



SAN FERNANDO VALLEY BROMELIAD SOCIETY

#### **MAY 2020**

P.O. Box 16561, ENCINO, CA 91416-6561

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#### **Elected OFFICERS & Volunteers**

Pres: Bryan Chan V.P.: Joyce Schumann Sec: Leni Koska Treas: Mary Chan Membership: vacant Advisors/Directors: Steve Ball, Richard Kaz – fp, & Carole Scott-fp, Sunshine Chair: Georgia Roiz Refreshments: vacant Web Mike Wisnev Editor: Mike Wisnev & Felipe Delgado Snail Mail: Nancy P-Hapke Instagram, Twitter & Face Book: Felipe Delgado

# Saturday May 2, 2020 IS CANCELLED

## **Announcements**

**Future meetings**. The May meeting has been cancelled. As things develop, the Club leadership will decide whether to have June and future meetings, and notify everyone via email. We expect to follow directives or advisories from national, state and local authorities in making these decisions.

As you know, we have our Club's show and sale with the LA Cactus and Succulent Festival. This has also been cancelled.

**Dues.** Starting for 2020, annual dues are now \$15 (\$20 if you receive the Newsletter by snail mail instead of email). You can pay at future meetings.

World Bromeliad Conference 2020 Rescheduled. The World Bromeliad Conference from June 9-13, 2020 in Sarasota, Florida has been rescheduled to June 8-12, 2021. The host hotel will still be the Hyatt Regency Hotel in Sarasota. You will have to change your reservation dates with the hotel. For more info, see <a href="https://www.bsi.org/new/conference-corner/">https://www.bsi.org/new/conference-corner/</a>

# Please pay your 2020 Membership Dues

#### NEED TO RENEW?.....

Pay at future meetings to: Treasurer - Mary Chan or Mail to: SFVBS membership, P.O. Box 16561 - Encino, CA 91416-6561

Yearly Membership Dues - \$15 for monthly e-mail newsletters or \$20 for snail mail

## Please Put These Dates on Your Calendar

Here is our 2020 Calendar. Please review our website and email notices before making your plans for these dates. Your attendance is important to us. As noted earlier, some future meetings, as well as the June show and sale, may be cancelled.

Saturday June 6	John Martinez
Saturday and Sunday June 13-4	Cancelled
Saturday July 4	Cancelled
Saturday August 1	STBA
Saturday September 5	Cristy Brenner
Saturday October 3	Ray van Veen
Saturday November 7	Woody Minnich

#### **STBA = Speaker To Be Announced**

**Speakers** Let us know if you have any ideas for Speakers about Bromeliads or any similar topics?

We are always looking for an interesting speaker. If you hear of someone, please notify **Joyce Schumann at** 818-416-5585 **or** ropojo@pacbell.net

## Literary Lines from the Library

May, 2020

At some point, this Covid 19 will ease up and we will meet again to catch up on all the ways we used to cope with the social distancing, face coverings and other restrictions but mostly to compare notes on the status of our plants. In the meantime, the Bromeliad Society International has issued two additional Journals for our enjoyment.

The first one is dated October-December, 2018 and the second one January – March 2019. I hadn't had a chance to read the first one so it didn't get placed in our library at our last meeting. My apologies – how did I know all this virus thing would be happening! This journal includes the index for the past year organized into sections titled "Plant Names", "People," "Titles and Topics." Other articles feature Cherie Lee (BSI Director, Part 2 of the 2018 World Bromeliad Conference and a trip to South-West Columbia. All good reading!! One of my favorite journals!

The latest journal starts with an article on nocturnal flowers of Werauhia haberi. Right away I learned something. I didn't know bromeliads had nocturnal flowers. Now I do. What about you? Theresa M. Bert contributed a very fun article on fitting her 2,000 plants into her space. Most of us can relate to this challenge.

