S.F.V.B.S.

SAN FERNANDO VALLEY BROMELIAD SOCIETY

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AUGUST 2014 NEWSLETTER

OFFICERS

Pres & News: **Mike Wisnev** V.P.: **Mary K. Carroll** Secretary: **Kathleen Misko** Treasurer: **Mary Chan**
Membership: **Nancy P.-Hapke** Health & Wellness: **Georgia Roiz** Web Page: **Kim Thorpe**
Directors: **Steve Ball, Bryan Chan, Richard Kaz –fp, Dave Bassani-fp**

next meeting: Saturday August 2, 2014 @ 10:00 am

Sepulveda Garden Center 16633 Magnolia Blvd. Encino, California 91316

AGENDA

9:30 – ***SET UP & SOCIALIZE***
10:00 - *Door Prize* – for members who arrive before 10:00

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

10:15 –*Speaker presentation:*

10:15 - *Speaker:* *Andy Siekkinen*
"Less Common Terrestrial Bromeliads"

Andy has spoken to our club on several occasions and each time he has great programs. He said since we are all familiar with the more common and established terrestrial bromeliads in cultivation like the genus Dyckia (especially with the great collectors/growers in your club!), some Hechtias, Orthophytums, and even Puyas. In this talk he said he will show and discuss some of the more unusual terrestrial plants that we can grow, with a focus on the plants that are well suited for growing in pots.

Andy is a nanotechnology chemist with a special love of plants. Leaving family in Ohio to get his Master's degree at the University of Washington in Seattle, he has settled in San Diego.

Andy represents our region in the Bromeliad Society of America (BSI). He has been exploring Mexico for the past five years searching for bromeliads in habitat. Andy has started a tour company to lead botanically themed vacations throughout Mexico (www.eagle-eye-adventures.com). In addition to the extensive field work, right now he is also doing genetic research on the Hechtias. **You don't want to miss this meeting!** <>

11:15 - Refreshment Break and Show and Tell:
Will the following members please provide refreshments this month: *Bob Wright, Max Wurzel, Steve Ball, Arab Bartarse, Wesley Bartera, Dave Bassani* ***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.
Questions about refreshments? Call Kathleen (818 402-6031). Leave a message - she will call back.

Feed The Kitty

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

11:30 - For Show and Tell *is our educational part of the meeting*
11:45 – Mini Auction: members contribute
12:00 – Raffle: We need each member to donate
12:15 - Pick Up around your area **12:30** – Meeting is Over – Drive Safely
So. Bay Bromeliad Show – many of us will go after this meeting. Directions to follow on the next page.

Orthophytum harleyi
photo by Andy Siekkinen

Orthophytum zanonii
photo by Andy Siekkinen

President's Message

Gregg gave a great talk last month and we saw some wonderful shots of Bromeliads and lots of other plants in habitat. **This month we have Andy Siekkinen back as our speaker. He has spoken numerous times, and gets rave reviews from all! And he brings some great gems to se**ll. We are really lucky to have both of these speakers – they travel from Santa Barbara and San Diego to speak to us. So I hope you all will attend.

Thanks for all the donations at the last meeting. As usual, Mary K brought in a lot of plants for the raffle. I think Bryan, Richard and Steve also had some – sorry if I left others out. Ana donated two loaves of bread for the auction. It was good to see Stacy and Roger, some members work a lot so we don't get to see them often enough. We appreciate the cash donation from Stacey; she made it to make up for missing her refreshment turn.

