



**S.F.V.B.S.**

**SAN FERNANDO VALLEY BROMELIAD SOCIETY**

**DECEMBER 2020**

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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: **Steffanie Delgado**, Web **Mike Wisnev**, Editor: **Mike Wisnev & Felipe Delgado**, Snail Mail:

**Nancy P-Hapke**, Instagram, Twitter & Facebook: **Felipe Delgado**

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**Saturday, December 5, 2020 ZOOM Meeting at NOON**

We will have our fourth ZOOM meeting, and for the second time, we will have a speaker presentation. (Enter <https://tiny.url/SFVBS>)

**Presentation – Cultivating Bromeliads in the San Fernando Valley**

Bryan Chan has been growing bromeliads in the San Fernando Valley since the early 1980's. Without the use of a greenhouse he has maintained a decent size collection and has regularly participated in local shows. With everyone spending so much time at home, Bryan decided to share his perspectives on growing, pest control and ultimately bringing the plants to shows. If there is time, he will also touch on the subject of creating new hybrids

**President's message**

I hope that our club members are doing well through these trying times. I have one announcement to make. The 2020 membership dues will be continued into 2021. Our club operational costs have been minimal and there has been no reason to consider collecting membership dues for the upcoming 2021 year.

Warm weather is still with us so keep up on watering your plants although, slow down on fertilizing so that you do not create a lot of soft new growth as we start to go into the winter months. As the weather cools many of the plants we grow can be given more light to increase or hold their color.

## 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. **As noted earlier, future meetings may be cancelled.**

Saturday December 5	Bryan Chan, SFVBS President
Saturday January 2	STBA

### **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](mailto:ropojo@pacbell.net)

## *Member-contributions of photos or articles*

Sorry to report that we did not have any photos or member columns to include on this portion. Obviously during these stressful times, our club is taking a back burner.



# Taxonomic Tidbits: *Disteganthus*: a case study in changing names.

Mike Wisnev, SFVBS Editor

([mwisnev@gmail.com](mailto:mwisnev@gmail.com)) San Fernando Valley Bromeliad Society Newsletter – December 2020

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Last month discussed *Disteganthus basi-lateralis* and *lateralis* in detail.



*Disteganthus basi-lateralis*. Photo by Selby.

Many thanks to Julián Aguirre-Santoro for sending this photograph.

The newsletter concluded by noting that two more species, *D. gracieae* and *morii* were described in 2015. Aguirre-Santoro, J. and F. Michelangeli. 2015. Two new species of *Disteganthus* (Bromeliaceae) from Suriname and French Guiana. 67(3) Brittonia 233-42 (“2015 Article”). The two new species are somewhat similar and also somewhat similar to *D. lateralis*. *D. lateralis* and *gracieae* are similar sized plants, and distinguished primarily due to the fact the former has linear and narrower leaves, while the latter has wider leaves that narrow towards the base. *D. morii* is found in a different area, and is a less robust plant than these other two, with narrower leaves, a narrower inflorescence and a different colored flower.

Given their similarities, the chart below shows some of the more salient differences from a hobbyist viewpoint – that is, the shape and size of the leaves, inflorescence and flower color. The article notes numerous other floral characteristics that differ. Except for items in blue, all information is from the Aguirre-Santoro Article.

	<i>D lateralis</i>	<i>D gracieae</i>	<i>D morii</i>
Locations	Found in 3 localities in northern Guyana, Suriname and French Guiana.	Mainly central and eastern French Guiana	Two localities in French Guiana
Leaf shape	Linear-oblong	Oblanceolate, narrowed to base	Linear-lanceolate narrowed to base
Leaf length	200-280 cm	80-170 cm	120-160 cm
Leaf width	4-8 cm	1.2-3.2 cm at base, (4.8-)6-8.5 in middle	1.3-2.3 cm at base, 2-3.2 in middle
Inflorescence size	<a href="#">Peduncle length not listed in description, but seems about 20+ cm in holotype.</a> Rachis 1-1.5 (-2.5) cm	Peduncle 5-19 cm, rachis (2.5-) 3.5-8 cm	6.5-12(-16) cm, Rachis 4-10(-16) mm
Upper peduncle bracts and basal floral bracts	ovate to lanceolate	elliptical to oblanceolate	lanceolate to ovate
Pedicels	0-3mm	4-10 mm	1-3 mm
Petal color	Not listed. <a href="#">Not listed in original description either. White or white and yellow based on photos on web.</a>	the distal half white, the proximal half white with light yellow	the distal half light green, the proximal half cream
Petal size	(15-) 30-40	47-8 mm	57-58 mm
sepals	Densely floccose, free to shortly connate up to 4mm	glabrescent to sparsely floccose; connate 1/3-2/3 of length (10-20 mm)	Densely floccose, connate up to 1/3 of length (7-15mm)



Both photographs on this page are **D. gracieae**, taken by Carol Gracie, near Saul, French Guiana. The photo above is from Gorts-Van Rjin & Gouda 50. The one to the left is from Mori et al. 22855. Many thanks to Julián Aguirre-Santoro for sending them; they also appear in his 2015 article.

