S.F.V.B.S.

SAN FERNANDO VALLEY BROMELIAD SOCIETY

AUGUST 2018

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

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

Twitter is: sfvbromsociety **Instagram is: sfvbromeliadsocity**

Elected OFFICERS & Volunteers

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

next meeting: **Saturday August 4, 2018 @ 10:00 am**

Sepulveda Garden Center 16633 Magnolia Blvd. Encino, California 91436

AGENDA

9:30 – ***SET UP & SOCIALIZE***

10:00 ***- Door Prize drawing – 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* – *Richard Kaz*

"Mysteries of Bromeliads"

Richard takes great photos and his programs are always entertaining.

I believe Richard has been a member of this club for around 30 years and in the past has served as Editor, Secretary and President for many years. You may have seen Richard selling plants in the club booth at the recent festival. His yard is filled with a variety of plants including bromeliads, succulents, bulbs and more. He is a frequent visitor of the Huntington Botanic Garden and usually includes photos from there.

Try not to miss this program, you won't be disappointed. <>

11:15 - Refreshment Break and Show and Tell: Will the following members please provide refreshments this month: ***Wendie Fischer, Efren Flores, Mardy Graves, Debbie Hild, Jeri Hughes, Adrienne Jaffe, James Johnson, Brenda Kanno 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 **(feed the kitty jar)** 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 <>

Announcements

- ***New Members*** – Please welcome - Carol & Charles Russell, Ilona Buratti, and Barbara Burnett
- ***August Birthdays –…*** *John Martinez Aug 16, Steve Ball Aug 29, Mary Chan and John Matthews*
- ***South Bay Bromeliad Show & Sale***

Saturday & Sunday August 4 & 5, 2018 / Saturday 12:00 noon - 4:30 Sunday 10:00 - 4:30
Rain Forest Flora Inc, 19121 Hawthorne Blvd., Torrance CA 90503

- ***Felipe Delgado*** - has opened Instagram and Twitter accounts for the club. He is accepting friends and followers. He will post meeting pictures and club info without using member names or photos unless he has permission. Felipe is also a monitor for the SFVBS Face Book page. Questions can be directed to fdelgado70@gmail.com 818-523-4488.

Instagram is sfvbromeliadsocity - can be searched from within Instagram typing @sfvbromeliadsociety
Twitter is sfvbromsociety - can be searched from within Twitter by typing @sfvbromsociety
Facebook - sanfernandovalleybs@groups.facebook.com
* *For members who are challenged by social media – you can google instructions and or talk to* **Felipe at a meeting to get assistance**

Library - First, I must apologize for not having the new library materials available to you at the July meeting. I got double booked for things-to-do that Saturday morning. For this month, the latest book to be added to our library will be featured. Again, it is an old issue, copyrighted in 1981, titled "Bromeliads: The Horticulturist's Guide to a Houseplant of Unparalleled Beauty With instructions on how to grow more than 200 bromeliads indoors and out" [say that ten times very fast!] by Jack Kramer. Most of the photos are B&W but the middle pages are filled with some very dramatic color photos. The book is divided into three parts:

- Part One: "Cultivating Bromeliads" covering topics as "What you Should Know About Bromeliads", "Bromeliads at Home", "Seasonal Culture and Care", "Insects and other Problems", and "Bromeliads Outdoors and in Greenhouses".
- Part Two: " A World of Bromeliads" - contains descriptions of over 200 Bromeliads.
- Part Three: "Choosing Bromeliads" – An easy reference for choosing a plant based on light needs and a graph that should be standard reading for every beginner. The book is good reading for beginners and growers alike. See you soon, Joyce
- ***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. Each member, please bring one plant <>

