

Far North Coast Bromeliad Study Group N.S.W.

Study Group meets the third Thursday of each month

Next meeting 16th July 2015 at 11 a.m.

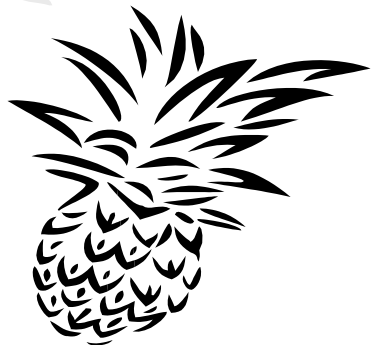
Venue: PineGrove Bromeliad Nursery
114 Pine Street Wardell 2477
Phone (02) 6683 4188

Discussion: June 2015
General Discussion

Editorial Team:

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Trish Kelly
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Meeting 21st May 2015

The meeting was opened at approximately 11.00 am
The 20 members and one visitor present were welcomed.
One apology was received.

General Business

Ross welcomed everyone and distributed the Newsletter. Ross commented on the booklet handed out at the previous meeting outlining the requirements for publishing a guide to growing bromeliads in our region and requesting each member, to contribute several sentences telling of their experiences growing bromeliads.

The mail for this month was Bromelletter from The Bromeliad Society of Australia and the BSI Journal, also Ross showed the Queensland Society's Newsletter with one of our member's Lesley Baylis' *Nidularium atalaiaense* photo on the front cover.

Ross gave his report on the Bromsmatta Conference and the results of the competition run in conjunction with the Conference. All the presentations/talks were of a high standard and the BSA Members should be proud of their efforts in putting together such a wonderful event.

Both Ross and John Crawford commented on how entertaining Nigel Thomson's talk about 'Apartheid' in the plant world was, with his subject being the crossing of different genera in particular *Nidularium innocentii* X *Aechmea fasciata* which gives us the bigeneric (black x white) x*Nidumea* 'Midnight'. Nigel leaves the final decision to you "Does Apartheid Work ????" (photo p.9)

Ross also spoke of the great variety of plants available for sale and purchase saying there were many new releases and rarer species as well as many older favourites making a comeback.

A little further discussion on labelling, in particular Laurie's *Tillandsia xiphioides* (with an 'x' not a 'z') reminding Laurie that 'aff' meant 'an affinity to' or 'similar to'. Also a little clarification of my printing on a label accompanying the small *Nidularium amazonicum* seedlings. These were handed out several months ago as a exercise for our Group members. It is intended that we will bring our seedlings back in Spring perhaps the September meeting for discussion with each participating member commenting on their experiences.

Kay distributed some more *Hohenbergia catingae* var. *elongata* seedlings this meeting for those members who wished to grow them on.

Ross discussed the term 'variegata' and 'variegated' etc, referring to Laurie's *Neoregelia meyendorffii*. The terms variegated or variegata, technically are descriptive terms so one should not Latinise these terms when writing your labels, place the word 'variegated' separate to the actual plant name. Where possible indicate the species or parentage of the plant giving the purchaser some ideas of the plant's origin or breeding. For example the variegated form of *Vriesea philippo-coburgii* is registered on the BCR as *Vriesea* 'Rafael', some people have suggested that they would like to see a notation on the reverse side of their label as an indication that this plant is a form of *Vr. philippo-coburgii*.

A lengthy discussion between Ross and Trish ensued about the futility and inconsistencies of the current system with Trish expressing how difficult and confusing it has become, particularly for the new enthusiast or grower and understands why so many members choose not to label their plants or even worse buy plants unlabelled.

Ross reported that PineGrove attended the Woodburn Orchid Show recently and had a very successful week-end. This is a well organised event worth visiting.

Our best wishes to our members Dawn and Flo who have not been well, we wish them a speedy recovery and hope they can join us again shortly.

Ross announced he would not be here for the July meeting as he is going to Equador for five weeks Bromeliad hunting and visiting the Galapagos Islands. We wish him a very enjoyable time exploring and a safe trip and look forward on his return to hearing all the stories and seeing lots of photos.

