

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

Edition: January 2021

Agenda: General Discussion

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

Study Group meets the third Thursday of each month

Next meeting 18th February 2021 at 11 a.m.

## **Editorial Team:**

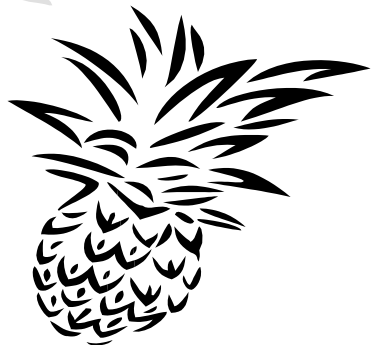
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## **Meeting 17th December 2020**

The meeting was opened at approximately 11.00 am  
The 12 members present were welcomed.  
Three apologies were received.

### **General Business**

The weather forecast for the week of our Christmas Party meeting was wet wet wet which it had been until our day. We had a few drops of rain in the early hours of the morning which concerned us a little however by meeting time it was perfect, sun was shining, not a cloud in the sky and not uncomfortably humid as one might expect after some summer rain.

The day was to be a casual get together, there was some Bromeliad chatter regarding the rain and how our plants are loving the conditions albeit so do the weeds. Covid was also mentioned with our thoughts going to John, Drew and Jennifer who again were unable to attend due to NSW/Qld border issues, length of time it takes to get back across the border into Queensland. At times even with a pass this has been taking up to several hours. Hopefully we will see some improvements in coming months so they will be able to attend meetings again. With many other Groups/Societies unable to conduct regular monthly meetings we should consider ourselves lucky that we can.

What is a Christmas Party without a range of good food to be enjoyed by all especially the deserts of trifle and a pavlova, yes there were salads etc also.

With no Popular Vote Competition conducted throughout 2020 the formalities of trophy presentations didn't happen, but we were able to surprise Coral by asking last years recipient of a Life Member badge, Gary to present one to Coral. Coral joined our Group the year after husband Gary who agreed the awarding of a Life Member badge to Coral was very deserving, thanks for all your efforts over the past 10 years Coral. The 'Gift Swap' tables were well supported, many thanks to everyone.

**Errata** The heading for top of page 2 in last months (Dec. 2020) Newsletter should read **Meeting 19th November 2020** not Meeting 15th October 2020.

### **Show, Tell and Ask!**

With new members among us now, we have been asked to revisit some topics of interest during 2021 e.g. pollinating, hybridising and mutation selection etc. Helen will continue researching history articles of people we should know about.

## **Mutants in Plants**

by W. W. G. Moir

I have been interested in plants all my life. At the age of thirteen I became interested in hibiscus. I started collecting varieties and species that had arrived in Hawaii and also those native to the Islands. Looking over hedges of *Hibiscus rosa-sinensis*, the red flowered species from China, I observed many mutants, from dwarf flowers to overly large ones, variegated and bronzed leaved ones, etc. All became separate clones when planted in the garden, maintaining their differences. Similarly the native white flowered species were found to be quite variable when raised from seed. The variations in flower production and fertility of seed were factors I did not expect, but their use in making many hybrids became very worthwhile. It was at this time that I also found out how important it was to have certain individuals as females to pass on the good traits. The reversal of the cross was even more startling.

Many other plants that were greatly expanded by asexual reproduction to make hedges were also observed to mutate. These mutants were always where conditions were good and rapid growth resulted. The sugar canes of the early years of the industry were plants secured from the wild or from native villages in many tropical areas. The canes that the Polynesians brought to Hawaii around 600 AD were mostly highly colored striped stem varieties that had long been associated with their cultures in religious rites. These early Polynesians had been good observers and realized that these striped varieties mutated to solid colored stalks and then mutated back again to striped, even striped of less intense colors. The Polynesians even had names for all the types of mutants. These first canes brought to Hawaii were soon expanded by mutation to six or seven times the number of forms. The commercially grown varieties and even their seedlings gave rise to many mutants because here was a crop being rapidly expanded by cutting up the stalks and planting the pieces.

The citrus industry in Southern California started a project called "Bud Selection" that recognized the superiority of mutants of branches that were superior in yield and fine quality. The trees were top grafted to the scions of the better selections. A great increase in yield resulted from this initial move as all inferior or degenerate mutants were thus removed.

The sugar industry of Hawaii undertook a similar project and soon proved that mutants yielding 25% more were to be found in any variety that was grown. One plantation expanded six of these strains to cover their entire area in a few years and made a great increase in total yield. But the problem of continuous removal of degenerate forms, which are common, discouraged the continuation of the process. Newer hybrids of higher yield were coming along and seemed easier to work with. On top of that mechanization was the big push, and machines do not pick out better strains nor better planting material.