Taking a look back at last month……. We didn't finish talking about the June festival; hope you all were able to attend. If you weren't you missed out on all the fun; maybe you can help next year. In the July newsletter we didn't have a complete list of SFVBS members who participated in the festival and can only hope that we have a full list now. Many contributed in different ways. For those who were there the club wants to acknowledge you. There is a big overlap of SFVBS members and LACSS members, which is a good thing until help is needed for the festival. Many of the LACSS members were mainly helping with cactus club activities, however even if they only lifted an occasional hand to the Bromeliad section, we want to acknowledge them too. The names of those SFVBS members helping in some way at the festival were Steve Ball, Duke & Kaz Benadom, Bryan & Mary Chan, Nels Christianson, Felipe Delgado, Miguel Delgado, Richard Kaz, Leni Koska and Teresa Campbell, John Martinez, Michael & Terral Matsumoto, Kathleen Misko, Rose Polito & Joyce Schumann, Nancy Pyne-Hapke, Chris Rogers, Peter Speziale, Ray Van Veen, Michael & Ana Wisnev, Bob Wright, Efren Flores, Brenda Kanno, John Matthews, Stacey Phelps, Steve Rudolph. Thank you all for your service. <>

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 for monthly e-mail** newsletters or **$15 for snail mail**

Please Put These Dates on Your Calendar

Here is our 2018 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

Saturday August 4, 2018	***STBA***
Sat & Sun August 4 & 5	***South Bay Bromeliad Show & Sale***
Saturday September 1, 2018	***Cristy Brenner***
Saturday October 6, 2018	***STBA***
Saturday November 3, 2018	***STBA***
Saturday December 1, 2018	***Holiday Party***
Saturday January 5, 2019	***STBA***

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** **or Bryan Chan bcbrome@aol.com** <>

Member Photos – contributed by Mike Wisnev

Ana and I saw these crested *Ananus comosus* (yes, pineapple) on a recent trip to the Philippines. They are apparently popular for the Chinese New Year. It wasn't clear if they are normal, or result from chemicals.

Bromeliads in Ecuador; courtesy of Jerry Raack.

Jerry Raack is a long-time bromeliad enthusiast (about 50 years!) who recently posted some great habitat photos he took in Ecuador. See http://botu07.bio.uu.nl/Brom-L/. He graciously allowed his pictures and emails to be used in our Newsletter.

Thanks so much to Jerry for sharing these photos. Below is ***Guzmania gracilior***:

Jerry said "Locality: Ecuador, Zamora-Chinchipe Province - East on the road from Los Encuentros toward the Condor mountains at an elevation of 1584 meters. I include this lousy photo only to document my finding of this small, but colorful species. It was along the road, and had been growing on a steep embankment which had sloughed downward to the road. The entire clump was interconnected by stolons and was growing in a very wet area. The inflorescence is only about 20 to 25 cm long."

Above is ***Guzmania farcininiformis***. Locality: Ecuador, Zamora-Chinchipe Province - East on road from Los Encuentros toward the Condor Mountains. Elevation: 1510 meters.

Taxonomic Tidbits *Hohenbergia Part 2*

By Mike Wisnev, SFVBS Editor (mwisnev@gmail.com) Photos by Wisnev unless noted.

San Fernando Valley Bromeliad Society Newsletter – August 2018

Part 1 discussed the history of the genus up until 1980, and some of the species found in cultivation. Subsequent changes and more species are covered here.

Hohenbergia burle-marxii is another desirable species to have. Here is a wonderfully grown specimen. ***H. burle-marxii.***

Photo by Bromelario Imperialis. Leme and Till described this species in 1996, stating that for "several years now, we have observed flowering a strange *Hohenbergia* species collected by Roberto Burle Marx and Luiz K. Correia de Araujo in Bahia, Brazil. This plant grows in the gardens of Burle Marx's country home in Guaratiba, Rio de Janeiro. An attractive plant with beautiful foliage, this bromeliad has large, densely arranged leaves that are purple colored for the most part and covered with dark spots." Bromelia 3(1): 28-32. 1996.