It will be necessary for the Group to discuss having a meeting in July in Ross's absence. There will not be a July or August Newsletter as I am unable to do the lot or should I say unwilling. Trish

A request has gone out to members for further articles for the Newsletter. Have you taken any great bromeliad photos lately??? Let's share with everyone!

The next Bromeliad Conferences will be held on the Sunshine Coast in 2017 and on the Gold Coast in 2019. These are fun events, very informative and a place to meet and make friends with other like minded Bromeliad lovers. So start saving your pennies now and come join the festivities in 2017, then on to 2019.

Show and Tell

A plea to everyone, as we all seem to enjoy the **Show and Tell** section of our meeting, a small plea to you all, please bring a bromeliad of interest to our meetings. Let's see it, even if you don't know anything about it, someone else will and we all learn a little more.

A label confirmation was requested on *Orthophytum disjunctum* var. *viridiflorum*, Ross verifying that it was correct.

Trish brought in a *Nidularium cariacicaense* in flower. There has been some confusion as to the correct specie name of several of the finer foliaged, smaller growing Nidulariums. This one once thought to be *Nid. scheremetiewei* was also confused with *Nid. angustibracteatum*, another name that caused confusion was *Nid.* 'Legrie' which appears to be *Nid. cariacicaense* mislabelled. (photos p.9)

Gloria spoke of bringing along a nice plant to sell to assist the financial situation of the Group. Gloria very kindly donated an *Alcantarea* 'Cairns Green' which was sold and the proceeds going to our kitty. Gloria also suggested that when other members donate plants for sale for the Group funds, to clearly label it as such. Thank you very much Gloria and Tom.

Note: *Alc.* 'Cairns Green' is now registered as *Alc.* 'Whyanbeel'. (article p.12)

These additional funds will ensure that we maintain the current quality of our Newsletter, please keep your donations coming in everyone!

Jennifer made a request for information wanting to know if anyone was familiar with the *Neoregelias*: 'Moby Dick', 'Captain Ahab' and 'Starbuck'. These are reportedly grex mates created by John Catlan. Jennifer says she has 'Captain Ahab' and has offered a pup to grow together with Ross' Neo. 'Moby Dick' for comparison. It will also be compared to *Neo. correia-araujo* (Leme seed).

Ross showed a *Aechmea acquilegia* in flower and several other bromeliads that are variegated, some have cultivar names some do not. (article p.5)

A subtle warning was given when the name *Quesnelia* 'Tim Plowman' was mentioned, be very careful when purchasing this particular plant as there are some unscrupulous sellers who have been growing *Quesnelia mamorata* in the shade, ending up with longish leaves which they then curl the leaf ends so it looks like a 'Tim Plowman'. Buyer Beware!!

Also brought to our attention was a case of misinterpretation of the 'Decorative' Class. When entering these particular sections one should always keep the plants as the main or dominant feature of the entry while using ornaments or additional material/embellishments as supplementary to, and not detracting from the principal arrangement. Ross gave an example of the misinterpretation.

There was a discussion on the difficulties of detecting root mealy bug without tipping your plants out of their pots. Ross stated he regularly sprays for mealy bug, root mealy and scale with Spectrum 200SC as a precaution. Les said he mixes diatomaceous earth into his potting mix as a deterrent. A reminder to all, be very vigilant and keep an eye out for scale infestation and do not bring plants affected with scale to our meetings.

Plants with Variegated Forms Named in Latin Under the ICBN Rules

by Derek Butcher May 2012

Over the years we have seen these sorts of names used as either variety or forma and there are some 18 on record, be they *variegata*, *striata*, or *lineata*.

Why the concern, you may ask?

Several hundred have been named as Cultivars under the ICNCP rules so why were these 18 not treated in the same fashion. To my mind the main reason was the fact that many botanists ignored the existence of the ICNCP rules.

What is also interesting is that although botanists have gone to the trouble to preserve herbarium specimens and formally describe these variants under the ICBN rules they mostly ignore this taxon when formally reviewing the species. To my mind all subspecies, varieties or formas should be dealt with at the same time. In recent years you must have noticed that where this anomaly has happened in recent years I have been involved in creating Cultivar names to cover this void. Yes, that taxon has died out in the wild but it is still living as a culton in cultivation.

Gone are the days of Latin names having a greater status. If an oddity is found in the wild that is not genetic you should not speak of a form or variety. A cultivar name must be considered by botanists to be equally valid.

