculata, mauryana, mauryana fo. secundifolia, ignesiae, caballosensis, grandispica, boqueronensis, penasconensis, teloloapanensis, lepidosepala, tortilis* and *curvifolia*. (The species underlined are botanically described for the first time).

In all cases, there are excellent, close-up, colour photographs of flowering plant(s) of these tillandsias. Habitat photographs are also often provided.

The book concludes with distribution maps, a botanical key, list of references, and acknowledgements.

This book is similar in style to the **Tillandisa Tectorum Complex** by Leiselotte Hromadnik. (It was published in 2005 by the same publisher).

This book is worth reading by anyone interested in bromeliads. If you are a tillandsia collector, it is well worth buying.

It can be borrowed from the Society's library. Copies can be purchased from the Society, but only a limited number are available.

Pollen Stretching

(by Andrew Flower)

Editorial comment (Bob Reilly). In this article, Andrew Flower, a well known New Zealand tillandsia grower and hybridist, describes how to extend the period of time over which pollen from a given plant remains viable and available for hybridising.

Reprinted, with permission, from the Journal of The Bromeliad Society (1995(v. 45(3), pp 129-130.

The goal is to obtain viable seed from bromel species – for me, this means primarily the grey-leaved Tillandsioideae. The problem is, few species are self-fertile if you have only one clone and have to rely on human-made environments. In my area, sometimes even a batch of seedlings sharing the same mum will not interbreed.

My solution is a two-step process: first obtain plants of the same species from different populations, second, breed between them. Sounds easy if you say it quick, but nature has a few tricks yet. Take my two *Tillandsia kolbii* for example: #260 was imported from the U.S. in 1990; #261 was imported in 1992 from a different nursery. Each year, #260 flowers between mid-September and late October (southern hemisphere) and each year #261 flowers almost exactly three weeks after the last flower has finished on #260. The most straightforward method for breeding under these circumstances is to store pollen from the earlier flowering plant (one could presumably delay flowering of the earlier one, but I have not tried that).

We are fortunate that the techniques for storing pollen are well tried, simple to effect,

Tillandsia pereziana var. *canescens.* This is a scan of the original herbarium specimen made in 1876

and work well for bromels. As a result, each year I am able to breed between #261 and #260 and have been successful with stored pollen on a number of other species. The longest storage period I can be reasonably sure of for a successful cross of mine was two months but longer storage should be possible.

The basic principle for storing pollen: keep it cool and dry.

The effective environmental ranges for storing pollen from most plants are 10% to 50% relative humidity and to 0° to 10° C (Hartman and Kester, 1975). The main difficulty is with the relative humidity (i.e. the amount of moisture in the air relative to the temperature) because it increases as the temperature falls.

Just wrapping the pollen in a small piece of clean hard paper and keeping it for a day or two in the refrigerator should be enough to keep the pollen alive – but under these conditions mould and mildew soon appear and destroy pollen (Beadle, 1992). If you want to keep the pollen for any longer period you need to take steps to keep it dry. The official method is to store it in a desiccator over a moisture-absorbent material such as calcium chloride or sulphuric acid.

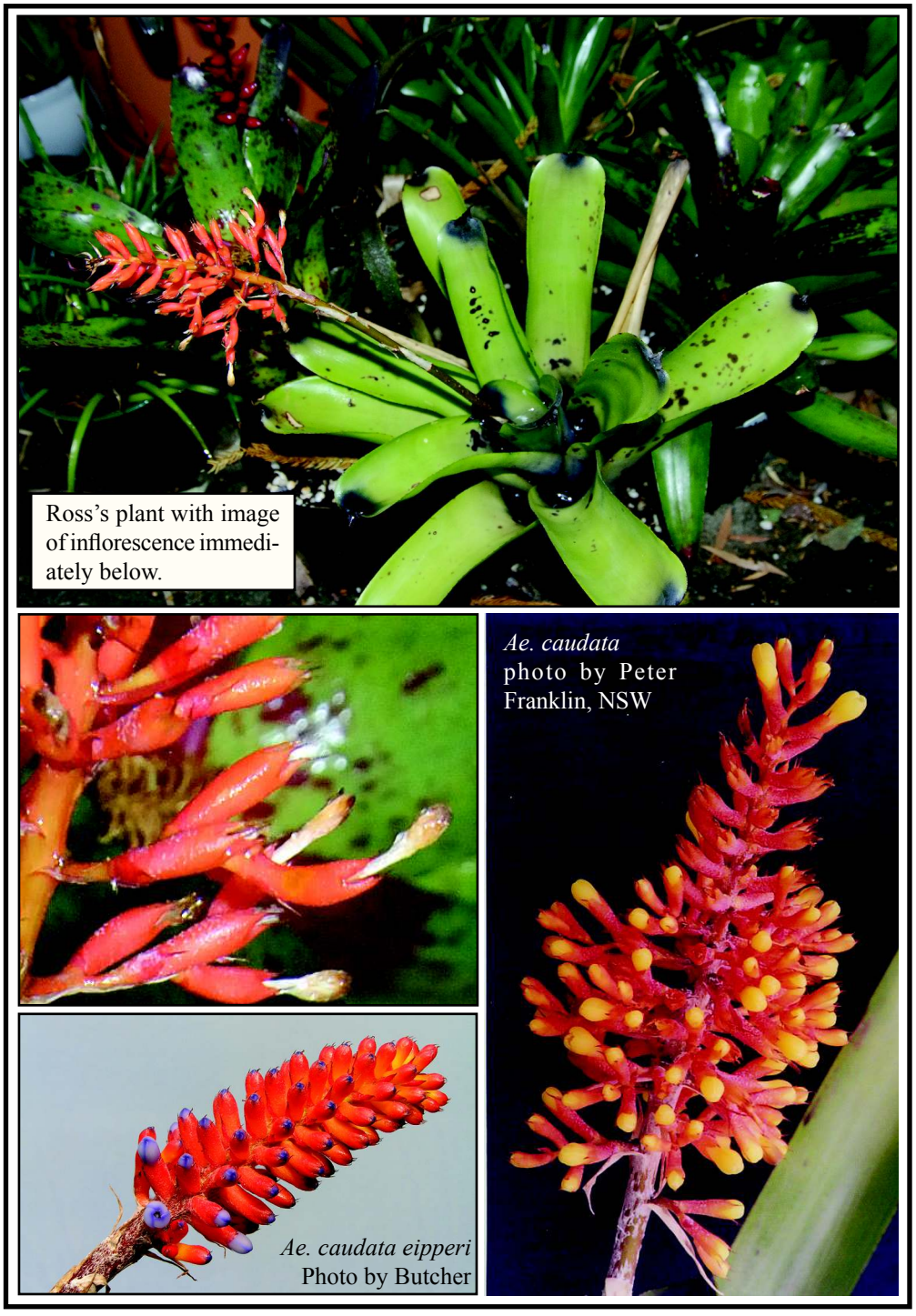
The method I use is to scrape the pollen onto a small piece of paper (I have used ordinary writing paper successfully) about 5 cm square, fold the paper around the pollen, place it in a small glass bottle with some absorbent material, then put the bottle in the dairy compartment of my refrigerator. The temperature in there ranges from a mean 5°C in summer to 3°C in winter.