This month my Taxonomic Tidbits covers *Hechtia glomerata, texensis* and some other lateral bloomers at the HBG. The article is too long to put in the mail but if you would like a copy contact Mary K at 818-705-4728 and she will bring a copy for you to the next meeting. Hope to see you all at the next meeting by 10:00 am…. ***Hope to see you all at the next meeting by 10:00 am...*** <>

Mike Wisnev

Things to keep in mind

- ***Directions to South Bay Bromeliad Show & Sale*** on **Sat & Sun August 2 & 3** at Rainforest Flora Inc., (RFI) 19121 Hawthorne Blvd. in Torrance. Directions from Sepulveda Garden Center: (approx. 25.5 miles & 30 min.) East on 101 Fwy. / South on 405 Fwy. towards Santa Monica / Exit # 42A at Hawthorne Blvd. It is a very good show and RFI is always worth seeing.

- ***Happy Birthday to*** Mary Chan (no date), **Bob Friedman will be 92 on Aug 05**, John Martinez Aug 16 and Steve Ball Aug 29 (We don't have your birthday listed? Maybe you didn't give us the date) !

- ***Bob Friedman's*** health is failing. I understand he was hospitalized twice recently including the weekend of our June Show. Please keep Bob in your thoughts and prayers.

- ***Bus Trip- October 25*** **– sponsored by South Bay Bromeliad Ass. – Mary K will have details at our August club meeting. Pick up at Balboa Park. Bring your checkbook if you are interested.**

- ***Help us to improve our membership***
- ***What can you do to help our club?***

Ramblings about Better Growing

The editor is looking for information from other members for this column. Some of uou must have some growing tips to share about what to do or what not to do; it can be 1 or 2 sentences or 3 or 4 paragraphs. Member contributions are vital to keep the newsletter interesting and our SFVBS thriving. <>

Bromeliads have few pests that damage the plant, the most harmful being **mealy bugs and aphids**. However, there is one human pest that can thrive in a bromeliad. While mosquitos do no damage to the bromeliad plant, they can be a nuisance. This month I will share some info from the internet about **aphids,** but first a ……. ***Mosquito Reminder***

Reminder – Water becomes stagnant in about 4 days of 80 degree temperatures. Mosquitoes breed in stagnant water. Dumping all Bromeliad tanks and tubes is ideal but just adding some fresh water every 3 to 4 days is a great deterrent.

Aphids - A common pest on many plants, these sap-sucking insects are often noticed feeding in clusters on new plant growth. Here's how to control aphids organically without using toxic sprays.

Description: There are approximately 4,000 aphid species found throughout the world. Low to moderate numbers are usually not harmful to plants and rarely require aphid control. However, heavy infestations will cause leaves to curl, wilt or yellow and stunted plant growth. A general decline in overall plant vigor will also be noticed. Several species can transmit plant diseases, particularly viruses which they pass on during feeding.

Aphids are small (1/8 inch long), soft bodied, pear-shaped insects that may be green, yellow, brown, red or black in color depending on species and food source. Generally adults are wingless, but some can grow wings, especially if populations are high. They have two whip-like antennae at the tip of the head and a pair of tube-like structures, called cornicles, projecting backward out of their hind end.

Note: As they feed, aphids secrete large amounts of a sticky fluid known as honeydew. This sweet goo drips onto plants, attracting ants and promoting a black sooty mold growth on leaves. Cars and lawn furniture that are under infested trees will also be covered with this sticky fluid.

Life Cycle: In spring wingless female aphids hatch from overwintering eggs and soon give birth to many nymphs (males are not present). Young nymphs increase gradually in size and within a week give birth to many more nymphs. This process is repeated several times and results in huge population explosions. As the colony grows, a few of the females develop wings and fly off to other host plants to start new colonies. In late summer and early fall sexual forms (males and females) develop which mate and lay overwintering eggs. There are many overlapping generations per year.

Note: Most aphids, except for the sexual forms, do not have to mate in order to reproduce, and they produce live young, rather than eggs.