Years of observation of nature all over the world besides growing, hybridizing, and studying all kinds of plants besides orchids and bromeliads soon showed me that mutations are the way of life. It is how evolution takes place. The more stable the environment the greater the variation in a species, and the less stable the area the fewer the variations. Several researchers have published fine articles on this subject.

It became clear that to obtain mutants one had to give them the very best culture that they desired, not just what you thought was needed. Good observation in native habitats obtains this information. But questions arise as to just what is a species, especially if it can vary to the point one could almost describe the mutant as a new species. Consider the records of what happened to plants from the great climatic changes in our past and note great periods of expansion as conditions became good and great periods of loss when conditions became bad. It was a constant change and a fight for survival. This goes on daily in our midst and it is the basic force in evolution. Not one single environment remains in any one spot forever; there is continuous change even if man never appeared on earth to aid in pollution and destruction of species these changes would continue. It is in this process that mutants arise that can better survive, and save the species.

Take the bromeliads and ask why some species, for instance *Nidularium innocentii*, from the cloud forest of south eastern Brazil, should have so many variations. There are five color variants listed in Victoria Padilla's book and there are more when you recognize gigas and dwarf forms of each. Who would believe that var. *innocentii* with its purple leaves and great stature was the same species as var. *viridis* in green or *lineatum* and *striatum* with their green and white? As soon as they flower you see the same exact flower head and must realize they are one species. But we see this species at a period of change. Do you realize that in the same environment where *Nid. innocentii* lives grow epiphytic orchids that have greatly mutated to gigas sized flowers? Is there something in the environment or the granitic rock hillsides that induces mutation or is it just the nature of the genes within the plant species living there? I favor the effect of environment on the genes over their being anything inherently different.

Take *Aechmea chantinii* from the Amazon and consider all the lovely variants with cultivar names that have recently come out of that area. One of the dark brown and grey barred forms growing at our front door produced a leaf with a 1 cm. wide green stripe down the length of the leaf. The brown color had been lost. The next "keiki" from the plant was right on that stripe and came out entirely pale silver green all over, not just partly one and partly the other. The plant is double the size of the dark leaved one. This is *A. amazonica*, so you see how deceptive some mutants can be in looking like different species. This mutant has only half the intensity of green and silver that is in the average *chantinii* and suffers from sunshine. Flowers of all forms of these *chantinii* are just about the same.

Think of all the many forms of *Tillandsia fasciculata* and remember they come from a very wide variety of environments. Is it any wonder that they vary? As I write in February the "alba" form is in full color of fiery orange and yellow instead of shades of red. It was given to us as an alba form, but it has vibrant colors far from white. How many forms have you seen of this species with short to long flower spikes, short to long leaves, etc., with so many very dull and uninteresting heads of bracts and dull flowers? *T. juncea* is just as variable with red bracts to purple ones, big plants and little ones.

However, some other species seldom change and just plod along producing the same type of growth over and over again. It just may not be their turn to mutate. There might be something in their make up that never allows them to vary. Have they gone through the "explosive" stage and reconcentrated and lost their ability to vary again? Maybe they have come from areas never subjected to change and built up a dominance against change?

The next time you observe an especially fine form of a plant look to see if it is just well grown or whether it has within its genes the vigor and character of greatness? Look for these outstanding plants for they thrive on the care you give them, while the run of the mill form barely exists.

Remember these traits can be used to your advantage while enjoying the plants' vigor. They deserve the space assigned to less vigorous or less floriferous ones. These fine plants just do not occur everywhere so be on the lookout for them. Lest you get the wrong idea from my comments, I am just as favorably impressed with vigorous small growers that give distinctively different reasons for their space in the sun. Consider the beautiful bronzed leaved *Guzmania lingulata* var. *minor* of small size, compactness of growth, and fieriness of flower color, and realize this mutant should have space in the garden. But I judiciously place these various species so their fine qualities will best show and always in the environments they need. Maybe mutants will appear. Look for them.

Sixty-seven years after what was discussed in the first paragraph, I still look back at how enjoyable it has been to see plants mutate. What fond memories one can bring up at a moment's notice of things one has seen if one has a photographic vision as I am lucky to possess. But it worries me that the finest spots in nature where environments and location are perfect for mutation and evolution are so lightly regarded and unprotected. These should be capitalized upon, studied, and protected, and given national or even international recognition as places of great stature. These environments are in need of greater consideration and protection than most of the endangered species of questionable value. If we study these areas we may learn to duplicate their "secrets" and save this world.