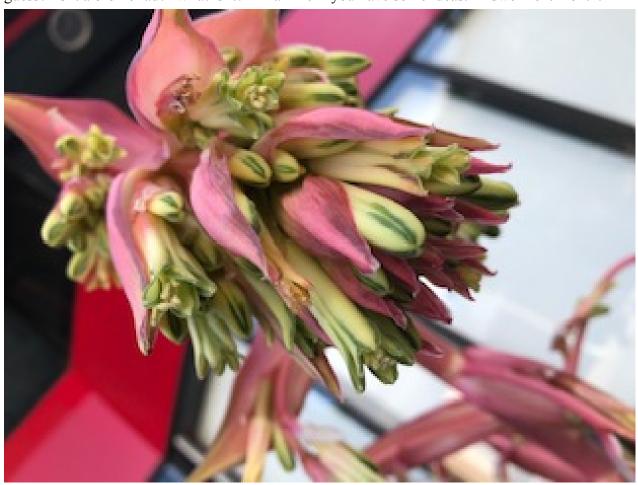
The Library has many other journals available for you to check out. Even if a plant has been renamed, the basic information on description, cultivation, location will remain the same so the original journal articles provide valuable information. Be sure to stop by the library area and check something out.

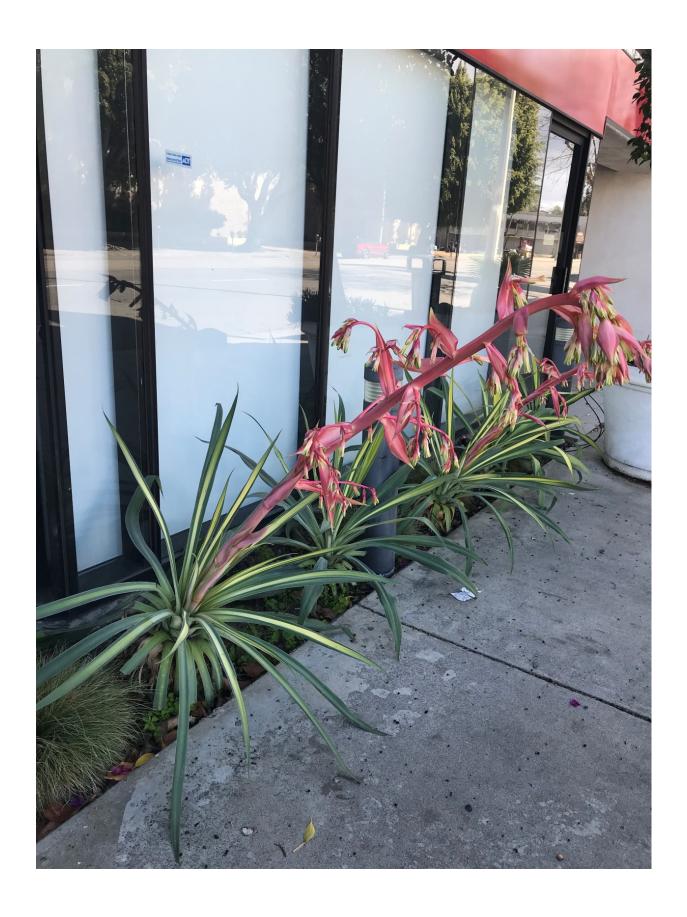
Happy reading and growing. Joyce, Librarian

# This section is open for any Member-contributions of photos or articles

I saw this awhile back. From a distance, it looked more like bromeliad inflorescence than anything else I was familiar with. But the plant itself looks more like an *Agave* or perhaps *Furcrea*.

I asked a few folks for an ID and got some and then found what I think it is. Anybody care to guess? Is it a bromeliad? What is it? Email me if you have some ideas. Answer next month.









Bryan Chan provided us with the following photos of some of his lovely plants.







Close up of the Aechmea organensis bloom.



Neoregelia "Jack of Diamonds" (large plant – 19" across)

Thank you for the lovely photos Bryan.