My ***Hohenbergia burle-marxii*** (shown to left) is a lesson on how not to grow plants. Not knowing anything about *Hohenbergia*, I had two of them in a lot of shade to make sure they didn't burn. Then I learned they could take a lot of sun, and moved them, but without letting them adjust. It never looked remotely decent, but did flower last year.

It took some time for the inflorescence to fully develop. I first noticed it in early July, and wasn't fully developed until for almost two months. I saw some flowers, but forgot to take a photo. When I remembered a few days later, it wasn't flowering.

But a week later it flowered again, and continued to do so for over a month.

I thought the inflorescence was also burnt, which is hard to do. But the description which says the primary bracts are stramineous, which means the color of straw. They are strange looking for sure.

The description says the flowers are greenish, but these look white to me, as do the petals shown in other pictures I have seen.

But you can see there is some green at the apex. With the purple stigma, it makes it a pretty nice flower. They are supposed to be fragrant.

As best as I can determine, the cup like structure surrounding the stigma are the "well developed lateral callosities ca. 10 mm long from the base and with irregular bidentate apex." Leme & W. Till, Bromelia 3(1): 28-32. 1996. There are two on each petal.

Disjunct geographic locations. More and more DNA studies are finding that it is unusual for species of a genus to grow in disjunct locations, that is, two or more locations that are not close to each other; it turns that the species in one location belong to a different genus. Based on recent DNA testing by Julian Aguirre-Santoro, *Hohenbergia* species found in the Greater Antilles and Caribbean were transferred to *Wittmackia*. The remaining species are found primarily in eastern Brazil, except for *H. stellata* which strangely is also found there, but also in northern Venezuela.

In fact, another *Hohenbergia* species had been found in a disjunct location – Guatemala. *H. guatemalensis* was described in 1941 by Smith in his Studies of the Bromeliaceae-XII. Smith stated that this "constitutes the first record for the genus *Hohenbergia* on the mainland of North America. *H. guatemalensis* shows no strong resemblance to any other species and its caudate ovules would relate it to the Brazilian rather than to the West Indian series of species." 137:6 Contr. Gray Herb. p.383 (1941).

Eloise Beach, a great grower in Florida, saw an unlabeled plant at the Herring's home in 1974 and realized "it was quite different than anything I had ever seen before." 32(3) JBS 105 (1982). She sent part of the inflorescence to Dr. Read at the Smithsonian, who in turn noted it seemed to be *H. guatemalensis*, but Smith had not seen fresh flowers when he described that species. He asked for more of the plant and Beach then sent the entire inflorescence to him. He reported back that it didn't have petal appendages, unlike all other *Hohenbergia* species.

Photo by Eloise Beach

Hohenbergia guatemalensis, growing at the Herring residence in Orlando Florida.

In 1976, Smith and Read moved this species to a newly described genus, *Hohenbergiopsis*. They noted that it could well fit in a key for *Hohenbergia* species, but "to be strictly logical in using petal appendages as the major generic distinction in the Bromelioideae, it becomes necessary to make it a separate genus." Notes on Bromeliaceae XXXVIII, 33 Phytology 441 (1976).

This species didn't have petal appendages, while all other *Hohenbergia* do. The Smith & Downs 1979 key distinguished the genus based on the fact the filaments form a tube and its different pollen.

Photo by Beach 32(3) JBS 105 (1982). Most DNA studies that include this species show it doesn't belong with *Hohenbergia*.

DNA testing. There hasn't been much DNA testing with regard to the remaining species. A 2015 published study that included 5 species suggests it is monophyletic. Aguirre-Santoro's doctoral thesis included five such species in subg. *Hohenbergia*, four of which (*stellata, correia-araujoi, rosea and pennae)* fell on one branch, which was sister to *Hohenbergiopsis guatemalensis.* However, 3 clones of *H andina* fell on a different branch; if accurate, this species isn't really a *Hohenbergia*.