Examples of where variegates have been ignored by Botanists in reviews include *Ananas bracteatus*, *Ananas comosus*, *Tillandsia utriculata*, *Tillandsia viridiflora* and *Vriesea atra*.

I intend to note any of these in any of the lists I maintain on the internet with the following: "A mutation that should never have been described under ICBN rules"

Regrettably I would include *Guzmania monostachia* var. *variegata*, much beloved by Floridian growers, and which does not breed true from seed. But if someone can come up with an apt cultivar name this could be duly recorded.



Guzmania monostachia
var. *variegata*
Photo: John Kress

Glossary

ICBN: International Code of Botanical Nomenclature.

An agreement between botanists around the world to follow.

ICNCP: International Code of Nomenclature for Cultivated Plants

The rules and recommendations for naming plants in cultivation.

Herbaria Are a Major Frontier for Species Discovery

By Derek Butcher 2011

The amount of botanical material you can find on the internet is astounding and sometimes thought provoking. In this case I was referred to an article in PNAS 107(51): 22169-22171. 2010, where the title caught my eye. What was it all about? I'll quote from a few areas to show what I learnt:

“The data from our sample of new species published between 1970 and 2010 show that only 16% were described within five years of being collected for the first time. The description of the remaining 84% involved much older specimens, with nearly one-quarter of new species descriptions involving specimens >50 yr old. Extrapolation of these results suggest that, of the estimated 70,000 species still to be described, more than half already have been collected and are stored in herbaria. Effort, funding, and research focus should, therefore, be directed as much to examining extant herbarium material as collecting new material in the field.”



A Herbarium storage facility

First, I must say that in my experience things are not that bad in Bromeliaceae but it does show a bias as far as taxonomists are concerned to the dead dried plant. I can think of what 5 years delay can mean when going back to the place of discovery only to say “Whoops!” Where are they? The habitat has been changed by man! How do you look realistically at plant conservation especially with our epiphytes which regrettably rely on trees to survive!

Many of us do acquire plants or seeds from the wild which have not been properly identified. We should not immediately rush in to hybridise so we can make money out of them, but should consider their conservation. We should not just give them any name and forget about it. Instead, we should retain as much information of where the plant or seed were collected for future reference. For really outstanding ones a Cultivar name should be given and put into the Cultivar Register with photos and other data.

In other words taxonomists may be responsible for the dead plant, but we, as growers are responsible for living material.

Show and Tell Discussion Plants

by Ross Little



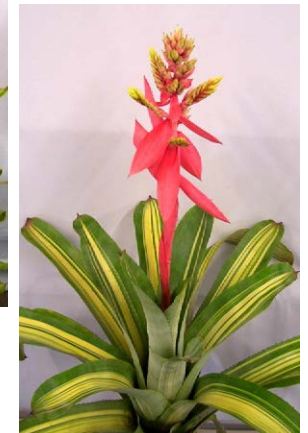
Aechmea mexicana



Aechmea mexicana
variegated form



Vriesea 'Rafael'
variegated form of
Vr. philippo-coburgii



Aechmea
'Loie's Pride'



Aechmea 'Falkland'
albomarg. form of *Ae. aquilega*



Aechmea aquilega
grey/silver form



Aechmea aquilega
variegated form



Cryptanthus 'Absolute Zero'
1st Open Gloria Dunbar



Orthophytum 'Starlights'
1st Novice Jill Ashe



Nidularium cariacicaense
grown by Trish Kelly



Nidularium angustibracteatum

Nidularium scheremetiewii



Guzmania hybrid
Judges Choice Kay Daniels



Guzvriesea 'Happa'
grown by Laurie Mountford



Cryptanthus 'Puerto Rico'
grown by Les Higgins



Cryptanthus in a Piglet Bowl
grown by Gloria Dunbar



'Mixed Planting in Grotto'
1st Decorative Helen Clewett



Neoregelia hybrid ???
grown by Laurie Mountford



Nidumea 'Midnight'
grown by Nigel Thomson

Photo's supplied by: Ross Little, Nigel Thomson, Derek Butcher / Leme

Transition of Plants

by Gloria Dunbar 2015

The move from five acres of rich red volcanic soil on a high ridge at Koonorigan, Northern NSW to a town block, which is taken up mainly with the house and then a boat driveway from the front street to the canal, at Ballina 47 kms away, was very stressful & time consuming!