Remember that most of the mutants are a loss of some feature of the plant or the reacquiring of it, but the gigas forms are probably a doubling of the chromosomes.

Reprinted from: BSI Journal 1976 Vol.26, No.4.

***Wittmackia lingulatoides*** (Leme & H.Luther) Aguirre-Santoro, comb. nov. Plant Syst. Evol. DOI 10.1007/s00606-017-1394-y 2017

*Aechmea lingulatoides* Leme & H. Luther, Selbyana 19(2): 187, fig.4. 1998.

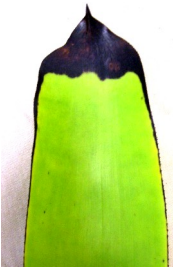
TYPE: Brazil, Bahia, without exact locality from caatinga vegetation, originally collected by Roberto Burle Marx s.n., fl. cult., E.M.C. Leme s.n. (holotype: HB [seen as high-resolution photograph]!; isotype: SEL!); A. Amorim 1816, A. Carvalho, S. Sant'Ana, J.G. Jardim and G. Pitanga (paratype: CEPEC [n.v.], NY [n.v.]).

*Wittmackia lingulatoides* grows on cliffs or campos rupestres - grasslands and in the understory of the caatinga - which is vegetation in semi-arid country of Brazil consisting of thorny shrubs and stunted trees.

Distribution: Endemic to eastern Brazil from Ceará to Bahia at 0-900 m a. s. l.

The suffix **-oides** - from the Greek meaning: likeness, used for species that resemble other species.

*Wittmackia lingulatoides* resembles or looks like *Wittmackia lingulata* to which it differs by producing its offsets on long stolons, it has longer dark brown spines - 2 mm on the leaf margins as opposed to finely serrate for *Witt. lingulata*. The leaf apex and the leaf sheath/base are black on *Witt. lingulata*, this trait is not evident on our *Witt. lingulatoides*



*Wittmackia lingulatoides* being a much larger plant also has a larger inflorescence with branches more densely flowered - more flowers to each branch albeit smaller at 14 mm than those of *Witt. lingulata* at 12 to 18 mm but it has larger white petals - 11 mm, *Witt. lingulata* - 7 to 10 mm.



*Wittmackia lingulatoides* also has fragrant flowers not noted for *Wittmackia lingulata*.

The fragrance was described to me as smelling like: cream cheese frosting with a touch of citrus and vanilla.

To me they smelt like cinnamon.



Both are excellent plants for the landscape being grown in the open garden here in northern NSW.

Both can be grown in dappled light to full sun which turns the foliage an intense golden yellow colour.

When grown in a shady position the white inflorescence stands out against the darker background making it much more showy than when in bright light.

Not being an overly rampant grower, even at 1.60 m (5'3") high including the 700 mm inflorescence and 1.40 m (4'7") across it does need space to grow but I don't find it to be very invasive in the garden. Once a clump has formed and come Spring you get a multiple flowering it certainly is eye catching with a hint of perfume as a bonus.

Hopefully with these few details of comparison any misidentifications of these two species in our collections may be corrected.

Photos and text compiled by:  
Ross Little





Debbie



Shirley  
dressed for the occasion



Keryn  
always cheerful



Coral and Gary  
FNCBSG Life Members



Ross and Coral captured by Debbie



Mitch



Helen with some Christmas  
cheer watched by Santa



Ian and Dave



Jean

Kayelene



## **Victoria Padilla**

### **California's Contribution to The Bromeliad Society.** by Elmer J. Lorenz

A beautiful bromeliad growing on a jungle tree top may remain unknown for many years until someone collects and brings it back for all of us to appreciate. The same is true of the former Editor of our *Journal*. With the exception of a few, our previous Editor was known only in print and as Victoria Padilla, Editor. It is hoped this brief narration will sufficiently inform the members so our prior Editor is known to be more than printed words, but a beautiful person who has brought us many hours of pleasure through her numerous contributions to The Bromeliad Society, Inc.



Early in 1948 Joseph Schneider of San Gabriel, California, wrote to Miss Kemble, organizer of Round Robins for the magazine *Flower Grower*, asking if she could get a group together who were interested in bromeliads. She placed a call for members in the February, 1948 issue, to which Victoria Padilla responded immediately. She was followed by eight others, and they, in turn, by four more.

There is no doubt that since that eventful 1948 no one individual has given more time, interest, energy, concern and leadership to the growing interest in bromeliads and to The Bromeliad Society, Inc., than Victoria Padilla — to whom we are forever grateful.