H. andina, photo by Sawyer. 44(2) BSJ 96 (1994).

Never having heard of *H. andina*, I was curious if it was different than other species. Sure enough, Betancur, who described the species in 1991, said they found no relationship with any other species. Even more important, it was found in western Columbia very far from the other species of the genus.

Again, we see that a species found in a locality distant from other species in its genus may not belong to the genus. Interestingly, the DNA study had *H. andina* on a branch with *Aechmea brachteata, pubescens and dactylina*, all of which have a fairly wide distribution that includes Columbia.

24 more *Hohenbergia* species. Part 1 discussed the 21 *Hohenbergia* species listed in Smith & Downs (as well as two more described before 1979 but listed in S&D as a variety or *Aechmea*) and three more described in 1980. Twenty-four more species have been described, and one has been transferred out. As of May 1, 2018, there are 49 species according to the Bromeliad Taxon List prepared by Gouda and Butcher. http://botu07.bio.uu.nl/bcg/taxonList.php.

Harms described *H. horrida* as a species in 1935; Read and Smith later made it a variety of *H. catingae* in 1976. Four other varieties of *H. catingae* have been described; they differ based on the length of the basal branches, the length of the scape bracts, the nature of the floral bracts and the sepal shape. In 2003, Baracho re-established var. *horrida* as a species again, and Leme agreed.

Above is the flower of *Hohenbergia catingae* var. *eximbricata*, a variety known for its short peduncle bracts. Photo by Bromelario Imperialis. The sepals are completely covered in wool, while the floral bracts come to a very spiny point.

In Frag. Atl. NE Brazil. 293-294 (2007), Leme also says Baracho

> "proposed that the other varieties of *H. catingae* be placed in synonymy. He felt that the morphological traits cited for these varieties were contained in the natural variability universe of the type species, *H. catingae*. However, the presence of similarity does not imply the absence of differences, which suggests a more profound assessment of the above-mentioned varieties. Furthermore, these varieties have other distinguishing traits that were not mentioned explicitly in the respective protologues, a topic that Baracho (2003) did not touch on. This reinforces the need for a more detailed analysis of these taxa, and for this reason, we did not adopt the ample synonymization proposal for the *H. catingae* varieties."

Hohenbergia catingae at Kew Gardens. Photo by Dick Culbert. CC BY 2.0. This species was described by Ule in 1908. The picture shows a plant with longer branches than most other pictures of the species.

Professor Edmundo Perriera described *Hohenbergia pennae* (flower shown to the right is a photo by Butcher) in 1983. He and Moutinho also described *H. correia-araujoi* and two other *Hohenbergia* species in 1980. Perriera mentored Elton Leme, and Leme named the genus *Edmundoa* after him. Perriera also found *H. edmundoi* for the first time and it was named after him.

Hohenbergia pennae. Photo by Tropiflora, Dennis and Linda Cathcart.

Their website says "This is a second clone of this species that we collected in the Chapada Diamantina area of Bahia, this one near Mucuge …Noted for its outstanding bulbous shape with wavy margined leaves that are very wide at the base and narrow abruptly where they bend to flare out at the 'neck' of the plant. The color is grayish green mottled with blackish purple. The inflorescence is a rose colored scape with many compound branches with flowers that are basically greenish with purple petals. After blooming they turn a sort of wheat color." https://www.tropiflora.com/product/hohenbergia-pennae-mucuge/

Elton Leme (alone or with others) has described roughly two thirds of the species described since 1979. This is not surprising – Leme has no doubt described more Brazilian species than anyone.