Aphids continued……

Control: To get rid of aphids naturally pinch or prune off heavily infested leaves or other plant parts. Use the Bug Blaster or hose off plants with a strong stream of water to reduce pest numbers. Commercially available beneficial insects, such as ladybugs and lacewing are important natural predators. For best results, make releases when pest levels are low to medium. If populations are high, use a least-toxic, short-lived natural pesticide to establish control, then release predatory insects to maintain control. Insecticidal soap or botanical. Insecticides can be used to spot treat heavily infested areas. Horticultural oils should be applied early in the season or late in the fall to destroy overwintering eggs. Do not over water or over fertilize – aphids like plants with high nitrogen levels and soft new growth. Try organic fertilizers which release nutrients slowly.

Tip: Ants feed on the honeydew that sucking insects produce and will protect these pests from their natural enemies. An application of Tanglefoot Pest Barrier to the stalks of roses and other woody plants will help keep ants away.

Recommended Products:

Bug Blaster - is around $24.00 and is just a fine sprayer to blast the bugs onto the ground to die
Lady bugs – can be purchased by the thousands online and at some local garden shops
Safer Insecticide Soap - can be purchased for about $7.00 at any garden store

Source: Eric Vinje http://www.planetnatural.com/pest-problem-solver/lawn-pests/aphid-control/

submitted by: marykcarroll August 2014

Help us to improve our Membership

Tell people about your hobby !
Let apartment dwellers know these plants can be grown inside or on a balcony !
Give them a plant !
Invite them to a meeting !
Reach out to visitors and new members, make them feel welcomed !
Let us hear your ideas to improve membership.

Please Put These Dates on Your Calendar

Sat & Sun August 2 & 3	South Bay Bromeliad Show & Sale
Saturday, Sept 6, 2014	Speaker - **Larry Farley – "**Bromeliad Blooms by the Month"
Saturday, Oct 4, 2014	SFVBS Regular meeting - Speaker to be announced
Saturday, Nov 1, 2014	Speaker – **Pam Koide –**
Saturday, Dec 6, 2014	Holiday Meeting & Brunch 10:00 – 2:00

Speakers

We have some interesting speakers lined up for the next few months of this year but it is never to early to start planning for 2015. 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 Mary K. at 818-705-4728 or e-mail **rango676@aol.com** <>

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 sick or unidentified plants that can be brought in. **Each member, please bring one plant.** <>

- ***What can you do to help our club?***

First foremost we need **members to plan to attend all meetings.** What we ask is for people **to try not to plan anything else on our meeting day.** Look at our calendar below before you schedule your next event.

1. You can **donate an occasional plant for the mini-auction or the raffle**. **You can also participate by buying raffle tickets or by bidding** on a plant in the auction.
2. Food and Drink – everyone is encouraged to bring in something for our great lunches, and feed the kitty if you don't. .
3. Newsletter – you might contribute a short (or better yet, long) article – a paragraph would be great. <>

Membership Dues

Membership Chair - Nancy Pyne-Hapke or Treasurer - Mary Chan
or Mail to: SFVBS membership
Attn: Nancy Pyne-Hapke
P.O. Box 16561 - Encino, CA 91416-6561
***Yearly Membership* Dues $10.00** for a family

Broms in Bloom Member Photos

Here is Kathleen Misko with her Tillandsia exhibit at the June 2014 show.
Tillys cleverly placed on a wire dress form.

Photo by her daughter, Amber Jordan

Taxonomic Tidbits –

Hechtia glomerata, texensis and some other lateral bloomers at the HBG.

By Mike Wisnev, SFVBS President (mwisnev@sbcglobal.net)

San Fernando Valley Bromeliad Society Newsletter – August 2014

Two of the more commonly seen *Hechtia* are *H. glomerata* and *H. texensis*. Both are at the Huntington Botanical Gardens, yet I am not sure how to tell them apart despite having spent way too much time looking at them. Part of the problem is that both have a very extensive range and seem to vary widely. It would be great if I could show you a number of habitat plants that have been identified as one or the other. Since these don't seem available, you will see pictures from the HBG – lots of them.

