

S.F.V.B.S.

San Fernando Valley Bromeliad Society

JUNE 2017

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

sfvbromeliad.homestead.com

sanfernandovalleybs@groups.facebook.com

Elected OFFICERS & Volunteers

Pres: Bryan Chan and Carole Scott V.P.: John Martinez Secretary: Leni Koska Treasurer: Mary Chan Membership: Joyce Schumann Advisors/Directors: Steve Ball, Bryan Chan, Richard Kaz –fp, Mike Wisnev Sunshine Chair: Georgia Roiz, Refreshments: vacant Web: Mike Wisnev, Editors: Mike Wisnev & Mary K., Snail Mail: Nancy P-Hapke

next meeting: Saturday June 3, 2017 @ 10:00 am

Sepulveda Garden Center 16633 Magnolia Blvd. Encino, California 91316

AGENDA

9:30 – SET UP & SOCIALIZE 10:00 - Door Prize – one member who arrives before 10:00 gets a Bromeliad

10:05 -Welcome Visitors and New Members. Make announcements and Introduce Speaker

10:15 -Speaker John Martinez & Nils Schirrmacher "Dudleya: Succulent Diversity in Our Own Backyard"

Our local mountains are home to a plentiful and varied assortment of *Dudleya*. Each of the 11 species and 6 subspecies inhabiting the Santa Monica's and San Bernadino's can be found within an hour's drive from central Los Angeles. For the past two years, John Martinez and Nils Schirrmacher have photographed these succulents in habitat, trekking slopes and canyons to uncover our native treasures. Their introduction the breadth of local *Dudleya* will feature their photos and impart lessons learned in the field.

John currently lives in Moorpark with his wife Linda and is a retired Los Angeles Fire Department Battalion Chief. He is a member of the San Fernando Valley Bromeliad Society, Los Angeles CSS, San Gabriel Valley CSS, a founding member of the newly formed Conejo CSS, and a past volunteer at the Huntington Botanical Garden.

John has a deep fondness of nature and has been growing xeric plants most of his adult life. Over the past 6 years he has shared a co-op succulent growing compound in Somis with three experienced growers of cactus, succulents, and other exotics.

Aside from maintaining his plant collection, John's time is divided between gardening, golf, photography, occasional fly fishing, and grandchildren. As a native of Southern California John attended California State University of Northridge where he received a Bachelor's Degree in Art.

Nils Schirrmacher has been collecting succulents since 1999, the year he joined the CSSA. In 2005, he became a member of the Los Angeles Cactus and Succulent Society and currently serves as club historian. From his Los Angeles apartment, he's building a collection of seed-grown plants that includes members of the Aizoaceae, or mesembs. This pursuit lead to his joining the Mesemb Study Group in 2014. Nils holds a Master's Degree in Art from UC Irvine and has had several gallery exhibitions of his work. By day, he works as an Art Handler.

Don't miss this meeting! <>

11:15 - Refreshment Break and Show and Tell:

Will the following members please provide refreshments this month: Mardy Graves, Dana Groina, Nancy Pyne-Hapke Adrienne Jaffee, James Johnson, , Brenda Kanno, Richard & Anne Kaz, Leni Koska & Teresa Campbell,

and anyone else who has a snack they would like to share. If you can't contribute this month don't stay away.... just bring a snack next time you come.

Feed The Kitty

If you don't contribute to the refreshment table, please make a small donation to (<u>feed the kitty jar</u>) on the table; this helps fund the coffee breaks.

11:30 - Show and Tell is our educational part of the meeting – Members are encouraged to please bring one or more plants. You may not have a pristine plant but you certainly have one that needs a name or is sick and you have a question.

11:45 – Mini Auction: members can donate plants for auction, or can get 75% of proceeds, with the remainder to the Club

12:00 – Raffle: Please bring plants to donate and/or buy tickets. Almost everyone comes home with new treasures!

12:15 - Pick Up around your area

12:30 –/ Meeting is over—Drive safely <>

<u>Announcements</u> Many thanks to our new member Donna Baker for donating many of the raffle plants at the May meeting.

Participation Rewards System – This is a reminder that you will be rewarded for participation. Bring a Show-N- Tell plant, raffle plants, and Refreshments and you will be rewarded with a Raffle ticket for each category. We realize not everyone has pristine show plants but each of us certainly have unidentified plants that can be brought in. Each member, please bring one plant

Please pay your 2017 Membership Dues

NEED TO RENEW?.....