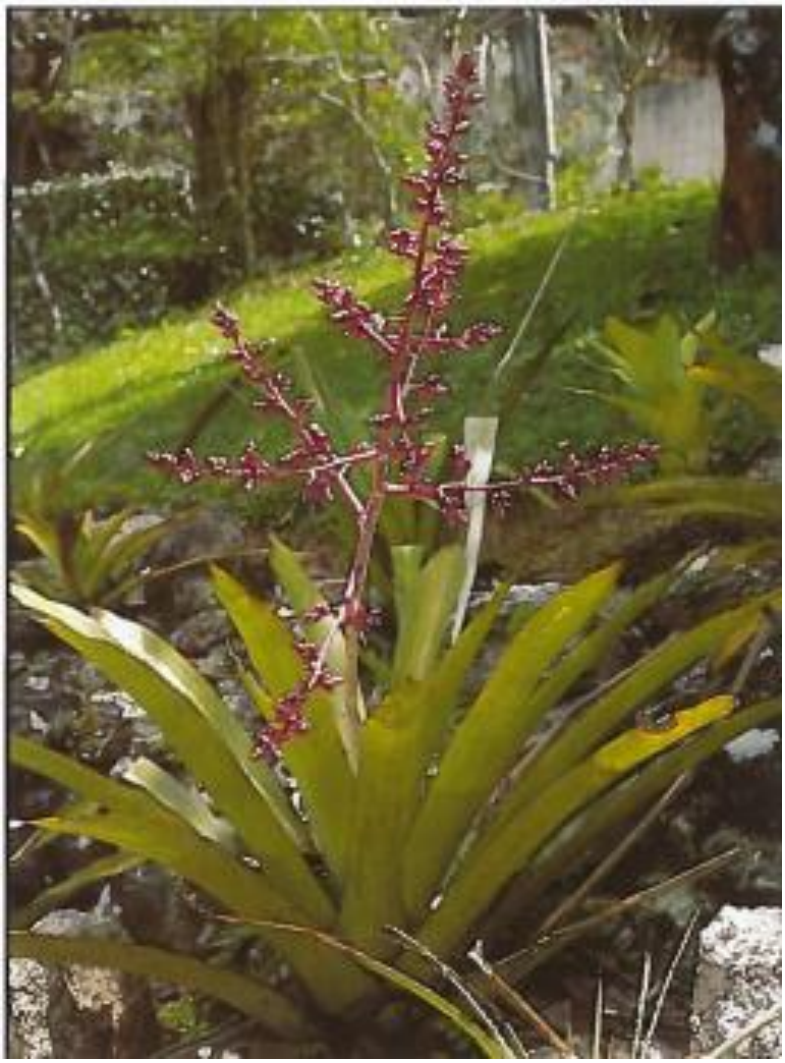
Hohenbergia undulatifolia (left) and ***H. utriculosa*** (right).
Id at 148-9. Photos by Leme.

It is obvious how the former species got its name. Ule described *H. utriculosa* in 1908; Leme noted it is similar to *H. catingae*. In 1998, Leme and Harry Luther described *H. undulatifolia*, which they found growing in the same rocky area as *H. utriculosa* and *Aechmea bromeliifolia.* If you think many of these *Hohenbergia* species look similar, don't feel bad. Leme and Luther stated:

> "This new species, like most of the species of *Hohenbergia* with a bottle shaped leaf-rosette, is difficult to recognize when not in flower due to the phenomenon of the convergent shapes that make those bromeliads from the Bahian grasslands on rocky soils very similar to each other…*Hohenbergia undulatifolia* - the name is a reference to the strongly undulate leaf-margins - is related to *H. pennae*, but differs from it by the abaxially glabrous leaf-blades, the subglobose, glabrescent, and distinctly smaller fascicles of flowers …[T]his new species also resembles *H. edmundoi*, differing by the longer and narrower leaf blades with acuminate apex, leaf margins bearing acicular spines toward base and laxly spinulose toward apex with very small spines…" 48(4) BSJ 155 (1998).

Hohenbergia conquistensis (left) and ***H. sandrae*** (right).

Both photos by Leme. 53(4) JBS 169 (2003) at 171 and 174.