## Missing our Society Members

By now, I am sure that we all miss the social outings that we enjoyed before the world turned in this uncertain direction. Meetings, shows and sales are being cancelled left and right and with the new normal being social distancing and staying responsible by staying home I am seriously missing my fellow Society Members. I cannot wait to be able to meet again and share stories, plants and to break bread. Hopefully soon but perhaps, not as soon as we would like.

I want to share some photos from our last meeting on March 7<sup>th</sup>! I am sorry to report that only Bryan has provided photos for me to post to Instagram. Hopefully this means that we are spending as much time as possible with our plants.



Society Members enjoying Nils' Talk



Leni's Cryptanthus





Ray's Tillandsia bunch along with Leni's blooming Tillandsia concolor.

starting to bloom

Steve B. Aechmea





Bryan's Quesnelia marmorata in bloom and fragrant Tillandsia duratii



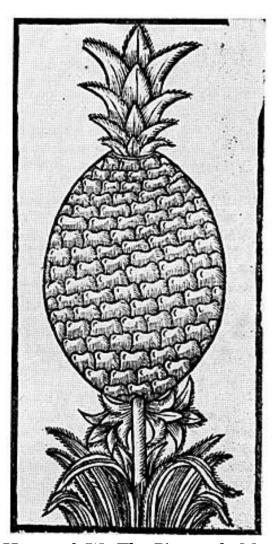


Steve B. Aechmea and Bryan's Quesnelia strobolespikia going to flower

## Taxonomic Tidbits: Ananas

By Mike Wisnev SFVBS Editor (<u>mwisnev@gmail.com</u>) San Fernando Valley Bromeliad Society Newsletter -May 2020

The genus *Ananas* is unique in lots of ways. For starters, it has the most well-known bromeliad in the world, yet one that is not that commonly cultivated by collector hobbyists – the pineapple. Thus, it is the most edible bromeliad fruit, and the most importantly in the genus economically.



This highly artistic, slightly impressionistic and, at the same time, considering the circumstances, notably realistic, illustration of a pineapple is said to be the first pictorial representation of that fruit known in European literature after the Discovery of America in 1492. It appears with other woodcuts in the famous Historia General de las Indias of 1535, published in Seville, and authored by the celebrated historian, Gonzalo Fernandez de Oviedo. Oviedo is considered, by Samuel Eliot Morrison, as one of the four main contemporary authorities for the Discovery Period, the others being Peter Martyr, Fernando Columbus and Las Casas.

Photo by courtesy of the John Carter Brown Library from the original edition of 1535.

Hayward, W. The Pineapple Meets the Press. Brom. Soc. Bull. 6(3): 35 at 36. 1956. This article contains a wealth of information about the earliest publications about the pineapple. The HBG also has this 1535 publication.

Perhaps not surprisingly, the pineapple is also the first bromeliad known in Europe. With the exception of one species found in eastern Africa, all bromeliad species grow in South, Central and North America. "Fernando Columbus reports that his father, Christopher Columbus, first saw pineapples on the then cannibal island of Guadaloupe in 1493 ..." and then in Panama on a later voyage." Id at 35.

According to Wikipedia and FAOSTAT of the United Nations, around 27 million tons of pineapples were produced in 2017. Costa Rica and the Philippines are the largest producers, followed by Brazil, Thailand, India, Indonesia, Nigeria and China. Thailand, Indonesia and the Philippines consume almost half of the pineapple juice produced. Hawaii used to be a major producer, but it is now too costly to produce them there. There are a number of pineapple cultivars.



Del Monte pineapple fields in Bukidnon, Philippines.

Photo by Obsidian Soul. https://en.wikipedia.org/wiki/Pineapple

The pineapple is a fairly uncommon type of fruit known as a multiple fruit. Like most bromeliads, the inflorescence has many flowers, and each forms an individual fruit. Unlike others, these fruits then fuse together to become the fruit we know as pineapple, the "edible portion being formed more by the rachis, perianth and bracts. Small seeds may be found. Each polygonal area on the surface represents a flower." BiologyDiscussion.com. Jackfruits are similar, while figs (and *Dorstenia*, for those in cacti and succulent clubs) are a different type of multiple fruit.