Pay at the meeting to: Membership Chair – Joyce Schumann or Treasurer - Mary Chan or Mail to: SFVBS membership, P.O. Box 16561 - Encino, CA 91416-6561

Yearly Membership Dues \$10.00 for a single or couple

Please Put These Dates on Your Calendar

Here is our 2017 Calendar. As our schedule is always subject to change due to, please review our website and email notices before making your plans for these dates.

| Saturday June 3 | John Martinez & Nils Schirrmacher "Dudleya: Succulent |
|-------------------------|---|
| | Diversity in Our Own Backyard |
| Sat & Sun - June 10&11, | SFVBS Bromeliad Show & Sale |
| Saturday July 1 | STBA |
| Saturday August 5 | STBA |
| Saturday September 2 | STBA |
| Saturday October 7 | STBA |
| Saturday November 4 | STBA |
| Saturday December 2 | Holiday Party |
| | |
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| | |

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 John Martinez **johnwm6425@gmail.com** <>

Be Prepared - Just 2 More Weeks Are you almost ready for our Bromeliad Show on June 10 & 11?

Now is a good time to remove large pups and prepare to sell or donate pups for Club Sale. At the show we need Volunteer Docents, Volunteers for Reception & Membership Help with Set-Up & Break Down

Prepare 2 or 3 plants

We still have time to get our plants ready. Each member should commit to have at least 3 plants ready for our show. Remove pups that are half or 2/3 the size of the mother plants. Wear long sleeves and gloves when handling the spiny plants. When potting tall or large plants, you can add a few rocks or broken pottery to the bottom of the pots to prevent them from falling over. Use proper potting mixture. Pot the plant and if necessary use chopsticks or small rocks to brace the pup upright; pup's root faster when stabilized. Place the pot on a bench or in an area where it will receive bright diffused light. Before the show wipe the leaves and flower pots with a damp cloth. In 15 minutes your 3 plants are ready to show.

Mother plants or large pups are now ready for the Show!

Taxonomic Tidbits - The Rise (and Fall?) of Crthophytum - the new Sincoraea genus Part 3

By Mike Wisney (mwisney@gmail.com)

San Fernando Valley Bromeliad Society Newsletter -June 2017

This series appeared in the Newsletter in February and March, 2016. Part 1 covered the basics of *Orthophytum*, including the huge increase in species the last few decades, and the sessile inflorescence complex. Part 2 continued with the scapose inflorescence complex, and possible decline in the number of species due to initial DNA testing.



Figure 1. Sincoraea amoena is the type species of the genus Sincoraea described by E. H. G. Ule in 1908. Photo by Rafael Louzada.

All photographs in the article are from *Sincoraea*. Louzada, R. B, and Wanderley, M. L., Re-establishment of *Sincoraea* (Bromeliaceae), 66(1) JBS 6 (2017).

Recap of Parts 1 and 2. The genus showed up long ago, in 1854, when it was described by J. D. Beer. The name apparently it derives from the Greek "orthos" (straight) and "phyton" (plant). In 1908, Ernst Ule named two other genera from two new species he found in an expedition to Bahia, Brazil. Smith moved these two genera and the two species, *Sincoraea amoena* and *Cryptanthopsis saxicola* (meaning a plant resembling



Figure 6. Close-up of flowering Sincoraea humilis. Photo by Rafael Louzada.

Cryptanthus growing on rocks) to Orthophytum.



Figure 10. Close-up of Sincoraea rafaelii in flower. The holotype of Orthophytum rafaelii was prepared using another plant from this clone (Leme collection number 8152). Photo courtesy of Elton Leme.

Judge Elton M. C. Leme has made huge contributions to the world of Bromeliads. For example, he wrote separate books on *Nidularium, Canistrum and Canistropsis*. He has also studied *Orthophytum* extensively. In 2004, he informally grouped into the *Orthophytum* species into complexes and subcomplexes. Studies on *Orthophytum*, an Endemic Genus of Brazil - Part I by Elton M. C. Leme in J. Brom. Soc. 54(1): 36-7. 2004.

Leme starts out by dividing the species into two complexes based on the inflorescence. Many have long inflorescences – this is the scapose inflorescence complex. A smaller number of them, however, have their flowers growing low in the rosette, much like *O saxicola*. This is the sessile inflorescence complex. In turn, he then divided each complex into three subcomplexes.



Figure 7. Sincoraea mucugensis in flower at the edge of the large clump shown in Fig. 8. Photo by Rafael Louzada.

In 1979, there were about 17 species, most of them described by Dr. Lyman

Smith, a couple by Dr. Carl Mez and one by Mulford Foster, all well-known names in the bromeliad world. In the next quarter century, the number doubled. From 2004 to today, the number more than doubled again to about 70 species.

Since the new changes involve the sessile complex, we'll spend a bit more time on that group. Leme put most sessile species in subcomplex amoenum which are characterized being stemless, turning red while flowering and with white or pale colored petals.