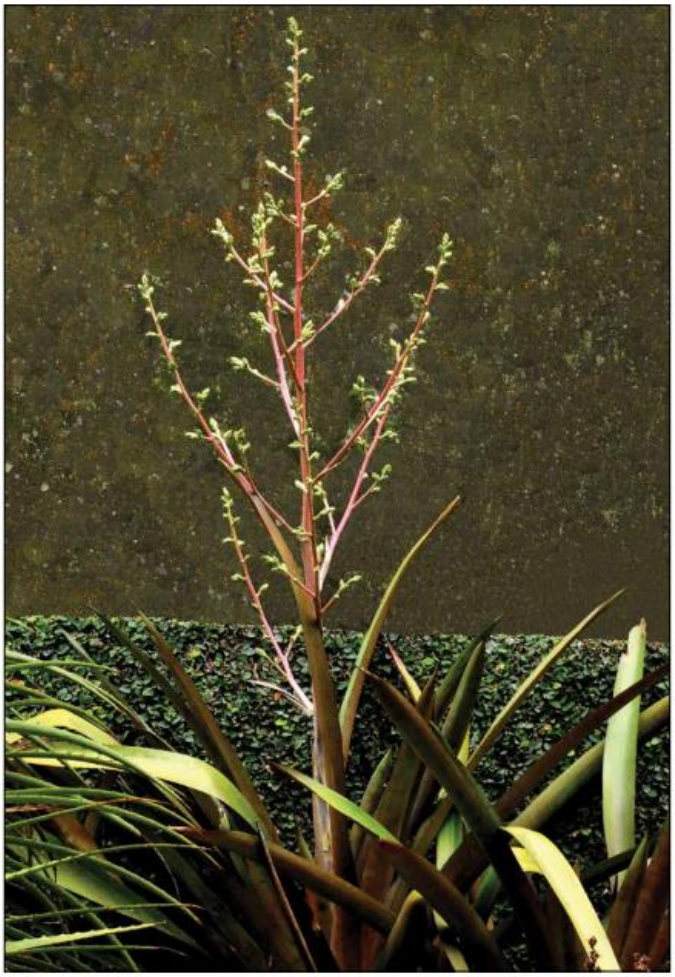
Leme described the two species shown above in 2003. Leme said *Hohenbergia conquistensis* is closely related to *H. vestita* , but is about half the size, with denser spination, shorter scape bracts and other floral differences. It has wooly floral bracts and violet petals.

Hohenbergia sandrae. Id at 174-5. Photo by Leme.

This species likes sunny locations and was "found growing terrestrially in thorn scrub…. It is closely related to *H. blanchetii* …but can be distinguished from it by its red scape (vs. pale green), rose to red floral bracts which are white-lepidote except for the white-lanate margins (vs. pale green and glabrous), flowers longer (ca. 14 mm long vs. 8-10 mm), sepals longer (ca. 5 mm long vs. 3.5 mm), brightly rose (vs. greenish) …" Id at 177.

Leme described ***Hohenbergia viridorubra*** , shown below.
Photo by Leme. 62(6) JBS 308 (2012).

Since botanists often have living flowers to describe a new species, the description can get very long. See the green floral bracts – Leme describes them as "subreniform, nearly erect with the flowers, distinctly shorter than the sepals, 8 × 11–12 mm, green, sparsely pale brown lepidote, trichomes fimbriate, to glabrescent, nerved, ecarinate, strongly convex, entire to remotely denticulate at the apex, thinly coriaceous, apex broadly acute to obtuse and apiculate, apiculus 1–1.7 mm long, yellowish." Id at 308-9.



Hohenbergia viridorubra, shown left. Photo by Leme. 62(6) JBS 306 (2012). It was named in light of the contrast between its red peduncle and the greenish bracts and sepals.