First we had to choose what to take with us & what to leave of our beloved plants that had taken many years of collecting! Having thousands of Bromeliads and a large collection of clivias it was a daunting task, but we managed with the help of our friends.

At first the plants had to be crammed into a small space here at Ballina, most under cover of a laserlite roof, where they stayed until we had put our home on the market and had some renovations completed here at Ballina which took a few months. As soon as the renos were finished we moved to Ballina, travelling back to care for our Koonorigan property until it was sold.



The next headache was placing our plants, as we never had room for a shade house or the benefit of trees in the yard, the outside spa area had to be converted to a garden by placing marine ply over the spa cover to put our Vrieseas and Guzmanias. The hedge, which ran down the boat driveway was then cut to allow room under it for Billbergias and Cryptanthus etc. where they get lovely morning sun.

The Alcantareas we brought with us were able to be grown in full sun thankfully, so five large Silver Plums were put along the frontage onto the canal where they have thrived and three have since flowered.

After deciding on this home we attended the New Zealand Conference where I had asked Peter Tristram about the effect of salt spray on these plants and was assured I would have no worries.

Other Alcantareas were planted in the front of the house, after enlarging beds to cope with their size. The only tree in the garden is a lemon tree RIGHT in the front, along with some pesky dracaenas, which have been reluctantly left as they provide some shade for some of our large Vrieseas and the few Neoregelias we allowed ourselves.



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Our Tillandsias were a worry here but we solved the problem by constructing a screen made from reinforcing wire with biscuit shade cloth behind it, between us and our neighbour along the side of the house. This gives us added privacy as we look out of our bathroom window onto them where they get full sun and lots of fresh air, the Tillandsias love it!

Everything has thrived! We had to put 75% biscuit shade cloth underneath the laserlite roofing over the spa area after the first summer as we had burn on our plants on those really hot days, the addition of the mesh fixed the problem. The plants now get the perfect amount of light for good colour without any burn!



Having had a garden planted to attract birds and animals with beautiful trees, allowing planting in the ground with fertilizer provided by our environment, which allowed optimum growth for the plants, I never had to worry much about fertilizing artificially, so far I haven't had to here but that may change in time.

This is a very different garden and environment to our previous garden which we had created from a piece of grazing land over 39 years, but as it was a move necessitated by age, we are now very happy with everything here and particularly pleased that our wonderful plants love the change as much as we do!



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Alcantarea 'Whyanbeel'

by Peter Tristram Dec 2010.

Peter Sargent, who lives north of Cairns at the Whyanbeel Arboretum, near Mossman, has been a prolific grower of seed, especially bromeliads, for most of his life. Many species and some cultivars in our collections originate from Peter's seed raising efforts, mostly from imported seed.



Many years ago, around 1982, a very young Peter imported a single packet of seed into Australia, from Renato Bello in Brazil. It was labelled, '*Vriesea imperialis*'. The batch of about 150 plants grew predominantly green, with broad, slightly mottled, often ribbed leaves with typically speckled sheaths and bloomed with a huge red 'imperial' inflorescence, after some years. More batches were sown from these bloomings, all true to the originals. Prolific numbers of adventitious pups were also harvested.

Among the batch were also some redder ones, very similar in shape and size, just red, but none have bloomed. They look magnificent in the grounds around Peter's house, complementing the 'green' ones wonderfully. Adventitious pups of these have also been harvested and are spread in many collections. These are yet to be named though 'Whyanbeel Red' would be obvious.

In the early 1990s, David Warrington of the Cairns Flecker Botanic Gardens, received 8 large plants, all 'green' forms. From there they spread south and the name 'Cairns Green' was also coined. Who used this name first is still a source of debate. Now this form of '*Vriesea imperialis*' was on the move, changing to *Alcantarea* 'Cairns Green' or *Alcantarea imperialis* 'Green' depending on the collector, with the resurrection of that genus by Jason Grant in 1995.