Don't use plastic containers; they may produce toxins deadly to pollen. So far as the absorbent material is concerned, calcium chloride would be fine. When I started storing pollen, the local pharmacy didn't have any so I bought some silica gel. That is good material because the crystals are blue when dry then turn pink as they become saturated with moisture. So I can keep an eye on the pollen jars, and replace the silica if they are starting to turn colour. Saturated crystals can be dried out in the oven then reused. When using stored pollen to fertilise a plant, I use it straight from the refrigerator without letting it warm up first.

Pollen storage is effective when you follow the basics of keeping it cool and dry and can be a major tool for developing seed propagation in cultivation before adequate stocks of breeding plants have been built up for a given species.

Membership Fee Increase

As from February 2010 the membership fees will be $35 per year single/$40 family. So if you are renewing your membership, please ensure you forward the correct amount


Ross's plant with image of inflorescence immediately below.
Ae. caudata
photo by Peter Franklin, NSW
Ae. caudata eipperi
Photo by Butcher

Aechmea caudata

by Derek Butcher 10/2009.

Editorial Comment:(Ross Stenhouse) When I asked Derek about the identity I didn't realise just what a can of worms I had opened. I just liked the plant and wanted to confirm its identity.

This all started out when Ross Stenhouse asked me to identify a photo he had of a supposed *Aechmea caudata* and I couldn't answer him. Such are the problems of trying to identify a species that cannot be traced back to somewhere in its country of origin. This is what all taxonomists do whereas we, as gardeners have a much more challenging problem if we want to get close to the truth. I say 'want' because many are satisfied with the name on the label or are even happy without a label. Or shudder shudder accept identity on Ebay where 'Caveat Emptor' (Let the buyer beware) applies.

From the 1960's we have been dogged with the problem as what is *Aechmea caudata* and that was when you had to understand Latin to read Mez's Reference book. It was before Smith and Downs in around 1979 and yet how many of you refer to this work when trying to identify species plants?

Just a bit of history I could glean

From J Brom Soc 28:125-7. 1978 An Aechmea Hybrid by Bernard Stonor

However, the pollen parent is a problem plant. It is usually grown in Australia under the name of *Aechmea caudata*, but the description of both the plant and the inflorescence differ from those given in the books and keys. The plant, for instance, has large blue-black tips to the leaves. The inflorescence is glabrous but still flocculose.

We now know that this species can have blue-black tips to the leaves. Back then I grew this plant with blue-black tipped leaves for many years but it never flowered in Adelaide which is all the more pertinent when you read the following

From Bromeletter 24(3): 6. 1986 by Olwen Ferris

Aechmea caudata - (Free flowering type). This was also smaller than the type I already had. (Later I sent a number of forms to Dr L.B. Smith for identification, as some growers were calling this smaller form by another name. Dr Smith said that this plant came from a wide area and varied somewhat, so there were all forms of *Ae. caudata*.). This is also good as a hanging basket specimen.

The problem here is what was this 'other plant' called and in those days we had very little access to coloured photos.

The next step is to give you something to refer to, where we have *Aechmea caudata* var *caudata,* var *variegata,* var. *eipperi,* and *forma albiflora.* To my mind var.*variegata* has never been found in the wild and should have been given a cultivar name!