It may be easier than I make it out to be. The Smith and Downs key separates them by flower size – *texensis* is 8-10mm and *glomerata* 4-7mm. When I try to compare the relevant features of both, I don't see much to distinguish them other than flower size. Sepal color also differs – *glomerata* has brown sepals, while *texensis* has rose colored ones or white ones with brown nerves.

H. glomerata is apparently one of the more confusing species in the genus. Someone did their PhD thesis on it, and it may be broken into 5 more species. I am not commenting more on that set of problems. What I am addressing is the possible confusion of some *H. glomerata* and *H. texensis*, a point I haven't seen in the literature. I don't know if the PhD thesis comments on this. And having not seen the plants in habitat, there may be no real confusion other than mine!

When I think of *H. glomerata*, I think of a green-red symmetric leaved plant with flowers that bunch in glomerules (hence the name, I presume.) I confess that this is because one of my first *Hechtias* was supposedly *H. glomerata*. I think this is a common theme for hobbyists – we often get a named plant, and that becomes our concept of the species. I suggest this is something we all need to guard against as 1] plant names are often wrong, and 2] plants are more variable than we often realize.

So here is my *H. glomerata*, from an impeccable source (EBAY!) and its flower. Notice the small flowers bunched in glomerules and brown sepals. I never saw the flowers open much more – perhaps I missed them, I don't know. In any case, this plant seems to match well for *glomerata* from what I can tell. But I didn't measure the flowers. To further confuse me, I have a picture of a plant of another club member labeled *texensis* that looks almost identical, though I didn't see the flowers .

Hechtia glomerata, Photos from (EBAY!) and its flower

Below is one of the first *H. texensis* that I saw. It is **labelled *H. elliptica* at HBG**, but that name has been referred to *H. texensis*, as has *H. scariosa*. It has a larger, more open flower, with whitish sepals. This plant is actually rather odd for *H. texensis* in that it is highly lepidote on the upper surface.

At this point, you might be wondering why I am confused – the plants look pretty different, and so do the flowers. But it gets more confusing, at least to me.

Here is *H. texensis* *(as scariosa 42316)* at HBG, looking like other similar looking plants labelled *H. texensis* or scariosa at HBG.

Based on these limited samples, I thought I had a sense of the two species. *Glomerata* seems larger, with green-red shiny leaves, and smaller flowers with brown sepals. *Texensis* seems smaller, with scurfy upright non-symetric leaves, and larger flowers with whitish brown sepals.

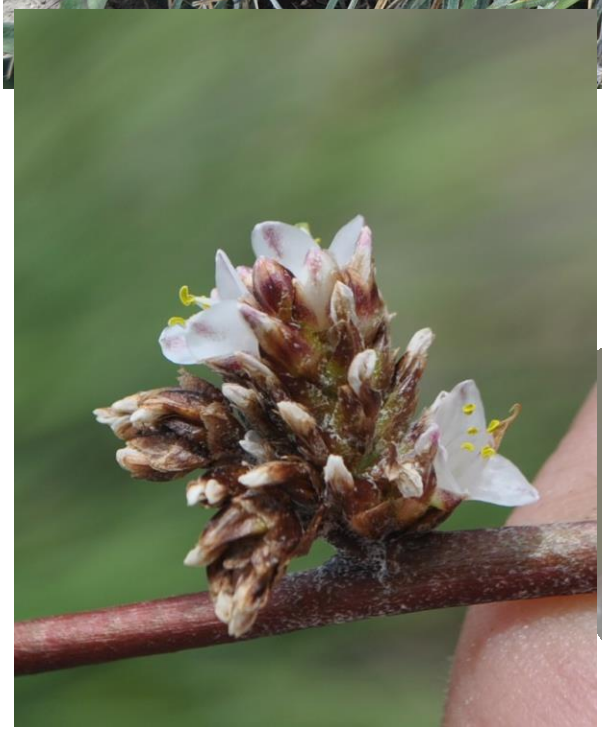
When I read more about these two, I found my perception didn't seem to match the description. *Texensis* can have leaves to 80 cm, while *glomerata* is listed to 40 cm (though others synonymized are 1 m long), and *texensis* leaves are said to be "soon glabrous and shiny above."

