S.F.V.B.S.

SAN FERNANDO VALLEY BROMELIAD SOCIETY

SEPTEMBER 2020

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

sfvbromeliad.homestead.com sanfernandovalleybs@groups.facebook.com

Twitter is: @sfvbromsociety ***Instagram is: @sfvbromeliadsociety***

next meeting: Saturday September 5, 2020 Zoom Meeting

Please Put These Dates on Your Calendar

Here is our 2020 Calendar. Rarely does our schedule change……. however, please review our website and email notices before making your plans for these dates. Your attendance is important to us. Due to Covid, **future meetings may be cancelled.**

Saturday September 5	SFVBS 1st Zoom Online Meeting
Saturday October 3	??
Saturday November 7	John Martinez, Dyckia Program

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

President's message: The SFVBS is going to host a meeting on Zoom. This is scheduled on our regular September meeting date Sept. 5th at Noon. Since this is experimental for us a program has not been scheduled but, we are planning to have programs in future meetings.

You can join us for a chat with video – with Show-N-Tell, plant Q&A, and a general bromeliad topics discussion. Hosted by Bryan and Mary Chan. Log on with your computer that has video/camera and microphone/speaker capability, or on your smart phone. There is NO NEED to download the Zoom program. You can join on the Zoom app or just click on the provided link or type it into your browser. You'll need the Meeting ID number either way that you join. Here is a YouTube video that describes the easy process of joining Zoom meetings without downloading the app.

https://www.youtube.com/watch?v=cDZOx-N39EU

This is the link to the meeting. Click on or copy and paste into your browser to start.

https://us04web.zoom.us/j/9672190375?pwd=K0ZHa0FzcTQrZEVrbEVubUxCTnRKZz09

Then join the Zoom meeting.

Hi to everyone, September, 2020

What a wild ride this last few months have been! No, I'm not referring to the last trip to the grocery store. When we had our last meeting, the future seemed a bit uncertain but manageable. Then the pandemic took over and changed everything we took for granted.

In March, we had speakers scheduled for the rest of the year and had to cancel all of them. In addition, the Sepulveda Garden Center closed and we didn't even have a place to go for a casual get together. But now, it is time for us to get back on track and get into our new reality. As a step in that direction, Bryan has scheduled a Zoom meeting for September.

For November, John Martinez will present his very comprehensive program about Dyckias. He will use the BSI Dyckia tutorial as a basis but will expand the program by adding his experience as a grower and consummate seeker of new information.

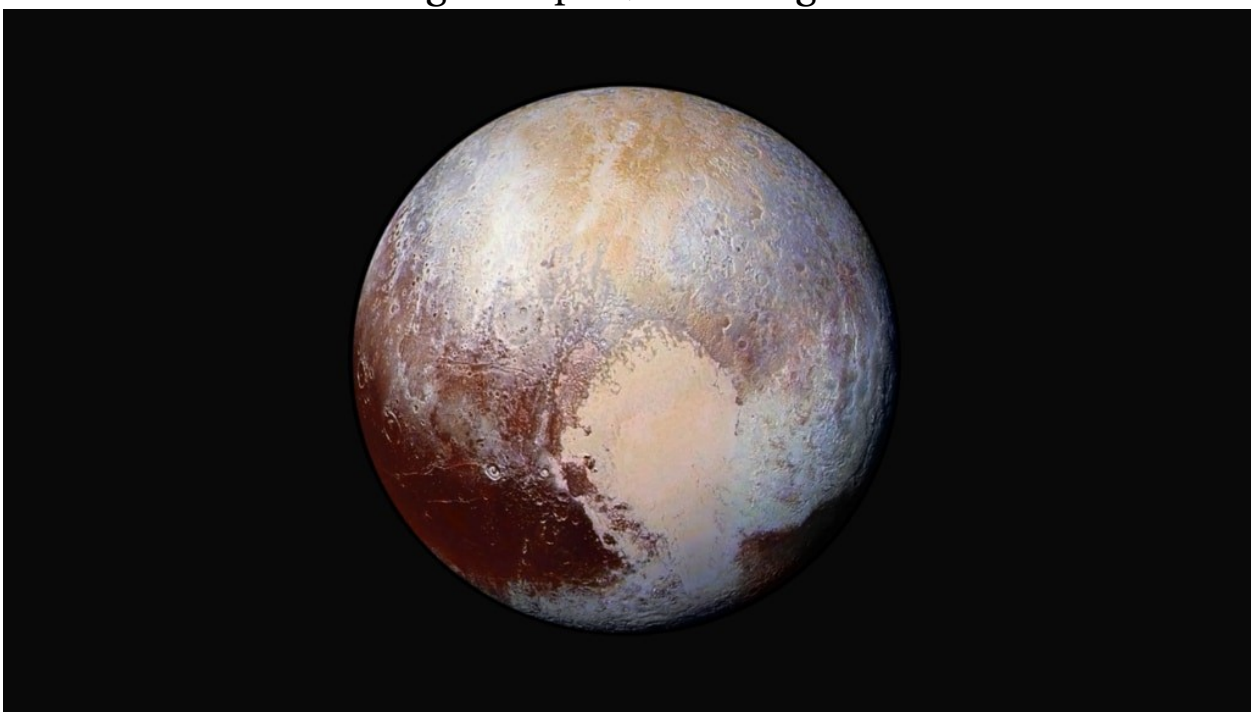
Looking forward to seeing all of you soon!!!