Ae. caudata seedling
photo by Peter Franklin
Something odd here

A. caudata var. *albiflora*
photo by Mick Romanowski,
Vic.

A. caudata
photo by Warwick Varley, NSW

Above: *A. caudata* var. *eipperi* photo by D Butcher

Aechmea caudata var caudata Lindman, Svensk. Akad. Halldl. 24(8): 29, pl. 6, figs. 1-9. Feb 1891.

Description from Smith & Downs

• Plant flowering to 9 dm high.
• Leaves 10-15 in a broadly funnel form rosette, 5-10 dm long, minutely appressed-lepidote;
• Sheaths ovate or elliptic, distinct or obscure, entire, brown toward base;
• Blades ligulate, broadly rounded and apiculate, to 8 cm wide but often much narrower, laxly serrulate with spines less than 1 mm long, sometimes dark toward apex.
• Scape usually erect, 4-10 mm in diameter, white-flocculose;
• Scape -bracts erect, lanceolate, acute, entire, membranaceous, red, subglabrous, the upper usually much longer than the internodes.
• inflorescence densely or sub densely paniculate, 10-25 cm long, to 11 cm in diameter, bipinnate to the middle or higher and the remainder simple, white-flocculose;
• Primary bracts like the scape-bracts, usually shorter than the branches;
• Spikes spreading, laxly 4-7-flowered; rhachis slender, strongly geniculate.
• Floral bracts ovate, attenuate to a slender brown spine, 7-17 mm long, entire, nerved, red, the margins free from the rhachis;
• Flowers sessile, spreading, 18-25 mm long.
• Sepals 7-11 mm long including the long spine, connate;
• Petals ligulate, obtuse, 12-15 mm long, yellow, turning purplish on drying, bearing 2 small scales at base;
• Stamens shorter than the petals, pollen biporate;
• Ovary sub cylindric, epigynous tube evident, crateriform; placentae extending nearly the full height of the cell; ovules obtuse.
• Type. Mosen 3242 (holotype, S), Ponta de Taipu, Sao Vicente, Santos, Sao Paulo, Brazil, 20 Apr 1875.
• Distribution. Saxicolous on coastal ledge to epiphytic in forest, from near sea level to 900 m alt, Espirito Santo to Rio Grande do Sul, Brazil.

Aechmea caudata* var *variegata M. B. Foster, Bromel. Soc. Bull. 3: 47. 1953.

• Leaf-blades with broad white longitudinal stripes.
• Type. Foster 2834 (holotype, US), cultivated, from Brazil, June 1955.
• Distribution. Unknown.

Aechmea caudata Lindm. 1891 forma albiflora Weber et Roeth, Feddes Repert. 93: 337. 1982

• Differs from type by having totally white petals
• Habitat: Brasilia sine loco, leg. .AMANDA et MICHAEL BLEHER s. n. fl. in Hort. Halensis 18. 12. 1980, Holotype: WEB 252.

A***echmea caudata Lindm.* var. *eipperi*** Reitz, Sellowia 17: 41. 1965.

• Petals pale blue, tip totally blue
• Type: S. Catarina. Araquari. legit E. J. Eipper s. nr. (29.8.1962). HBR.

Named in honour of E J. Eipper.

Notes from 'Bromeliaceas' by Reitz 1983 p390

• Ecological Observations- The plant has a similar flower to *Aechmea organensis*, diverging of this especially for its robustness and the color of the rachis, of the scape bracts and floral, as well as of the ovary, that are red-orange, and everything as in *Ae. organensis* and of color red-wine (fide Reitz); flowers with petals clear-blue and strong-blue apex; characteristic and exclusive to the flora of the wet Atlantic forest in Santa Catarlna, where it has restricted and inexpressive dispersion.

BRAZIL: At the moment only known by the clonotype. Lyman B. Smith & R. J. Downs (1979) as they didn't see the holotype, only copy of the herbarium specimen, suspected it was a variety of *Aechmea organensis*

Wawra. However the clone that supplied the type var eipperi Reitz, has been cultivated by several bromeliad growers, and by me, in Itapema, SC. It varies a lot from *Ae. organensis* especially in its robustness the color of the rachis, in the scape and floral bracts, as well as the ovary, that are red - orange, and everything else in *Ae. organensis* and of color red-wine. The specimens of *Ae. organensis* that I collected in São João, Morretes, in Paraná (R. Reitz nrs. 5729 and 5753) were healthy and much smaller than the var. eipperi Reitz, dominating in the color red-purple or red-wine in the inflorescence, except the petals that naturally are blue.

Aechmea Caudata v. *Eipperi*

by Derek Butcher in Bromeletter 6: 10. 1994

You can blame this article on Peter Franklin because you will remember him challenging me in Bromeletter March/April to translate from Portugese to English the details of this rather interesting variety.

Reitz maintains this is a blue flowered "caudata", but Lyman Smith suggests this may be synonymous with *Ae. organensis*. The cynic in me suggests that because Lyman Smith based his key for subgenus Ortgiesia on petal colour a blue coloured "caudata" would not fit!

Anyway, I started translating that part in Reitz's book "Bromeliaceas" which I had been asked to do. Reitz clearly believed that his plant was closer to *Aechmea caudata* than *Ae. organensi*s. According to Reitz it differed from *Ae. organensis* by the strength and colour of the rhachis, the bracts exceeding the flowers and the ovary a healthy reddish orange compared to the wine red of *Ae. organensis*. I could not find a full description

of this variety although this could be in Sellowia in 1965 when Reitz first described it (It isn't!). All we really know is that this variety differs from the type *Ae. caudata* by having clear blue petals with darker blue tips.