# Dole 'Tropical Gold'

pineapple. It has been cultivated for its tasty fruit, but also for its lack of spines etc.

Note that the leaves of the crown are spineless. Each of the many fairly small pointed structures on the fruit itself are floral bracts; the entire inflorescence fuses together to become a multiple fruit.

You can grow a new plant by cutting off the crown, but it is unlikely to survive our mild Los Angeles winters unless you have a greenhouse or perhaps bring it inside.

Note that "some *Aechmea* and *Bromelia* species also yield edible fruits," including *A. nudicaulis* and *bracteata*, and *B. balansae*. Coppens d'Eeckenbrugge, G. and Leal, F. 2003. Morphology, anatomy and taxonomy,

In: The pineapple: botany, production and uses. Pineap. bot. prod. uses (ed. D. Bartholomew et al.) pp. 13-33.

# Part of the original description of the genus Ananas in

ANANAS, The Pine-apple. The Characters are; It bath a Flower confisting of one Leaf, which is divided into three Parts, and is funnel-shaped: the Embryoes -are produced in the Tubercles : these afterward become a fleshy Fruit full of Juice: the Seeds, which are lodged in the Tubercles, are very small, and almost kidney-shaped. The Species are; I. ANANAS aculeatus, fructu ovato. earne albida. Plum. Oval-shaped Pine apple, with a whitish Flesh. 2. ANANAS aculeatus, fructu pyramidato, carne aurea. Plum. Pyramidal Pine apple, with a yellowish Fiesh, called the Sugar-loaf pine. 3. ANANAS folio vix Servato. Boerb. Ind. Alt. 2, 83. Pine-apple with smooth Leaves. 4. ANANAS lucide wirens, folio vix ferrato Hort. Elth. Pine apple with fhining green Leaves, and fcarce any Spines on their Edges. 5. Ananas fruciu pyramidato olive colore, intus aureo. Pyramidal olive-colour'd Pine-apple, with a yellow Fleih. 6. ANANAS

1754. Miller, P. (1754) Gardeners Dictionary, 4th ed. Vol.1 unpaged. Image from the Biodiversity Heritage Library. Digitized by New York Botanical Garden, LuEsther T. Mertz Library.

www.biodiversitylibrary.org/

This is only part of a page – there are 8 more full pages of text about *Ananas*.

Miller described some "species" but they were in the form of polynomials, not as a binomial name introduced by Linnaeus the year before.

Miller wasn't sure where it originated, but speculated it was Africa! He also noted that to grow the plant, you needed to let the cutting dry in a warm place for about five days or it would rot.

Various kinds of pineapples were cultivated

by indigenous peoples of South America, both for fruit and fiber, before Europeans arrived. The leaves of the plant were once commonly used in the Philippines to create a textile fabric. This industry was decimated by World War 2, and is now reviving.

Given the importance of the industry, there is a Pineapple Working Group under the International Society for Horticultural Science. It has produced 26 technical newsletters the last few decades, all of which are available online. <a href="https://www.ishs.org/pineapple/pineapple-newsletters">https://www.ishs.org/pineapple/pineapple-newsletters</a>. The tenth international pineapple symposium is scheduled for July 2020.

Ananas apparently was derived from languages of indigenous Brazilian people. While the pineapple was given various names before 1753, modern nomenclature doesn't recognize them. Linnaeus established the current binomial system for plant names in 1753 and published Bromelia ananas in 1753 and Bromelia comosus the next year. Ananas as a genus name was published in 1754 by Miller; however, Miller did not follow the new principles of Linnaeus and thus he did not validly publish any species names. See part of the text on the prior page. The edible pineapple was often called A. sativus, until it was recognized (in 1917) that A. comosus had priority.