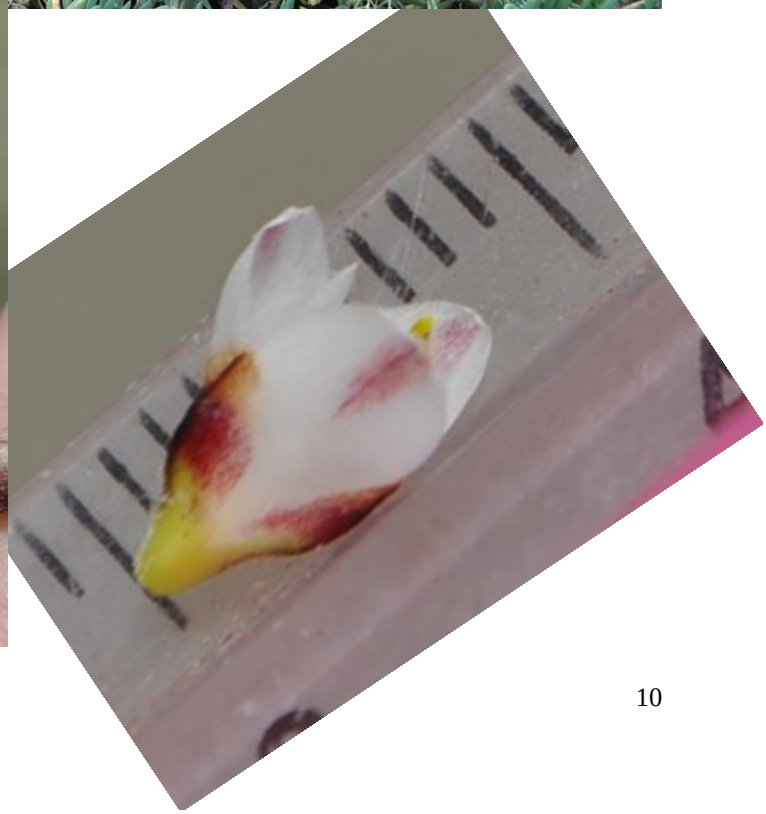
Here is *H. glomerata* 28316 in bed 4, collected (along with other specimens) near Rayones, Nuevo Leon. Lyman Smith identified them! But the literature indicates that *H. texensis* has been found at Rayones!

This one seems to have *glomerata* flowers – the petals are about 5mm long and the sepals brown (or is it rose?). But the leaves look more like texensis, at least to me.

These plants from Rayones were collected by Myron Kimnach and Gary Lyons. Gary is still at the HBG, and is in charge of the desert garden. He told me there is incredible variation in habitat and that presumably the same species can look very different at the same locality. They can look even more different when grown in a garden.

On this page is **another 28316 in Bed 5**, also growing in full sun. This is more interesting. It has much larger leaves, and the flowers are larger, almost 8 mm. And while the sepals look brown in the picture on the left, when you take one off, you see it is more rose colored, like some *texensis*!. The petals also have a rose spot.





What does the literature say? In a recent article, Burt-Utley, Utley, & Garcia-Mendoza state

> *Hechtia glomerata* is the most widely distributed species in the genus, ranging from southeastern Texas to Guatemala and has been abundantly collected in Texas and in the northern Mexican states of Tamaulipas, Hidalgo, and San Luis Potosi. In *H. glomerata*, like *H. texensis*, inflorescences are lateral and a robust flowering individual may have two or more inflorescences simultaneously with flowers at anthesis (e.g. Utley & Utley 9005). Inflorescences in populations of *H. glomerata* also vary from once compound with short densely flowered to elongate laxly flowered lateral branches to twice compound with elongate lateral branches. … In both taxa, the lowermost scape bracts are very short, unlike those of species with terminal inflorescences that typically have foliose lowermost scape bracts. **Phytoneuron 59: 1-17. 2011**

Interestingly, neither this article nor another where they discuss *H. texensis* mentions anything to distinguish the two apart from flower size.