Later, at the Australian Bromeliad Conference in Brisbane in 2004, Arno King, another prolific importer, who had been on a trip to Brazil, contended that it was *Alcantarea brasiliiana*, after seeing very similar plants of this name in the famous Sitio (Roberto) Burle-Marx near Rio de Janeiro. Mark Paul, another *Alcantarea* aficionado, also visited Burle-Marx's extensive gardens in 2006 and agreed with Arno. Thus the plants in the south were renamed *Alcantarea brasiliiana* and spread further and wider still when Bruce Dunstan, at the then Stockade Nursery (now Greenstock), began mass propagation.

The name 'Whyanbeel' is proposed in recognition of Peter Sargent and the Arboretum, which he runs with his parents, Pirrie and Jan. It follows the same reasoning as recent registrations of *imperialis* forms like 'Grace', 'Silver Plum' and 'Purple Skotak'. Peter does not like the name 'Cairns Green' as it was invented without his consultation or recognition.

The name *Alcantarea brasiliiana* may be reduced to synonymy with *Alcantarea imperialis*, so, pending official publication of taxonomic changes by Leme and/or Versieux, it seems Renato Bello's seed was correctly named, something many growers never doubted. The complexity of and interrelationships between populations of *imperialis/brasiliiana/regina* and other species like *geniculata* and *glaziouana*, in southern Brazil, especially near Rio de Janeiro, will take much longer to understand.

Alcantarea 'Whyanbeel' refers to many greges now propagated of very similar appearance, quite different to the many other forms of *Alcantarea imperialis*. It can be distinguished by a fairly tight 'stacked' rosette of light green, subtly mottled, broad (av. 20cm), ribbed leaves, which are turned under at the very tip. These suffuse some redness in cooler climates and lack the obvious surface wax of most forms of *Al. imperialis*. The inflorescence rises to over 3m with a mass of enfolding stem bracts, like reduced leaves, colouring a rich red in the lower half of each, to all red, near the apex. From each stem bract, the lateral, red branches are typical *imperialis*, along with the 10+cm creamy-white/yellowish flaccid flowers.

Alcantarea 'Whyanbeel' grown and photographed by Ross Little

Tissue Culture Process

by Lynn Hudson 2015

Tissue culturing plants is part of our plant supply system and is being used on many plants. I have heard of Societies who have ruled that there will be no tissue cultured plants in their Group. Fact is we would not know what is tissue cultured and what is not. If you see a bench of plants all uniform you can usually safely assume they are cloned by tissue culture. It is not new but it is more widespread. Here is how I understand the process. The eye is taken from the stem of the plant and placed in a liquid mixture or 'agar'. This mixture is very important, the contents are usually a secret as it is the food for the eye to grow new plants. Cleanliness is very important, everything must be utterly sterile, as a germ can wipe out the whole batch. The eye produces small plants, these are removed and placed in agar and they proceed to produce more plants. This can go on and on indefinitely but obviously there is a point where the plants will not carry the original genes, they could be completely different and could be weaker.

The small plants arrive at the nurseries, usually in a peat mixture, they are separated and grown on. Some plants embark on a fast journey in a controlled environment - fed to maturity then treated to bring them into flower. Feeding and initiating flowering provides flowering plants all year round plus flowering at specific required times.

A visit to the chain stores will often reveal some magnificent Vrieseas and Guzmanias, some have names we know, others have names new to us. Guzmanias and Vrieseas seem to cope more successfully than Aechmeas and Neoregelias. Aechmeas usually grow true through the first generation and produce many pups but this next generation exhibits problems. Some take years to flower, others grow perfectly to halfway through a normal cycle then proceed to distort in the centre. Some revert to central distorted heads but will not produce an inflorescence. It is common to see 'coxcombing' - the flower bracts lie over in a row, leaving a long v-shaped space - in most cases the flowers bloom.

The main advantage to nurseries and finally to the general public is access to many plants that otherwise would not be available to us. Whilst nurseries do not have to keep mother plants and wait for pups they do need to streamline their propagation process to grow these plants faster to their full potential. Tissue culture provides immediate worldwide access to new varieties, especially hybrids. It causes variegations in plants - most of us love variegations!

Like it or not, the process is here to stay.