I am sure that those who have read so far will be asking themselves why is he telling us this. The keener growers will be pleased to know that this plant is in Australia, AND authenticated.

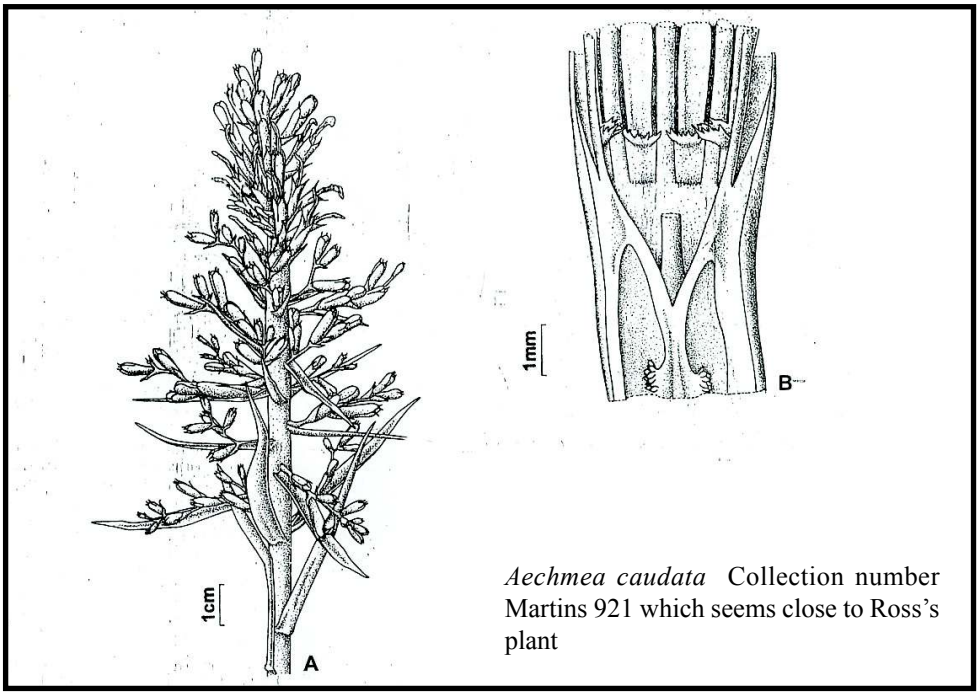
Grace Goode tells me that the plant has a brilliant inflorescence, cone shaped with a wide flat base, deep blue petals with yellow sepals which gradually turn orange. Not an outstanding plant, but the colourful inflorescence makes it worthwhile growing. The structure of the inflorescence in no way resembles what we consider to be typical of *Ae. caudata* which is branched in the lower portions. The scape is very thick.

This last comment tends to equate with Reitz's comment on the strength of the rhachis. Normally rhachis means the stem within the actual inflorescence, and not the flower stem (or scape) but this could be a translation problem.

If all the other species in the *Ortgiesia* group are anything to go by, this should have had species status in the first place. It does seem that we should keep the old name *Aechmea caudata* v. *eipperi* despite it being misleading.

Harry Luther was involved when Grace first got her plant, and I did write to him seeking clarification because it seemed he disagreed with Lyman Smith's views. He confirmed that *Aechmea caudata* v. *eipperi* appears to be an *Ae. caudata* with pale blue flowers. It is not *Ae. organensis* as far as he could see. BUT *Ae. caudata* appears to be a variable mess, maybe several things.

The Ortgiesia group is probably the most popular of the aechmeas in Australia, and there are misnamings galore. Just one



Aechmea caudata Collection number Martins 921 which seems close to Ross's plant

example - what does a true *Aechmea gamosepala* look like?

To give you an idea of what to expect from this species in Australia we have a series of drawings of wild plants to give you an idea of the range and a series of photos to show you how we have interpreted these with plants grown in Australia.

First I must warn about growing from seed because this species is one of the many that is promiscuous. Just one example follows.

Aechmea caudata v. *eipperi* or 'Grace's Blue'

by Derek Butcher 2001

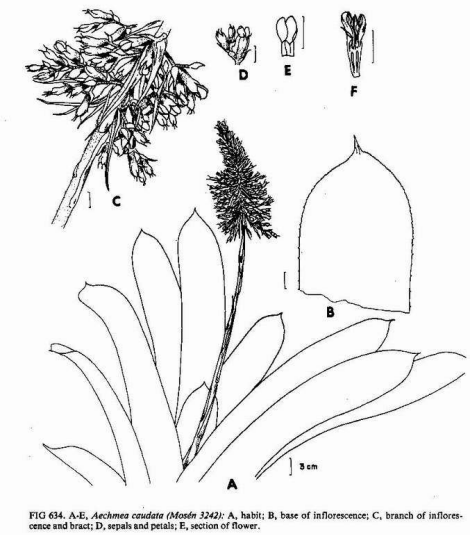


FIG 634. A-E, *Aechmea caudata (Monón 3242)*: A, habit; B, base of inflorescence; C, branch of inflorescence and bract; D, sepals and petals; E, section of flower.