There are a handful of features to distinguish *Hechtia* species. For the leaves, there is size, spination and color. More important is the inflorescence and flower – is it lateral blooming or terminal, glabrous or lepidote, bipinnate or tripinnate? What are the bracts like, and how big and what color are the flowers? But for *glomerata* and *texensis*, these are almost all the same! It is also worth noting that there aren't very many lateral bloomers.

I don't think I have shown a herbarium specimen before. Here is one of H. elliptica. Consistent with the pictures at the beginning of this article, it shows a plant with upright non-symetrical leaves

Contrast that concept of *H. texensis* with these two pictures .

Here is ***H. texensis*** **in Texas** pictured shown in the 1982 Bromeliad Society Journal.

Here is an old picture of ***H. ghiesbreghtii*** which has been referred to *H. glomerata* .

Photo K. L. Clint

Hechtia Ghiesbreghtii in flower.

Admittedly, it is hard to make much of these two pictures. But nothing really jumps out as being all that different. If you told me they were the same species, I would hardly be surprised. Neither seems to have a nice symmetric rosette. Both have tall inflorescences, perhaps with glomerules on lateral branches – it is hard to tell.

There is another consideration – sex. I have shown five plants at the HBG so far, and 3 seem to have open larger? petals, while 2 have more closed, smaller? petals. You may be able to tell, however, that the 3 open flowers are male, while the closed ones are female. Maybe that is what accounts for the difference in look. I have also been told the flowers open in early morning, and I see them in late morning or early afternoon.

Locality is also extremely important. Based on the literature, the two grow in the states noted below. They both grow in Texas (though not together), and in the two states with the black circles. This map shows some possible issues. The range of *texensis* is from southwest Texas through central northern Mexico. *Glomerata* is in southeast Texas and extends south, growing all the way into Guatamala. Both apparently are found at Landa de Matamoros, Queretaro (as is *H. tillandsioides*!) With this much range and overlap, it would hardly be surprising to find some intermediate plants and hybrids, especially in places like Nuevo Leon (where HBG 28316 was collected) which borders states where *glomerata* is found.

States	Area in sq.km	Population (Est. 1992)	State Capital
1a Baja California Sur (B.C.S.)	72,465	500,000	La Paz
1b Baja California Norte (B.C.)	71,627	2,000,000	Mexicali
2 Sonora (Son.)	182,553	1,900,000	Hermosillo
3 Chihuahua (Chih.)	245,612	2,700,000	Chihuahua
4 Sinaloa (Sin.)	58,488	2,400,000	Culiacán
5 Durango (Dgo.)	123,520	1,600,000	Durango
6 Coahuila (Coah.)	150,395	2,100,000	Saltillo
7 Nuevo León (N.L.)	65,103	4,000,000	Monterrey
8 Zacatecas (Zac.)	73,454	1,300,000	Zacatecas
9 San Luis Potosí (S.L.P.)	63,231	2,000,000	San Luis Potosí
10 Tamaulipas (Tamps.)	79,602	2,400,000	Ciudad Victoria
11 Nayarit (Nay.)	27,053	850,000	Tepic
12 Aguascalientes (Ags.)	5,586	800,000	Aguascalientes
13 Jalisco (Jal.)	81,058	5,800,000	Guadalajara
14 Guanajuato (Gto.)	30,575	4,200,000	Guanajuato
15 Querétaro	11,480	1,200,000	Querétaro
16 Hidalgo (Hgo.)	20,870	2,000,000	Pachuca
17 Colima (Col.)	5,205	500,000	Colima
18 Michoacán (Mich.)	60,093	3,600,000	Morelia
19 México (Mex.)	21,414	11,500,000	Toluca
20 Morelos (Mor.)	4,964	1,400,000	Cuernavaca
21 Tlaxcala (Tlax.)	4,027	780,000	Tlaxcala
22 Puebla (Pue.)	33,995	4,300,000	Puebla
23 Veracruz (Ver.)	71,896	6,500,000	Jalapa
24 Guerrero (Gro.)	64,458	2,800,000	Chilpancingo
25 Oaxaca (Oax.)	94,211	3,000,000	Oaxaca
26 Chiapas (Chis.)	74,415	3,500,000	Tuxtla Gutiérrez
27 Tabasco (Tab.)	25,337	1,550,000	Villahermosa
28 Campeche (Camp.)	50,952	600,000	Campeche
29 Yucatán (Yuc.)	38,508	1,350,000	Mérida
30 Quintana Roo (Q.R.)	50,350	550,000	Chetumal
D.F. Distrito Federal (Federal District)	1,483	10,500,000	Ciudad de México
Mexican Republic	1,972,547	90,180,000	