Victoria was the director of the Round Robin and guided the group in exchanging their experiences with bromeliads through correspondence with one another for almost two years.



During the spring of 1950, an invitation was sent out to all members of the Round Robin and others interested in bromeliads to attend a get together on May 21, to discuss the suggestion made by Joseph Schneider that a Bromeliad Society be formed.

Victoria in her garden.

On September 17, 1950 an organizational meeting was held at the home of Frank and Lucille Overton in Glendale, California. Twenty-one prospective members attended the meeting. The highlight and surprise of the meeting was the appearance of Mulford B. Foster, who had been personally invited by Mr. David Barry, Jr. to attend the organizational meeting. Most of us present at the meeting were unaware that Mr. Foster was going to appear. Mulford was hidden in a back closet with Victoria until he was introduced to the group when the meeting began!

During the first meeting, the officers elected were Mulford B. Foster, President, David Barry, Jr., First Vice-President, Russell J. Seibert, Second Vice-President, Victoria Padilla, Secretary and Frank H. Overton, Treasurer. Victoria was also elected to the Board of Directors at this time.



A view of Victoria Padilla's garden showing part of her extensive bromeliad collection.

The *Bromeliad Society Bulletin* (now the *Journal of the Bromeliad Society*) made its appearance in 1951 with the January-February issue. Volume I, Number 1, consisted almost entirely of an article by Mulford B. Foster, entitled "A Message From the President." It dealt with the organizational meeting, the objectives and aims of the new Society, etc. The *Bulletin* contained one other short article entitled "Note From the Secretary" and gave a description of the Bromeliad Insignia designed by Mulford B. Foster — the article was written by Victoria Padilla. This makes Victoria the first contributor to the Society's journal other than the Editor.



Victoria was Secretary and later Editorial Secretary of The Bromeliad Society for many years. However, it was when she became Editor of the *Bulletin of the Bromeliad Society* with the November-December, 1960, Vol. X. No. 6, issue of the journal that she began to make her greatest contributions to The Bromeliad Society, Inc.

The *Journal* is the cornerstone of The Bromeliad Society, Inc. It is the one feature that holds the whole structure of the Society together, making the Editor the most important member of the Society. The enthusiasm or lack of enthusiasm of the Editor can make the society, through its *Journal*, a success or failure. Victoria, through her determination and enthusiasm, surely made The Bromeliad Society a successful organization for the many years she was its Editor.

The assignment as editor of a journal dedicated to a 'One Plant Society' is not an easy one. The Bromeliad Society is no exception. The Editor of the *Journal of the Bromeliad Society* is responsible to collect, prepare and arrange informative, educational, instructive, and descriptive material pertaining to, or associated with, bromeliads. It is necessary that this combination be balanced in order for each issue to satisfy the beginning amateur grower and the advanced amateur grower.



Another view of Victoria Padilla's garden showing part of her extensive bromeliad collection.

The herculean task of issuing a journal six times a year that would fulfil the expectations of all the members of the Society, is an 'impossible dream,' but Victoria did an excellent job in meeting the challenge. The one major detail not realized or ignored by the membership is that a journal can be no better than the articles submitted — in number and quality.

Victoria Padilla, having been a teacher of business English at the college level, was very demanding that articles submitted have proper grammatical construction, correct punctuation, and proper spelling, plus being informative and instructive. Often she would have to severely edit an article or rewrite portions to meet her standards of acceptance for publication in the *Journal*. She was at times criticized for this editing, but Victoria always had the high standards for the *Journal* uppermost in her mind. She would not 'bend over backwards' and give in to the author's whims.

Victoria was just as demanding in the selection of photographs submitted for publication in the *Journal*. She, along with her brother, Jules Padilla, a professional photographer, would carefully screen all illustrations submitted before making the selection for publication. Jules Padilla also took many of the pictures used to illustrate the *Journal*.

Understanding the personality and background of Victoria is an important key to the understanding of her job as Editor. Included with her experience as a teacher, is Victoria's remarkable knowledge and great love of bromeliads. The combination of these important factors adds up to making an excellent Editor of the *Journal of The Bromeliad Society*. It is with great pride that we in California can broadcast that California's contribution to the Bromeliad Society is Victoria Padilla, and the fact that The Bromeliad Society was organized in California.

Many times Victoria has written a number of letters to various individuals asking for, or even pleading, for articles. The response in most instances was negative. Occasionally she would get an answer or two with the promise of an article. Often times she would get no response to her numerous letters requesting articles. Many is the time Victoria had to compose an article or two to complete an issue of the *Journal*. No one has contributed more to the *Journal* than Victoria. To verify this, all one has to do is turn to *The Cumulative Index to The Bulletin and Journal of The Bromeliad Society*, published by The Reed Herbarium, Contribution No. XXIX, and note that eight pages of contributions by Victoria Padilla are listed — no other individual in the Society has approached that number.