Best,
Joyce Schumann, VP-Programs

Member-contributions of photos or articles

Thanks to Al Mindel for sending in this great picture of his newest airplant holder that he hopes will give people something to smile about.

From Mike W - Continuing with space, I never figured to see Pluto!



Enhanced color global view of Pluto, taken when NASA's New Horizons spacecraft was 280,000 miles (450,000 km) away. The image shows Pluto's famous heart, a region known as Tombaugh Regio. It was recently announced that Pluto's icy heart makes winds blow across the dwarf planet's surface.
Image via NASA/ Johns Hopkins APL/ Southwest Research Institute)

Taxonomic Tidbits: *Ananas, part 4*

By Mike Wisnev SFVBS Editor (mwisnev@gmail.com) San Fernando Valley Bromeliad Society Newsletter –September 2020

Tidbits in three of the last four months discussed the pineapple genus (*Ananas* and possibly *Pseudananas*) at length. Depending upon the applicable botanists, there one or two genera, 2, 3 or 7 species and 0, 1 or 5 varieties. Furthermore, the two authorities that recognized 2 and 3 species didn't have one recognized name in common!

Ananas comosus, grown in Madagascar. Photo by Max Antheunisse. http://www.plantillustrations.org/illustration.php?id_illustration=68572.

A summary of the differences among these groups is set forth in the chart below. The left column lists the species and varieties recognized by Smith & Downs (with the exception of *A. monstrosus* which no one currently recognizes as a species or variety) and two synonyms listed by S&D. The three other columns list the names for each of these taxa by other authorities; for full citations to each of these authorities, see the May Newsletter. Unless noted otherwise, all are *Ananas* species or varieties. Recognized species names by the relevant authority are in bold.

Smith & Downs	**Flora do Brasil 2020** http://floradobrasil.jbrj.gov.br/	**World Checklist of Selected Plant Families** https://wcsp.science.kew.org/	[**Encylopaedia of Bromeliads** and **Bromeliad Taxon List** http://bromeliad.nl/encyclopedia/ https://botu07.bio.uu.nl/] **Or Bromeliad Cultivar Register** https://registry.bsi.org/*
ananassoides	***ananassoides***	***comosus* var. *microstachys***	***ananassoides***
bracteatus	***bracteatus***	***comosus* var. *bracteatus***	'Bracteatus'
bracteatus* var. *tricolor	Syn. of ***bracteatus***	Syn. of *comosus* var. *bracteatus*	'Tricolor'
comosus	***comosus***	***comosus* var. *comosus***	'Comosus'
comosus* var. *variegatus	Not listed	Syn of *comosus* var. *comosus*	'Variegatus'
erectifolius – syn. of *lucidus*	syn. of *lucidus*	***comosus* var. *ereectifolius***	'Erectifolius'
fritzmuelleri	***fritzmuelleri***	*comosus* var. *bracteatus*	n/a

***lucidus* Miller**	***lucidus* Miller**	Not listed**	n/a
macrodontes –syn. of *P. sagenarius*	syn. of *P. sagenarius*	***macrodontes***	***macrodontes***
nanus	Syn. of *ananassoides*	Syn. of *ananassoides*	***ananassoides* var. *nanus***
parguazensis	***parguazensis***	***comosus* var. *parguazensis***	***parguazensis***
Pseudananas sagenarius	***Pseudananas sagenarius***	Syn of *comosus* var. *bracteatus*	***Ananas sagenaria***

* All the cultivar names in the last column are listed in the BCR. The corresponding names in other columns are listed as excluded taxa in the Encylopaedia and Bromeliad Taxon List.