Both had been identified as *D. lateralis* previously, until Julián Aguirre-Santoro and Fabian Michelangeli realized they were not the same as the type species of *D. lateralis*. Compare this photo with the holotype of *D. lateralis* shown in last month's newsletter. Carol Gracie was on the expedition and the species was named after her.

As you can see from the upper picture, the leaves are wider in the middle and narrow towards the base. The leaves of *D. lateralis* are more linear in nature, and usually longer. You may also be able to see the hint of yellow on the petals in the photo to the left.



*D. morii*. Photo taken by Aguirre-Santoro & Michelangeli at Surinam (Sipaliwini). From Aguirre-Santoro & Michelangeli 1908. Many thanks to Julián Aguirre-Santoro for sending this.



*D. morii*. Photo taken by Aguirre-Santoro & Michelangeli at Surinam (Sipaliwini). Many thanks to Julián Aguirre-Santoro for sending this photograph, which does not appear in his 2015 publication. As you can see from the previous two photographs and the specimen below, the leaves of *D. morii* are very narrow, and not as long as *D. lateralis* or *graciae*. The petals are the longest of the *Disteganthus*, and are light green (white at base) unlike the other species. The peduncle is fairly short, and the upper bracts are lanceolate.



*D. morii*. Isotype. Aguirre-Santoro, J. & Michelangeli, F. A.; 1909, US National Herbarium Sheet 3699313, Barcode 01269202 .

Creator - Ingrid P. Lin

<https://collections.nmnh.si.edu/search/botany/> CCO license

Note the very narrow leaves that narrow at the base.

Surprisingly, there are a number of other photos of *Disteganthus* on the web shown on the following pages.

Both photographs on this page are labelled *D. gracieae*. Both photos were taken by Sébastien Sant, and appear on the Inventaire National du Patrimoine Naturel website.

[https://inpn.mnhn.fr/espece/cd\\_nom/851581](https://inpn.mnhn.fr/espece/cd_nom/851581).

It appears the pics were taken at Parc Amazonien de Guyane which is in central French Guiana.



They seem to match the description well since the leaves look wider and then narrow toward the base.



### *D. gracieae*.

Consistent with the description, the inflorescence is narrow, and the petals are white and yellow at the base and white at the distal portion.

For more photos of *Disteganthus* by Sant and others, see

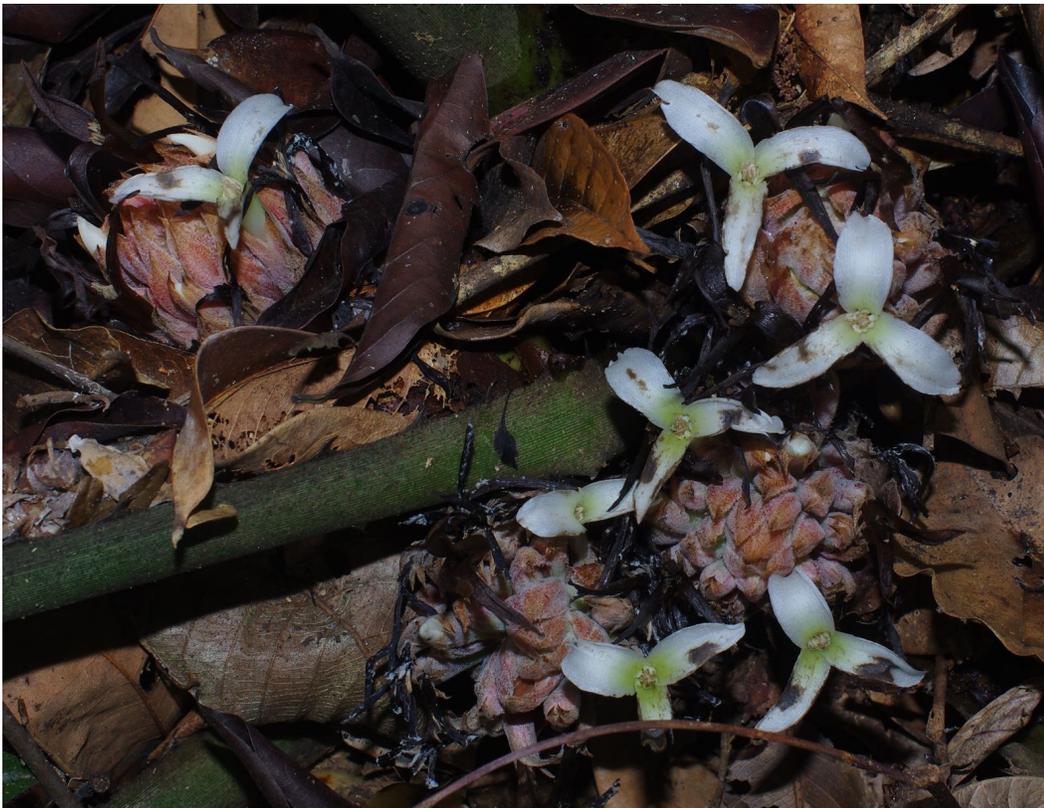
<https://floredeguyane.piwigo.com/index?/search/948>

Both photographs on this page are labelled *D. gracieae*. Both photos were taken by Hervé Galliffet, and appear on <http://www.lachaussetterouge.fr>. The photos were taken in 2013 and identified as *D. lateralis*, since *D. gracieae* had not yet been described.