It must be 5 years ago that I wrote in Bromeletter about this plant and shortly after the article I received an offset from Olive Trevor and seed from Grace Goode. The plant flowered and the seed germinated. Grace had got the seed from a plant that Harry Luther had verified was in fact *Aechmea caudata*

Ae. fasciata var *purpurea*

Ae 'Kiwi' photo by Jarka Rehak

Ae 'Kiwi'
photo by D Butcher

var. *eipperi*.

Anyway, photographs of the now flowering offset from Olive were investigated by Peter Franklin and myself and linked in very closely with Grace's plant that Harry had verified. Peter Franklin and myself's only gripe was why it was not called *Aechmea eipperi* in the first place! Reitz said the plant looked like an *Aechmea caudata* but Lyman Smith thought it looked like *Aechmea organensis*!

You may be interested to know that photographs on the Internet Web Sites suggest that the Americans do not know what a true *Aechmea caudata* var. *eipper*i looks like (except Harry Luther!)

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

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

Still, as I say, ad nauseam, on the Internet "Never trust the name on the label. Always check it out. Its fun!"

Aechmea fasciata - Real 'Stunners' With An Interesting History

(by Gerry Stansfield)

Reprinted, with permission, from the Bromeliad Newsletter, July 2004, v.22(7), pp 8 – 10.

Aechmea fasciata is naturally found on trees in the mountain forests of southern Brazil at elevations of 1,800 ft (540 m) to 4,000 ft (1,200 m) and in areas around Rio de Janeiro and the Distrito Federal in Buenos Aires. It is known for its beautifully proportioned vase-like form, wide greenish leaves barred with wide silver cross bands and its typical and very striking rose to candy-floss pink inflorescence, with blue flowers. The pink spike can last for up to six months or more and so it's no surprise that this easy to grow and easy to care for plant is extremely popular with nearly every bromeliad lover.

Our story about *Aechmea fasciata* really begins back in the 17th and early 18th centuries. In those days the botanists and collectors were often just starting to see their


Ae. 'Fireman Sam' is really a form of *Aechmea dealbata*. In fact Lyman Smith in 1932 treated *dealbata* as a synonym of *A. fasciata*
Ae. fasciata clone
Ae. fasciata var *purpurea*
Ae. "Felicity' (Unreg)

first bromeliads and so it is little wonder that many of the original names they gave to particular plants are not the names that have evolved and that we use today.

We do know that was it first introduced into cultivation in Belgium in 1826 under the name of *Billbergia rhodocyanea*, and it was one of the first bromeliads to be seen there. In some areas of Belgium the plant is still known by that original name today.

In 1828, Professor John Lindley, who was a professor of botany and a diligent administrator of the Horticultural Society of London (now the Royal Horticultural Society), renamed the plant *Billbergia rhodocyanea*, In 1830 it was called Hohenbergia fasciata. In 1847 the French botanist Charles Lemaire described this same plant as *Billbergia rhodocyanea*, while ten years later in 1857 the Austrian botanist, Georg Beer, described it as *Hoplophytum fasciata*. Other names such as *Aechmea leopoldii, Aechmea rhodocyanea* and *Quesnelia rhodocyanea* have also been recorded.

Confused? Well, our wonderful subject was finally given its permanent name of Aechmea fasciata by the Englishman Gilbert Baker, in 1879. Baker was a botanist of repute, well-known for his ability to correctly name many different plants.

The word 'aechmea' is from the Latin 'aichme' meaning a point, in reference to the calices (calyx) or the outer protective covering or envelopes as they are called, of the flower.

Aechmea fasciata flowered for the first time in Kew Gardens in England in 1878. Today it is still the most widely cultivated decorative bromeliad in Europe, especially popular in Belgium. Its many horticultural forms have slightly changed its original appearance, and here we are referring to the many fine clone forms that have evolved, such as German Auslese or Super Auslese as it was usually known, 'Morgana', 'Silver King', v. purpurea and so on. It still rates as the number one house plant in America, as the plants are easily pollinated, providing another plant is used as the pollen parent. *Ae. fasciata* will not accept its own pollen but the seed is easy to grow, even though it does take nine months for the seeds to ripen. Many large nurseries around the world grow thousands of the plants each year for special occasions and with the new flowering inducement pills, or 'Ethrel', thus *Aechmea fasciata* can be presented on demand in a most attractive manner to the public.

Let us look now at some of the very lovely improved clones this plant has produced. The first we have is *Aechmea fasciata* 'Super Auslese'. This was developed by Walter Richter, the famous German horticulturist, and the seed was made available through the very large seed merchants Albert Schenkel in Hamburg. Charles Allen (now deceased), and myself imported the seed into New Zealand from Schenkel. Super Auslese loosely means superior or best type, and this fasciata is definitely one of the best. A quite large plant with wide flowing leaves and strong markings and almost all over silver banding. One of the advantages of this plant is that the Germans seem to have successfully bred out the knuckling seen in many American fasciatas. The other point is that Super Auslese was the forerunner of the now popular 'Morgana', which was produced by Cornelius Bak in Holland.