Armed with all this information, let's see more pictures and see if anything becomes more clear.

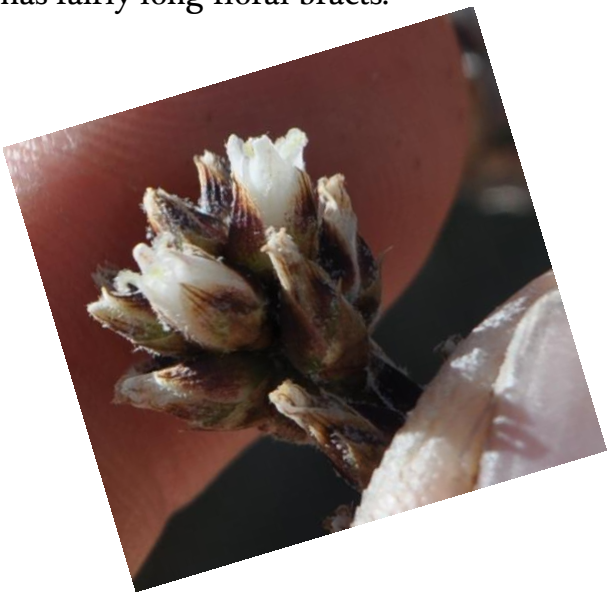
This one revealed another consideration – when I looked at it a few weeks later, some of the markings on the sepals were much darker than before. Perhaps this is due to the sun – I don't know. But I would no longer call these sepals whitish like I did before. So maybe this plant is more glomerata like.

Here is *H. glomerata* 37098 from Oaxaca, between El Cameron and Tehuantepec.

I was really looking forward to this one blooming. It seemed to match my concept of *H. glomerata*, and L Smith had identified it as such. And then it bloomed, in early July a few weeks ago! I was even more confused - it has whitish sepals and large male flowers – the petals alone are 7mm . To add to the mystery, it appears that neither *H texensis* nor *H glomerata* has been found in Oaxaca where this was collected. Another lateral bloomer – *H. fosteriana* grows there, but this didn't seem to match well based on the scant information available in S&D.

Here are two more growing side by side in Bed 4. The one on the left seems like *glomerata*, and seems to be the same as a couple others at HBG, all without a number that seems to match. The one on the right looks different than any others at HBG

Here are their flowers, both female. I think they both have petals around 4mm, but they sure look different. The one on the right has fairly long floral bracts.



Below is an unnamed plant that apparently was collected by Bill Baker in Quichi Guatemala; *glomerata* has been found in Quichi, but this doesn't look like either *texensis or glomerata* to me.