Another reader later identified them as looking more like *D. gracieae* as compared with *D. lateralis* “which has linear leaves, more robust inflorescences and a more slender habit.”



More photographs of *D. gracieae* and *basi-lateralis* are found on <http://www.lachaussetterouge.fr>, and taken by Hervé Galliffet.



The photos of *D. gracieae* were taken at Sentier des Monts La Fumée, Saül in French Guiana. “It is very remote, surrounded by dense rainforest and, because there are no roads to the town, can only be reached by airplane.” [Wikipedia](#)

Both photographs on this page are labelled *D. lateralis*. Both were taken by Hervé Galliffet, and appear on <http://www.lachaussetterouge.fr>

These photos were taken at “savanna-rock Wayabo, Kourou” which seems to be near the coast of north French Guiana. The map on the 2015 article does not show any populations here, but there are nearby populations of both *D. lateralis* and *gracieae*. Also, other populations of *D. lateralis* are on the northern coast of Suriname and Guyana.



*D. lateralis*. The website says this is “a fairly imposing plant which can reach 3 meters in height. The populations encountered could include up to fifteen individuals.” In contrast, *D. gracieae* is about 1.5m high according to the website. The inflorescence here is not that different than the one shown for *D. gracieae* on the prior page, but we don’t have any sense of size to compare the two. In any case, this photograph to the left is quite similar to the color illustration by M. Foster of the type plant. That illustration also says the leaves can reach 8-12 ft tall. Also compare with the illustration on p.5

For those interested in more information, the holotype of *D. gracieae* is at the NYBG and can be found here - <http://sweetgum.nybg.org/science/vh/specimen-details/?irn=216140>. You can also see other specimens and a photo of that plant taken by Scott Mori.

There are also two pictures under *Disteganthus lateralis* in the Florida Council of Bromeliad Societies website. <http://www.fcb.org/pictures.htm>. Based on the shape of the leaves, these are more likely *D. gracieae*.

Finally, there are some pictures of *D. lateralis* flowers on Flickr. [https://www.flickr.com/photos/andre\\_cardoso/5094326361/in/photolist-9mhgup-23i6oUR-8Lavzz-8LdVvYE-8LarQR-8LaKK8-8LayJZ-aBJzb9/](https://www.flickr.com/photos/andre_cardoso/5094326361/in/photolist-9mhgup-23i6oUR-8Lavzz-8LdVvYE-8LarQR-8LaKK8-8LayJZ-aBJzb9/) The leaves are not visible, so it is hard to assess whether they are correctly named.

Lots of times it is easy to distinguish species. But many species are quite variable. In the case of variable species with one or more similar relatives, it is worth considering how many times that there are some clones that can be readily distinguished, while others seem more intermediate. No doubt there are long leaved *Disteganthus* clones with linear long leaves, and some that are wider than narrow at the base, but are there some in between. If so, are they hybrids, or are the lines not so clear as we might like?

In any case, more than once, two different species have been described and later fieldwork revealed they were in a continuum and treated as one species.

**Phylogenetics.** As indicated at the outset, it appears *Disteganthus* is closely related to the pineapple genus *Ananas* (and perhaps *Pseudananas*). Not surprisingly, no one has included all four *Disteganthus* species in a study. The genus also appears closely related to some *Aechmea* species that undoubtedly will end up being transferred to another genus (or two) at some point in time. The precise placement, however, remain unclear. Some of the results of the studies are listed below:

1. A recent 2018 *Ananas* study found that *D. basi-lateralis* was sister to *Aechmea fernandae*. In turn this clade was sister to a clade of *Aechmea tayoensis* and *Ananas*.
2. Similarly, Aguirre-Santoro's doctorate thesis on *Ronnbergia* found that *D. morii* was sister to a clade of *Aechmea tayoensis* and two *Ananas* species. This clade in turn was sister to *Aechmea magdalenae* and *strobilacea*.
3. Two studies surprisingly found that *D. basi-lateralis* might be treated as an *Ananas*, or that *Ananas* needed to be broken up. The 2013 Silvestro Bromeliaceae study found *D. basi-lateralis* was sister to *Ananas fritzmulleri*, and that was sister to 4 other *Ananas* species. In turn these six species were sister to *Pseudananas*. A 2018 study on *Aechmea* subg. *Chevaliera* found *D. basi-lateralis* was sister to *Pseudananas*, and that clade was sister to *Ananas bracteatus*.

Those interested in more details about these studies should look at the October Newsletter.

One last tidbit. How did Lemaire come up with the *Disteganthus* name? It is from “the Greek *dis*, two, *stego*, cover or sheathed, and *anthos*, flower.” Jason Grant and Gea Zijlstra.

An Annotated Catalogue of the Generic Names of the Bromeliaceae. 1998. *Selbyana* 19(1) 91 – 121.