Leme said it is closely related *to Hohenbergia pabstii*, but is much larger, though it has smaller sepals. Both species grow in the forest in Bahia, but the newly described species is a terrestrial one found in comparatively dry areas compared to the wetter coastal areas in which *H. pabstii* is found.

It was first collected by Sandra Linhares – *Hohenbergia sandrae,* which she also found and collected, was named after her.

At the same time, Leme described *Hohenbergia halutheriana* named in honor of Harry Luther, who had just passed away. This same BSJ was devoted to Luther; newly described *Vriesea , Puya and Racineae* species were also named after him

Hohenbergia halutheriana shown right. Photo by Leme. Id at 299. This species forms giant clumps in the middle of giant trees. Leme said it is " closely related to *H. itamarajuensis* Leme & Baracho, but can be distinguished from it by the leaf blades with margins laxly to subdensely spinose, except for the densely spinose base and apex (vs. very densely spinose), the longer spines (up to 6 mm vs. up to 3 mm long), smaller floral bracts (7-13 x 8-11 mm vs. 20-22 x 17- 18 mm), which are green (vs. greenish-yellow to yellow) and even (vs. rugose near the base), shorter flowers (18- 19 mm vs. 23-25 mm long), smaller sepals (ca. 8 x 5 mm vs. 11-12 x 7 mm), which are green (vs. yellow), and by the shorter petals (12-13 mm vs. ca. 17 mm long) bearing well developed irregularly bidentate appendages (vs. appendages inconspicuous, attenuate)." Id. at 303.

Figure 2. The epiphytic habit of *Hohenbergia halutheriana*, forming a giant clump which is difficult to be accessed and collected. Photo by Elton M. C. Leme.

A fascicle and flower of

Hohenbergia haluteriana

are shown to the right.

Id at 302. Photo by Leme. Luther was the first to collect this species in 1995.

Figure 8. Details of the flower fascicles of the type specimen of *Hohenbergia itamarajuensis* (Leme 805 et al.) the closer relative of *H. halutheriana*. Photo by Elton M. C. Leme.

Id at 305. ***Hohenbergia itamarjuensis*** above. Photo by Leme. This species was described by Leme and Baracho in 1998. [It is compared with *H. halutheriana*, which is also found in Itamaraju, Bahia, on the prior page.] Like *H. burle-marxii*, the authors first saw this plant in Burle-Marx's garden, but did not have locality info. They later realized they had collected it before when their specimen later bloomed.

It is typical to compare a newly described species to others, and sometimes they are very similar and others not so much. Comparing the comparisons sometimes leads to a bit of a mystery.

Consider the two species just described. *Hohenbergia. viridobrubra* is "closely related" to. *pabstii. H. halutheriana* was considered "closely related" to *H. itamarjuensis;* in turn, *H. itamarjuensis* "shows morphological affinity with *H. pabstii."* Yet there is no mention of a relationship between *H. halutheriana and viridorubra;* perhaps the fall on opposite sides of the spectrum vis a vis *H. pabstii.*

Nonetheless, many of these species look very similar. When describing one new species that grow in rocky areas known as the Campos Rupestris, Leme said the "difficulty in establishing morphological differences of regional *Hohenbergia* species typical of that environment is due to the convergence of shape and structure of leaves and leaf-rosette caused by the combination of rupicolous or saxicolous habit, oligotrophic conditions, similar sun exposure and water stress." Leme, Selbyana 30(2): 129-146. 2010

Figure 5. Habit of *Hohenbergia mutabilis* Leme & J. Kollmann in early anthesis. Photo by J.

Believe it or not, a few species have been described by others. *Hohenbergia oxoniensis* is a real surprise. Weber described it in 1983 from an herbarium specimen labelled Chile found at Oxford University. He thinks it is similar to *H. eriantha* and probably from Bahia and Pernambuco. It seems only fair that one species be named in honor in Leme: in 2004, Luther and Norton named one species *H. lemei.* It is an ornamental species similar to *H. edmundoi.*

Hohenbergia mutabilis. 59(2) JBS 60 (2009). Photo by Kollmann. This is an enormous species with leaves up to 6 ft long. Leme and Kollmann named this species due to the "mutant status of the shape and size of the fertile portion of the branches when comparing its short, ellipsoid-ovate, capitate shape in early anthesis with the elongate cylindrical shape in late anthesis." Id at 65.