I say apparently collected, since the card lists this plant as being dead, yet I found the tag (HBG 37692) behind it after the gardening crew did some clean-up. This might be a different, or even new, species. It also seems to resemble *H. myriantha,* which doesn't grow in Guatemala. I have sometimes found that flower size changes, or I measure them differently when I return and remeasure a flower later. It is hardly clear to me how best to measure a petal – look at the picture above on the right – exactly where does the petal start? It might be easier if I dissected the flower, but that has its issues as well since the flower parts merge at the base of the flower. I suspect not all field workers have measured floral parts etc the same way. In a case like here where the distinction is a couple millimeters, that can be crucial. Also, the literature says some flower comparisons have been inaccurate due to sexual differences or measuring pre- or post-anthesis.

Here is one growing in shade most of the time, which may account for its look.

Here is a branch of its inflorescence, compared to a branch of the inflorescence of the plant Baker apparently collected in Guat. above it.

This gives you a sense of the problems botanists face when trying to distinguish species and plant features.

Now is often the time I offer some conclusions. Well, this time all I can say is that I am confused. Some seem to clearly be *H. texensis*, some more like *H. glomerata* and some – I have no idea! If this weren't confusing enough, there is at least one other *Hechtia* that also needs to be considered – *H. schottii* from the Yucatan. I don't think any of these are schottii, but I am not sure. But it also is in this same complex of plants.

There are other lateral blooming *Hechtia* at HBG that almost certainly aren't either *texensis* or *glomerata*. One *Hechtia* expert has seen pictures of some of them, and thinks one may be a new species. I'll save these for another article.

It would be interesting to compare the plants in southeast (*glomerata*) and southwest (texensis) Texas and see just how variable they are, and how much overlap, if any, between the two. Surely someone has seen both habitats.

This article keeps on growing! After the last comment, I figured I ought to check the web. So I Googled *texensis and glomerata*. Actually I had done this a long time ago, and based on the variety of pictures found pretty much ignored them. The web has an unbelievable amount of information and pictures, for those of you that don't use it that much. And some of it is undoubtedly wrong information. For that reason, I hear some say the web info is a waste of time. I disagree, rather strongly, in fact. Like everything else, you need to weigh the source and see what you can learn.

Here there are a lot of pictures with no information other than name. At first glance, my plant seems to match *texensis* – there are lots of pictures that match almost perfectly, but they don't show flowers. I tend to disregard these. There are also pictures on some University or educational sites, which presumably have more credence.

Best of all, there are some habitat shots that list the habitat. *Texensis* grows in Big Bend National Park and Brewster County. Glomerata grows in Starr and Zapata Counties in Texas. There are pictures which state they were taken in these locations. So, unless they are simply lying to us, it would seem reasonable to rely on them.

For those interested, take a look at these two sites

http://www.wildflower.org/gallery/search.php?family=Bromeliaceae&newsearch=true

http://botany.csdl.tamu.edu/FLORA/imaxxbml.htm

I am happy to say that based on this limited sample, I don't feel I have to change any of my comments above. *Texensis* seems much more asymetical. Some are indeed green and red like my plant, but seem very one-sided. This may be because they grow on cliffs and the leaves grow upright on the higher side, and don't grow much at all on the lower side. How would such a plant grow in a pot – I don't know, maybe just like mine!

As noted, this is a limited sample- very limited, since it is still less than 10 pictures and only from Texas. Given the huge range of these two species, the only way to get a real feel would be to go to a number of different localities, when they were blooming. Or, you would need to see many many more pictures from a variety of habitats. But pictures can be deceiving – more than once I have struggled to ID a plant based on pictures, but when I see actual specimens, they are fairly different. Also, you can't be sure if a picture is a representative plant or not – many times the most spectacular looking is the one that was collected or photographed.

I also Googled "Hechtia Nuevo Leon" and found some habitat shots. One looked much like the HBG 28316 plants, but had much whiter sepals like *texensis*. The other one looked like one at Big Bend – red and green but asymmetrical. I'll have to revisit these again next year when they bloom again.