**The 2015 Paper (cited in the June Newsletter) treats as *A. lucidus* Miller as an edible pineapple cultivar that is an invalid name. The WCSP recognizes *A. lucidus* (Aiton) Schult. & Schult.f as a synonym of *A. comosus* var. *comosus.*

<u>What is the correct name of the stoloniferous pineapple species?</u> As noted in the chart above, the current authorities have three different answers – *Pseudananas sagenarius, Ananas sagenaria and Ananas macrodontes*. There is also a fourth option - *Pseudananas macrodontes*. The answer depends upon whether *Pseudananas* is really a different genus than *Ananas* and whether *A. macrodontes* species is the same as the species described in 1810 as *Bromelia sagenaria*. In all likelihood, the answer here is inherently subjective. In some cases, a comprehensive phylogenetics study might provide an answer, but in others the results will still be open to argument. In this particular case, however, there is a major problem – as far as I am aware, no one knows (or at least there is no agreement) which living plants (or dead specimens) or specific locality corresponds to the plant used by

Arruda da Camara to describe *Bromelia sagenaria*. Thus, there is no way to get DNA sample to study. As a result, the answer depends on each botanist's interpretation of the relevant literature. This issue is discussed further below.

Pseudananas sagenarius (Smith & Downs), *Ananas sagenaria* (Encyclopaedia) or *Ananas macrodontes* (WSCP). Photo by Wisnev.

While labeled *Aechmea magdalenae*, the purple flowers (not visible here) indicate this incorrectly labelled, and is likely the taxa noted above. Note that most of the spines are antrorse (they face the tip of the leaves) while some at the bottom of the leaves are retrorse (they face the base of the leaves.) *A. parguazensis* also has both antrorse and retrorse leaves, but has a more spherical inflorescence, as well as shorter and narrower leaves.

In 1810, Arruda da Camara described *Bromelia sagenaria.* However, in 1939, Camargo treated it as *Pseudananas sagenarius*, with *P. macrodontes* as a later synonym. Arruda's and Camargo's papers are in ancient Portuguese and Portuguese, respectively. I have not seen other papers explaining this treatment, although I have not searched for any. Thus, it isn't clear why Camargo treated *P. sagenarius* as synonymous with *A. macrodontes* in 1939, nor why he later treated *macrodontes* as a variety of *P. sagenaria* in 1943. Leal, d'Eeckenbrugge & Holst (1998) did say Camargo thought that *A. sagenaria* included the plant known locally as yvira, which was described later as *A. macrodontes.* That article stated that Arruda's description "may correspond to either *Ananas bracteatus* or *Pseudananas macrodontes*, and provides no reason to abandon Morren's basionym" which is *A. macrodontes*. Id. at 232. That article also noted that Reyes-Zumeta generally continued Camargo's synonymy, with 3 varieties.

The 2003 and 2015 Papers take the position that *A. sagenaria* is the same as *A. comosus* var. *bracteatus*. The 2015 Paper discusses this at some length. Like the earlier paper, the primary argument is that Arruda never mentioned the existence of stolons or the lack of a leaf crown, despite describing the floral characteristics twice. They also noted Schultes & Schultes wondered if the two were different, and Mez later treated them the same.

Finally, they noted that Arruda's work "praises the species to be tolerant to poorly fertile soils and mentions cultivation close to sugar cane plantations, i.e., in an ecology that is very distinct from the organic soils of the rain forests where *A. macrodontes* thrives." 2015 Paper at 274.

These papers did not mention other authorities such as Morren. When he published *A. macrodontes* in 1878, he stated *A. sagenaria* "is believed to be the same plant that Lindley described as *Ananassa bracteata* and is cultivated by Bromeliads lovers…" Morren, E. 28 Belg. Hortic. 140 at 143 (1878). In addition to Mez, Beer treated *A. bracteata* and *sagenaria* as synonyms in his 1856 monograph, as did Baker in his 1889 monograph (although some different names were used for them). In 1939 Smith noted the two had "certain similarities," but also differences like the fact that the floral bracts of *B. sagenaria* (mentioned as being 3 inches in Arruda's paper) are almost twice as large as those of *A. bracteatus*. Presumably it is the large floral bracts that caused Baker and Mez to treat it as the same as *A. bracteatus*.

It is perhaps not surprising that there is considerable disagreement here since the

> "tetraploid *A. macrodontes* (Figure 8) only shows clear genetic affinity with *A. comosus* var. *bracteatus*, as they share rare isozymes (García 1988) as well as nuclear DNA markers, and chloroplast DNA markers in the case of the former *A. fritzmuelleri* Camargo (Duval et al., 2001, 2003). They also share most of their original geographic distribution in southern South America, and several morphological traits such as wide leaves, strong spines, the presence of retrorse spines, fruit peduncles of intermediate length and width, and bearing medium-size fruits with floral bracts longer than the individual flowers. " 2009 Paper at 21-22.

Without knowing Camargo's rationale, it seems inappropriate to take a position on this subject.

Ananas comosus, grown in Madagascar. Photo by Max Antheunisse. http://www.plantillustrations.org/illustration.php?id_illustration=68566.

Note it is not nearly spiny as the clone shown earlier.

Continued next month.