Maciel & Louzada described *Hohenbergia lativaginata* in 2014, and distinguished it from other species for its large and conspicuous leaf sheaths – it actually looks different from other species. It is closely related to *H arcuata*. They had a nice chart showing its differences along with those of *H. horrida, catingae and humilis*. Oliveira & Wanderly described *H. isepponae* in 2017 noting its similarity to *H. ridleyi and ramageana*.

Leme (alone or with others) also described the following *Hohenbergia* species:

H. achmeaoides – not very similar to other species, it has larger and fewer flowers and in some ways resembles *H. ridleyi* and *Aechmea,* such as *A ramosa.* Grows on rocks in full sun.

H. arcuata – an epiphytic plant related to *H. horrida*, it is named based on the arcuate recurved leaf blades.

H. barbarespina- very similar to *H. stellata,* and named due to its dense spination at the base of its leaves,

H. reconcavensis – similar to *H.. belemii* (but easily distinguished with denser spines and longer inflorescence) , it grows in large clumps.

H. magnispina – grows in the campos rupestres (rocky areas in grassland), and similar to *H. vestita* (but with large spines and shorter branches) *and estevesii.*

H. igatuensis – similar to *H. edmundoi* (but with a simple spike rather than bipinnate inflorescence) and *magnispina* (in habit), and has yellow leaves in sunlight.

H. loredanoana – an attractive epiphytic species similar *H. sandrae* and named in honor of the conservationist who established the private reserve where it is located near the Bahia-Minas Gerais border.

H. flava – with yellow flowers, and similar to *H. catingae.*

H. hatschbachii – good news, it has no affinity with other species. It does have a brown lanate inflorescence like *H. augustae.*

Part 1 (June 2018) concluded by showing pictures of my plants labelled *Hohenbergia rosea and vestita*. Both had started a small inflorescence that looked very similar and it wasn't clear they were labelled correctly. Another plant that was about to bloom (not shown before) is labelled *Hohenbergia* from Burle Marx garden.

On left above is labelled ‘’*Hohenbergia* from Burle Marx garden”; on right labelled *H. vestita*. Inflorescences of both are shown on the next page. With minor exceptions like the color of the peduncle bracts and width of the peduncle, they seem almost the same. Except for the fact the peduncle bracts exceed the internodes, they both seem to match *H. magnispina*! I also learned another bromeliad lover had a similar looking plant with the same label, and Harry Luther had identified his as *H. magnispina*.

H. vestita is a similar species but has a laxer inflorescence with longer branches as well as smaller spines that curve upwards as opposed to these which curve downward. There are two pictures of different clones of *H. vestita* shown in Part 1, and they look rather different than the tubular shape shown above. So if you have a plant labelled *H. vestita*, you will probably have to wait until it flowers and examine it closely to tell if it is correctly labelled.

Photos of inflorescence of plants labelled *Hohenbergia* from Burle Marx garden

(left above, and left on photo to left) and *H. vestita* (right above and right on photo to the left). As noted on prior page, both seem to be *H. magnispina*.

Labelled ***H. rosea***. The above plant matches the description of *H rosea* reasonably well, including the shape and size of the sepals and floral bracts. The inflorescence is similar to the ones shown on the prior page, though there are differences. But the leaves and rosette are quite different. Is it in fact *H rosea?* I am skeptical – see the pictures on the next page. I posted it on a forum and they agreed – among other things, it has a long needle like flower bract that is inconsistent with *H. rosea*. It may well be a hybrid of *H. rosea* and ?.