Victoria's contributions to The Bromeliad Society are not limited to being Secretary and Editor. She is responsible for the publication of several books on bromeliads. The first book was *Bromeliads In Color and Their Culture*. It was a compilation by Victoria Padilla of articles and photographs from the *Bulletin of The*

*Bromeliad Society*. The book was published in 1966 and is now very rare, having been out of print for many years. Two other books have been written by Victoria and have become very popular. *Bromeliads* is accepted as the horticultural authority for bromeliad growers as it is one of the best reference books available for the amateur grower. It is now in its sixth printing.

Next came *The Colorful Bromeliads — Their Infinite Variety*. This book is primarily a picture book of beautiful bromeliads. The comments expand the usefulness of the book by giving descriptions of plants, background information, in addition to the beautiful photographs.



Some members of the first Board of Directors of the Bromeliad Society, Inc.

From left to right (back row)

Morris Schick, Director; Dr. Russell Seibert, Second Vice President; Frank Overton, Treasurer;

From left to right (front row)

Victoria Padilla, Secretary; Mulford Foster, President; David Barry, Jr., First Vice President.

The photo was taken at the home of the Secretary in Los Angeles at the 1952 Board meeting.

Victoria also compiled *A Bromeliad Glossary* to assist the amateur bromeliad grower in defining some of the more technical botanical terms used in the *Journal of The Bromeliad Society*.

The *International Checklist of Bromeliad Hybrids* was gathered together by Victoria to meet one of the important requirements necessary for The Bromeliad Society, Inc., to become the International Registration Authority for Bromeliads.

Victoria was responsible for the ground work of establishing The Mulford B. Foster Bromeliad Identification Center at The Marie Selby Botanical Garden in Sarasota, Florida.

During a visit to Florida in 1978, Victoria investigated the facilities of The Marie Selby Botanical Garden as a possible location for a bromeliad identification center. After an enlightening conversation with Dr. Calloway Dodson, Research Director of The Marie Selby Botanical Garden, Victoria returned to California full of enthusiasm for the establishment of the identification center in Sarasota, Florida. She presented a detailed report to me, and I, as President of The Bromeliad Society, Inc., began the formal procedures to have The Bromeliad Society's Identification Center established in Sarasota, Florida at The Marie Selby Botanical Garden. After many years of debating, investigation and searching, the Identification Center was finally established and became an important function of the Bromeliad Society, Inc. After the death of Mulford B. Foster, the Identification Center was renamed The Mulford B. Foster Identification Center in his memory."

Victoria accepted no remuneration from The Bromeliad Society for her services as Editor of the *Journal*.

This article is but a brief resume of Victoria's contributions to The Bromeliad Society. The real contributions are forever enshrined in the 121 issues of the *Bulletin* and *Journal of the Bromeliad Society* that Victoria edited and the books she authored.

A small group of members of The Bromeliad Society gathered at the home of Victoria on July 25, 1982. The occasion of the momentous meeting was to present Victoria a gift on behalf of ALL the members of The Bromeliad Society, Inc., in recognition of her many years of service and dedication to the Society. This was done upon request of the Board of Directors of The Bromeliad Society, Inc.

Victoria retired as Editor with the November-December, 1981, issue of the *Journal* and Victoria now has many additional hours she can spend with and enjoy her bromeliads and other plants.

Reprinted from: BSI Journal 1982 Vol.32 (6)



The brain is the most  
outstanding organ  
It works 24/7, 365  
from birth until you  
**NEED TO IDENTIFY A  
PLANT  
IN FRONT OF A CLIENT**

**Where to Find Bromeliad Groups & Societies Meeting Dates**

[www.bromeliad.org.au](http://www.bromeliad.org.au) then click "Diary".

Check this site for regular updates of times, dates and addresses of meetings and shows in your area and around the country.

**Web Links for Checking Correct Identification and Spelling**

Bromeliad Cultivar Register (BCR): <http://registry.bsi.org/>

Refer to this site for correct identification and spelling of your hybrid or cultivar.

New Bromeliad Taxon List: <http://bromeliad.nl/taxonlist>

Refer to this site for latest species name changes and correct spelling.

Bromeliads in Australia (BinA): <http://bromeliad.org.au/>

Refer to this site for its Photo Index, Club Newsletters, Detective Derek Articles.

Keep these web sites set as desktop icons for quick reference access.