Novice Popular Vote

1st	Jill Ashe	<i>Orthophytum</i> 'Starlights'
2nd	Les Higgins	<i>Cryptanthus</i> 'Peurto Rico'
3rd	-----	-----

Open Popular Vote

1st	Gloria Dunbar	<i>Cryptanthus</i> 'Absolute Zero'
2nd	Laurie Mountford	<i>Guzvriesea</i> 'Happa'
3rd	Kay Daniels	<i>Guzmania</i> hybrid ?

Judges Choice

1st	Kay Daniels	<i>Guzmania</i> hybrid ?
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Decorative

1st	Helen Clewett	'Mixed Planting in Grotto'
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Comments from the Growers:

Jill has had her *Orthophytum* for approx. 18 months, it grows in her vertical garden where it receives plenty of light which has certainly enhanced the colour and patterning with Jill's husband attending to the watering with enthusiasm.

Gloria obtained her *Cryptanthus* at a Gold Coast Bromeliad and Succulent Society sale, growing it in a pot with a saucer to maintain the moisture needed. It now lives under a hedge where it obtains plenty of light as well as protection. The *Cryptanthus* receives frequent sea breezes and showers of rain laden with nutrients.

Laurie obtained his *XGuzvriesea* as a pup from Meg in 2009. The bigeneric grows in the shade house under 50% shade cloth, receives plenty of sunlight for most of the day, recently watered by plenty of rain but in drier times Laurie waters his bromeliads once or twice a week depending on the weather. Laurie's plants are fertilised when potted with Osmocote 'exact', they have no pests or diseases.

Kay is unsure where she obtained her *Guzmania* which was not quite in full bloom, but as Kay stated when there are monthly meetings you bring your plant along because in another month's time it may be finished and it is all about sharing the flowering with our membership. Kay grows her plants under 50% black shade cloth only watering occasionally in this weather as we have had adequate rainfall. Kay fertilizes her plants when potted, there are no pests or diseases.

Helen collected her lovely decorative timber “across the road” which is natural bushland when Warren was up staying at PineGrove. Helen’s arrangement of the natural spherical shaped wood together with small fern, moss and the Tillandsias, Cryptanthus and Orthophytum looks so natural and very attractive.

Gloria’s little piggy pot came from her mother and is the most delightful little pot so well complimented by her Cryptanthus happily growing in it, a great decorative piece for indoors.

Les purchased his Cryptanthus ‘Peurto Rico’ almost 2yrs ago from Margaret Paterson who is it’s originator. The registration states “parentage is unknown, a semi-shiny plant, bronzy-gold base colour and silver/gold barring”. It’s the only plant I have of this colour and I describe it as “somewhat like a shade of green”. Although it has flowered, the leaves remain held high with the leaf endings becoming increasingly recurved. This *Crypt.* ‘Peurto Rico’ has been grown under 50% white overlaid with 50% red shade cloth, however with the shade house becoming increasingly cold *Crypt.* Peurto Rico is now outside in full sun with a day temperature of +25°C. Night temperature can be as low as 14°C. This is a CAM plant and the lower night temperatures assist in the assimilation of Carbon Dioxide but is best not to go below 12°C. During the growing season the nutrient has alternated between Black Gold and various ‘Home Made’ substances. With winter approaching the nutrient is Potassium Phosphate and Molasses. Together they will improve cold hardiness, increase maturity and maintain maximum carbohydrate. There has never been any sign of pests or diseases.

What is Decorative ?

Decorative means just that, the pot or plant container needs to be for the want of a better word ‘pretty’. It needs to be a container that will accent the plant to be displayed and help make it stand out from the others and be pleasing to the eye. A decorative pot is one used to pretty a plant up when wishing to take the plant inside for a short period of time to brighten a room up. Decorative can be a multi planting of various genera as a dish garden or a fancy basket etc.

Other decorative pieces that can be used are logs/driftwood, rocks, sea shells, ceramic figurines (as seen with Gloria’s piglet pot on p.9) and any other item that takes your fancy to brighten up the container. Sometimes if the plant is in a good clean pot just a nice ribbon and bow will suffice to help hide the ‘standard’ pot.

An Embellishment is something that will add interest to the plant being displayed but not be the main focal point of the display.

Therefore a plant in a ‘standard’ container **doesn’t** fit the criteria of Decorative.