Fasciata 'Variegata' makes a very lovely house plant, while *Albomarginata* is one of my favourites. Then we have *Ae*. var *purpurea* which makes a very attractive pot plant on your patio and should be grown a lot more than it is. We have the lovely giant form of *purpurea* in Sangria. Down under *Aechmea* 'Kiwi' was raised by our own Bea Hanson from a packet of Ae. *fasciata* v. *pur-*


Ae 'Fascini'
photo by Jarka Rehak
Ae. 'Fascini' *variegated*
Photo by J. Catlan
Ae 'Pink Rocket'
Ae. 'Fascicaulis'
Photo by D Butcher

purea seed from the BSI seed bank back in 1980 and was registered *Ae.*'Kiwi' by Bea. The plant has consistent red-brown striping in the leaves, and has a very striking appearance. There is an extremely interesting point with *Ae*. 'Kiwi' in so much as the plant is self pollinating and sets seed from which you will grow back the original *Ae. fasciata* v. *purpurea.* Two others that we do not see very often are 'Ivory' and 'Red Spike'. The first has a pure white flower spike, and 'Red Spike' has a red spike instead of the usual pink.

***Aechmea fasciata* hybrids.**

It is strange, to me anyway, that fasciata has not been used as much as one would think to produce hybrids. There are a number in the BSI registry, but not that many considering the lovely capabilities of the plant. Perhaps it is time to do something about that!

Aechmea 'Fascini' a cv. of *Ae. chantinii* x *fasciata.* Williams 1969

Aechmea 'Pink Rocket' a cv. of *Ae. fendleri* x *fasciata.* Nat de Leon 1981. Nat de Leon is one of the few to register fasciata crosses.

Aechmea 'Fascicaulis' a cv. of *fasciata* x *nudicaulis* v. *nudicaulis*. Nat de Leon 1984

Aechmea 'Cosmic Starburst' a cv. of *fasciata* x *tessmannii*. Kent 1977

Aechmea 'Eileen' a cv. of *fasciata* x *serrata.* Nat de Leon 1988

These hybrids are where *Aechmea fasciata* has been used as the seed parent. There are a number of fine crosses where *fasciata* has been used as the pollen parent, and these and others can be found on the BSI Cultivar Registry online database – at www.bsi.org

News Snippits

Author: Ross Stenhouse

"Roger", a former member thinks my *Ae caudata* is actually *Ae*. "Blotches' (a cv of *Ae.caudata*) and suggests checking www.fcbs.org. Roger certainly has a good point, it looks very much like it, however I am not convinced for sure! If we look at the Cultivar Register 1998 we would also have to include 'Blue Tips', 'Melanocrater', and 'Fire Chief". These were all named by American nurserymen and yet we know that we were growing several dark tipped leaf forms in Australia well before then.

Alan Herndon of South Florida, USA informs that me he has been trying to stimulate interest among bromeliad growers in preserving clones (of species or hybrids) that are in danger of disappearing from cultivation. This is an effort parallel to that of Barry Uren in New Zealand - See article opposite.

Proposal for a Bromeliad Clone Preservation Project

Author: Alan Herndon

It has been nearly 60 years since the Bromeliad Society International (BSI) was formed and almost 50 years since the Bromeliad Society of South Florida (BSSF) was organized as an affiliate of the BSI. During this period, bromeliads have gone from being hard-to-find plants of interest to only a small cadre of highly motivated (some might say obsessed) collectors to a mainstream crop easily available to every American in local stores.

Along with the shift from collectible to commodity, large numbers of species were imported and huge numbers of hybrids were created to meet the demands of the mass market. As newer hybrids took over an ever larger share of the market, older clones began to disappear from sight. Many examples can be cited by people growing bromeliads 30-40 years ago. For example, we no longer have any idea where to find

Aechmea fulgens discolor 'Magnificent', if it still exists. Nor have we seen *Aechmea pineliana minuta* in recent years. The small form of *Aechmea tillandsioides*, that was commonly grown in southern Florida 30 years ago, now seems to be represented only by the *albomarginate* clone.

Note that the term clone is used both to describe genetically distinct collections of species and different hybrids. In general, a clone represents a group of genetically identical plants. These clones are commonly produced by asexual reproduction (i.e., not grown from seed). Each collection of a species in the wild almost always represents a genetically distinct clone. In the same way, virtually every seedling produced by crossing distinct clones of a single species (*Aechmea chantinii* is a good example) represents the start of a new distinct clone. In practice, we are not going to genotype plants, we will only recognize clones where the genetic difference manifests itself in the appearance of the plant. The same considerations apply to hybrid clones.

We are only concerned with clones that differ in appearance.

Some of the old clones have undoubtedly disappeared, but bromeliads are a remarkably hardy group of plants, and many of the older plants may still exist in the odd corners of small (or large) collections. As time passes, identification of these clones becomes harder as labels are lost in the normal course of events and memories fade. There is also a slow but steady loss of plants in even the

Books For Sale

The Society has the following books for sale:

• Starting with Bromeliads	$18
• Pitcher Plants of the Americas	$60
• Bromeliads: A Cultural Manual	$5
• Back Copies of Bromeliaceae (2005, 2006 Editions)	$4
• Bromeliads for the Contemporary Garden by Andrew Steens	$36
• Bromeliads: Next Generation by Shane Zaghini	$33
• Bromeliads: The Connoisseurs Guide by Andrew Steens	$36

Postage and package extra. Unfortunately we cannot supply overseas orders. Please phone the Librarian, Mrs Evelyn Rees (07) 3355 0432 to order books.

best maintained collections. Natural disasters (windstorms and floods, in particular) can lead to catastrophic losses in both plants and the labels attached to the plants. However, the most serious risk of wholesale loss in older collections occurs when the owners die, move or become too ill to care for their plants.