Figure 11. Close-up of Sincoraea ulei in flower. This species resembles S. burle-marxii closely, but differs in the higher density of scales on the leaves and less-pointed apex of the petals. Photo by Rafael Louzada.

The second subcomplex is the vagans subcomplex which differs quite a bit since it has a stem, and green petals (with white margins) that form a bit of

club shape. In addition to *O vagans*, it includes *O pseudovagans and zanonii*.

A third subcomplex has become the *Lampanthus* genus, discussed more in the earlier newsletters if you are interested.



Figure 2. The central white ring surrounding the inflorescence of Sincoraea albopicta varies greatly in width among different populations. Photo by Rafael Louzada.

Rafael Batista Louzada's doctorate work involved the first comprehensive DNA study of this genus. This study included 40 *Orthophytum* species, 12 *Cryptanthus* species and 2 *Lampanthus*. As before, Lousada followed up with an article. See Louzada, R.B., Schulte, K., Wanderley, M.L., Silvestro, D., Zizka, G., Barfuss, M.H.J., Palma-Silva, C., Molecular phylogeny of the Brazilian endemic genus *Orthophytum* (Bromelioideae, Bromeliaceae) and its implications on morphological character evolution, *Molecular Phylogenetics and Evolution (2014)*.

As to the actual result, all of the *Orthophytum* species didn't fall within a single group unless *Cryptanthus* is also included. While the results indicated *Orthophytum* isn't a good genus, the authors felt more work was needed before taking any specific action.

As to the two complexes created by Leme, the scapose complex was valid according to Louzada's research. Except for *O foliosum*, all of the species with scapose inflorescences are in one group. The sessile complex was a problem. There are two unrelated groups with sessile inflorescences. They correspond to the amoenum and vagans groups (except that *O foliosum* shows up in the vagans group). Since these two groups aren't very closely related, it seemed unlikely that the sessile complex will survive.



Figure 3. This photo resembles one of the commonly cultivated clones of Sincoraea burle-marxii. but the species is variable in appearance among wild populations. Photo by Rafael Louzada.

The end of part 2 of the earlier Newsletter stated "Perhaps the most likely approach would be to create a new genus for the amoenum complex; all the rest of the species could remain *Orthophytum.*" This is exactly what happened.

Part 3. Earlier this year, Louzada and Wanderley followed up with another article that made the amoenum subcomplex a new, or more accurately, resurrected, genus – *Sincoraea*. Louzada, R. B, and Wanderley, M. L., Reestablishment of *Sincoraea* (Bromeliaceae), 66(1) JBS 6 (2017Lousada and Wanderly start with an excellent overview of the history of Orthophytum. They then note that his earlier molecular studies show that Leme's amoenum subcomplex is not in the same group as the *vagans* subcomplex – in fact the latter group is more closely related to the scapose inflorescence.

They also note that while these two subcomplexes both are part of Leme's sessile complex, *O amoenum* has no peduncle, while *O saxicola* one has a "short but evident peduncle."



Figure 4. Marginal leaf prickles are conspicuous on Sincoraea hatschbachii. Photo by Rafael Louzada.



Figure 5. Sincorgeg helenicege has inconspicuous marginal prickles. Photo by Rafael Louzada.

In addition to the DNA testing, the authors also discussed the relevant plant characteristics. "Moreover, some morphological features of species of subcomplex vagans such as petals with obtuse-cucculate apex and cupulate petal appendages are also found in the species of the first lineage diverging from the clade containing all species with pedunculate inflorescences. The species of subcomplex amoenum have an inflorescence morphology distinct from the remaining species. The sessile flowers of this group emerge from the top of a short and inconspicuous stem - resembling an Asteraceae capitulum - while in other species of the genus the flowers are spread along the peduncle or in a long caulescent stem. ' Id at 8-9.

The article concluded with a description of the new genus, a key for the species and list of the taxonomic changes for the eleven new *Sincoraea*

species. Except for *S. navioides*, all were pictured in the BSI article and reproduced here.



Figure 9. Close-up of flowering Sincoraea ophiuroides, Photo by Rafael Louzada.

Orthophytum roseum is now considered to be the same species as *Sincoraea burle-marxii*. Originally, it was distinguished by its different size, but the authors found the sizes overlapped.

So, while *Orthphytum* once had over 70 species, it is now down to 57. This includes the vagans subcomplex. Sincoraea has 11 species, which are are restricted to the northern portion of the Espinhaco Mountain Range in Brazil.

Finally, Latin words often have different endings depending on their gender and other things. So some of the names are slightly different. For example, *O amoenum* is now *S amoena*, *O albopictum* is *S albopicta*, *O humile* is *S humilis*, and *O mucugense* is *S mucugensis*.