Anassa domestica Rumphius
Herb. Amboion 5:227 pl. 81 (1747).
Digital Library of the Royal Botanic
Garden: <a href="https://bibdigital.rjb.csic.es">https://bibdigital.rjb.csic.es</a>
Linnaeus published the name
Bromelia comosa in 1754, based on
Anassa domestica Rumphius. Names
published before 1753 are not
recognized under modern
nomenclatural rules.

As you can see, the leaves are fairly spiny, as is the case for many forms of *A. comosus*.



Ananas comosus var. parguazensis photo by Matthias Asmuss

While some treat the above name as the correct one, others call this wild pineapple *A. parguazensis.* Apart from the floral bracts, there very little variation between the flowers of the various pineapple species.

Due to the importance of the pineapple, and the fact that it is one of the earliest known bromeliads, you might think that the genus and species were well sorted out. Nothing could be further from the truth. There are tons of names ascribed to the genus, many of them cultivars, and many vary in relatively minor ways. The history of the genus and its species is long and confusing, and botanists disagree about its current status.

Given this difficult history, this article will attempt to summarize the <u>current</u> status of the genus, and some of the reasons why the various authorities disagree about the proper names. I have by no means done an exhaustive review of the literature, and apologies if I overlook or mischaracterize the views of others.

As best as I can tell, there are about three different views (with some variations) about the current status of the pineapple species, as follows:

- 1. The last major bromeliad monograph, by Smith & Downs in the late 1970's, listed nine different species (and two varieties). One species was in a different genus called *Pseudananas*. An online list of Brazilian species generally follows this view, currently listing two genera, seven species and treating the other two as synonyms. Flora do Brasil 2020 under construction. Jardim Botânico do Rio de Janeiro. Available at:
- < <a href="http://floradobrasil.jbrj.gov.br/">http://floradobrasil.jbrj.gov.br/</a>>. ("Brazilian Flora").
- 2. The World Checklist of Vascular Plants (WCVP) and World Checklist of Selected Plant Families (WCSP) are two of the better known websites listing currently recognized taxa and synonyms (and related information, such as the author and species of the publication) of either vascular plants or selected plant families. WCVP (2020). World Checklist of Vascular Plants, version 2.0. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; http://wcvp.science.kew.org. World Checklist of Selected Plant Families. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; http://wcsp.science.kew.org. They list one valid genus with two *Ananas* species: *comosus* (with five varieties) and *macrodontes*.
- 3. The New Bromeliad Taxon List ("Brom. Taxon List")) and Encylopaedia of Bromeliads ("Encylopaedia") each lists three species: *Ananas ananassoides* (with one variety), *parguazensis* and *sagenaria*. Butcher, D. & Gouda, E.J. (cont.updated) The New Bromeliad Taxon List.

http://bromeliad.nl/taxonList/]. University Botanic Gardens, Utrecht. Gouda, E.J., Butcher, D. & Gouda, C.S. (cont.updated) *Encyclopaedia of Bromeliads, Version 4.* http://bromeliad.nl/encyclopedia/ University Botanic Gardens, Utrecht. The Bromeliad Taxon List lists all natural bromeliad species, as well as synonyms and the name to which they are referred. The Encyclopaedia lists of all recognized natural bromeliad species, synonyms and a wealth of other information including tons of photographs. Even more information is available for a small fee. These two sources are commonly cited for the number of bromeliad species (or species of a bromeliad genus).



Ananus 'Variegatus' – it is a variegated form of *A. comosus.*Photo from Bromeliad Cultivar Registry ("BCR).

<a href="https://registry.bsi.org/">https://registry.bsi.org/</a> Note the lack of spines on the leaves – others may have

spines. This plant (with spines) can be found in the jungle garden of the HBG. Variegated forms have been known for at least 150 years, if not more.

A review of these three sources of botanical names makes an excellent case study about taxonomy and nomenclature. Despite the apparent almost complete disagreement, it turns out there is considerable agreement about the various taxonomic units, just very little about the correct name for them.

To be continued next month.