In some cases, it is important to have these older clones in hand. For instance, I have not found plants comparable to the plants we used to call *Neoregelia ampullacea ampullacea* and *Neoregelia ampullacea tigrina*. Without the plants, I cannot even guess how they relate to the *Neoregelia ampullacea* complex as understood today.

We propose a project to preserve these old bromeliad clones. The project will focus on providing information on what clones are available and who is growing them.

Specific goals include developing a database of the different bromeliad clones in cultivation, create a list of individuals growing each clone, and provide a framework for trading and selling these clones among interested growers. Clones most in danger of being lost in cultivation will be identified in the database.

The database will ultimately include all identifiable bromeliad clones, old or new. Clones will be identified by comparison to old photos and descriptions whenever possible. Older growers, such as Nat Deleon, will also be pressed into service to help with the identification of these plants. The initial priority will be identification of older clones, since these are most likely to have dwindled in cultivation.

Local Bromeliad Societies will play a crucial role in this project. Many desirable clones are probably waiting to be found in older collections where labels have been mixed and lost over the years. Knowledgeable local society members will be needed to ferret out these plants and establish their

Neo's-a-plenty at the Society's Spring Show

To say there were some really beautiful neoregelias at the society's recent Spring Show is an understatement. There were some absolute beautiful plants on show. A small selection is illustrated on the page over.

The names are shown below left to right, top to bottom.

Neo. 'Paprikia'
Neo 'Tim'
Neo. 'Bob and Grace'
Neo. 'Apricot Nectar' (unreg)
Neo. 'Victoria's Secret'
Neo. 'Lavender Blue'
Neo. 'Morado'
Neo. 'Green Apple'

Some of the plants were registered, others not. It's a shame because all deserve that status.

true identities. Local societies will also need to keep track of the individual growers in the database so all interested persons can be notified when a collection rich in desirable older clones is about to be dispersed. Finally, local Bromeliad Societies could help preserve the more important clones by including them in their plant distribution programs.

The general database should be open to all interested parties. Small commercial growers who would be willing to grow a clone that sells five to ten plants a year might find the database provides the necessary market. Collectors might find the database provides a way to exchange duplicates for money or other plants.

There should also be a membership network of people most interested in growing these plants. The primary aim is to have each clone established in more than one collection to guard against loss. Membership would be open to anyone willing to follow a few rules. Members would have to follow strict guidelines for labeling plants and ensuring labels are not lost. The central database would include a unique identifier for each clone that could be used in labeling so individual growers would not have to maintain the complete record associated with the clone. All members would agree to provide a minimum number of free offsets (perhaps 5) yearly for the benefit of the project (other offsets may be traded or sold for the benefit of the member). Finally, in the event of a natural disaster befalling one member, other members would be expected to help restock the collection of the affected member.

Benefits to members would include a ready source of information on all clones in the database and a directory of potential sources for desired plants. Members would also receive advance notice when another members collection (or a significant part thereof) becomes available. Finally, members could expect assistance in recovering their collections from disasters.

Calendar of Events

Sat 5 & Sun 6 Dec 2009 – Olive Branch Bromeliad Nursery Open Day
234 Canvey Rd, Ferny Grove (Upper Kedron) 4055. Open 9am – 4pm. Free admission. Come along and enjoy free refreshments, displays, demonstrations and our new sales area. Enquires: 3351 1203

20th Feb 2010 - Field Day to Genny & John Catlan's Garden
17 Pelican Parade, Jacob's Well. Plant sales. 8am to 2pm. Morning tea provided. Guest speakers. Please bring your own chair. For more information contact Ruth (after 4pm) on 3208 0546 or Bev 3208 7417

6th March 2010 - Field Day to Len & Olive Trevor's Nursery
232 Canvey Rd, Ferny Grove Plant sales 9am to 3pm Guest speakers. Come along and enjoy free refreshments, displays, demonstrations and our new sales area.
Enquires: 3351 1203

Sat 17 & Sun 18 April 2010 – BSQ Bromeliad Bonanza Mt Coot-tha Gardens Auditorium - Further details will be provided closer to the event

GENERAL MEETINGS of the Society are held on the 3rd Thursday of each month except for December, at the Uniting Hall, 52 Merthyr Rd., New Farm, Brisbane, commencing 7.30 pm. Classes for beginners commence at 7.00 pm.

Plant of the Month Programme for 2009

FEBRUARY:	Ananus, Intergeneric Plants, Tillandsias and Full-sun Neoregelias.
MARCH:	Cryptanthus, Tillandsias, Full-sun Aechmeas and Canistrums
APRIL:	Cryptanthus, Tillandsias
MAY:	Spotted Neoregelias, Orthophytums, Tillandsias and Variegated Bromeliads
JUNE:	Alcantareas, Foliage Vrieseas, Dyckias, Hechtias
JULY:	Billbergias, Pitcairnias, Nidulariums
AUGUST:	Billbergias, Foliage Vrieseas, Catopsis and Miniature Neoregelias.
SEPTEMBER:	Billbergias and Guzmanias.
OCTOBER:	Vrieseas, Neoregelias, Nidulariums, Guzmanias
NOVEMBER:	Not often seen Bromeliads and Succulents

Competition Schedule for 2009

Novice, Intermediate and Advanced in each Class of the Mini-Shows and in the Popular Vote.

January: **MINI-SHOW**
- Class 1: Aechmea - species and hybrids
- Class 2: Vriesea - species and hybrids
- Class 3: Dyckia - species and hybrids
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

February : **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

March: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

April: **MINI-SHOW**
- Class 1:Bromelioideae not listed elsewhere in the schedule – species and hybrids.
- Class 2: Guzmania - species and hybrids
- Class 3: Pitcairnia and Pepinia - species and hybrids
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

May: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

June: POPULAR VOTE: Any Genus – species or hybrid, Novelty Bromeliad Display

July: **MINI-SHOW**
- Class 1: Billbergia - species and hybrids
- Class 2: Tillandsioideae not listed elsewhere in the schedule – species and hybrids.
- Class 3: Neoregelia - species and hybrids – up to 200mm diameter when mature.
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

August: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

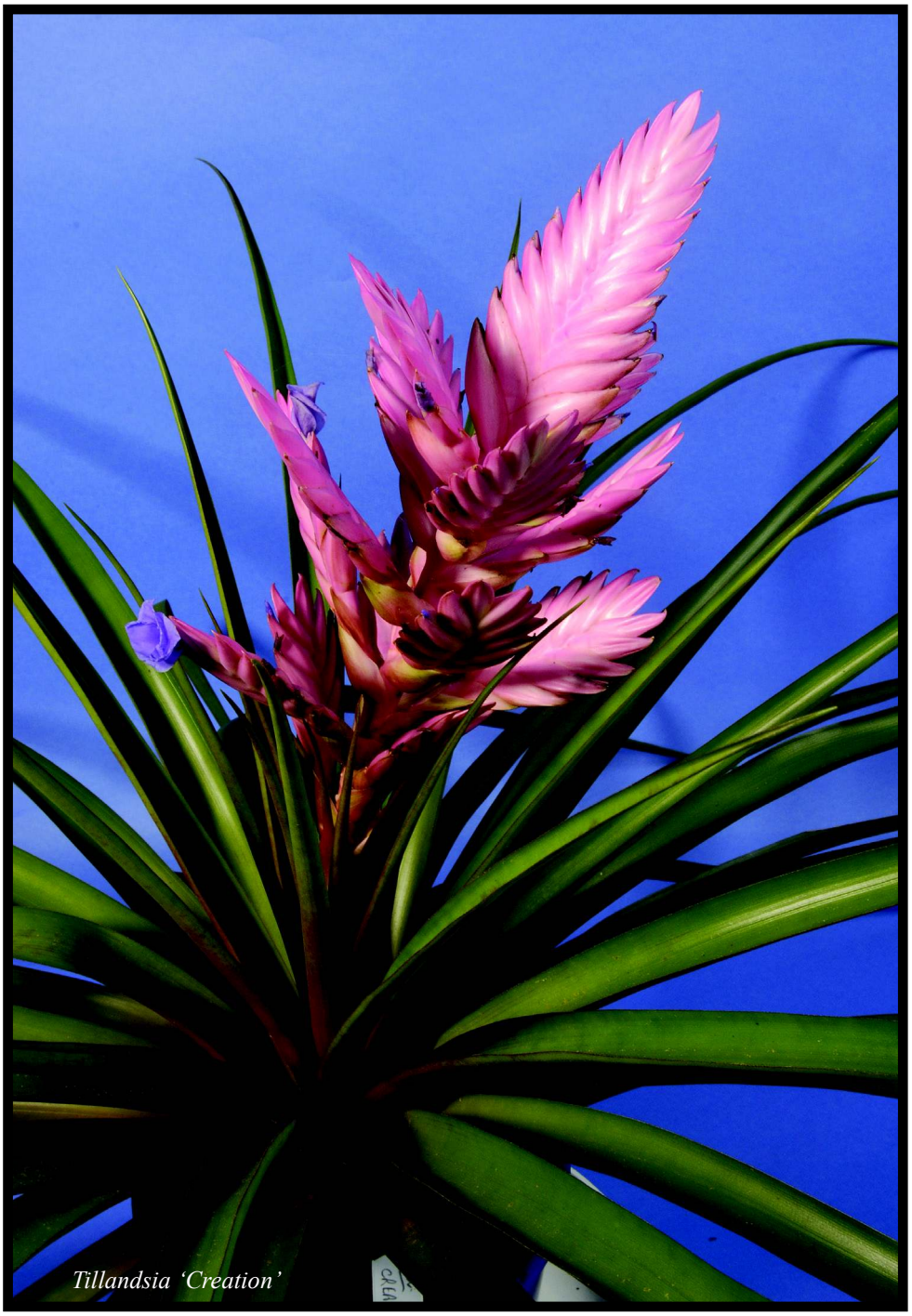
September: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

October: MINI-SHOW
- Class 1: Neoregelia - species and hybrids – over 200mm diameter when mature.
- Class 2: Tillandsia - species and hybrids.
- Class 3: Pitcairnioideae not listed elsewhere in the schedule – species and hybrids.
- Class 4: Any Other Mature (flowering) Bromeliad - species and hybrids.

November: **POPULAR VOTE:** Any Genus – species or hybrid, Novelty Bromeliad Display

Note 1: Class 4 in each Mini Show schedule provides for any flowering bromeliad that would not be in its prime for the appropriate Mini Show.

Note 2: Class 1 (April), Class 2 (July) and Class 3 (October) provide for plants from these subfamilies not elsewhere included in the Mini Show schedule.



Tillandsia 'Creation'