



FLORIDA COUNCIL OF BROMELIAD SOCIETIES

Volume 39
Issue 4
November 2019





TABLE OF CONTENTS

2019 FCBS Officers and Representatives, Committee Members, Florida BSI Officers.....	3
I Love Bromeliads by Carol Wolfe.....	4
These are a Few of my Favorite Tillandsias by Carol & Tom Wolfe.....	5
Artistic Design Arrangements by Tom Wolfe.....	10
Southwest Bromeliad Guild & Cryptanthus Society Show by Jay Thurrott.....	14
Bidding Wars by Greg Kolojeski.....	17
New Genus Karawata by Derek Butcher.....	19
Bromeliad Ecology, Diversity in an Ecological Wonderland by Theresa M. Bert.....	20
Two Icons of the Bromeliad World.....	27
Nita Ankenbruck and Vale Grace Goode.....	29
Grace Goode 102 Years by Peter Cook.....	30
2020 Extravaganza.....	31
BSI Judges School Application.....	36
Caloosahatchee Bromeliad Show.....	37
2020 World Bromeliad Conference Information.....	38
2019 Calendar of Events.....	40

PUBLICATION: This newsletter is published four times a year, February, May, August, and November, and is a publication of the Florida Council of Bromeliad Societies. Please submit your bromeliad related activities, articles, photographs, society shows, news and events of your society.

DEADLINES FOR ARTICLE SUBMISSIONS ARE:

February issue January 15

May issue April 15th

August issue July 15

November issue October 15th.

COPYRIGHT: All materials contributed and published in this FCBS Newsletter are copyrighted and belong to the authors/photographers. The authors/photographer have given permission to use the materials and pictures in this publication for educational purposes. You may use any articles and/or pictures published in the FCBS Newsletter for educational purposes with the credit given to the authors/photographers. Commercial use of this material is prohibited but you may contact the authors/photographers directly for other permissions or material purchases.

FCBS TAX DEDUCTIBLE RECEIPTS: The Florida Council of Bromeliad Societies, Inc. is a 501(c)3 Non-Profit Corporation, incorporated in the State of Florida. Please make your contributions for 2019 tax deductible receipts by going to FCBS.org to make online contributions through PayPal or mail check or money order to FCBS Treasurer: Sudi Hipsley, 6616 Tusawilla Drive, Leesburg, FL 34748-9190. If you have questions regarding your contribution, please call Sudi at 352-504-6162.

Cover Photograph: Tillandsia capitata pink form ©Photo Carol Wolfe



2019 FCBS OFFICERS



Mike Saunders
2019 Chairman
Bromeliad Society of Central Florida



Sandy Burnett
2019 Secretary
Gainesville Bromeliad Society



Tom Wolfe
2019 Vice Chairman
Bromeliad Guild of Tampa Bay



Sudi Hipsley
2019 Treasurer
Seminole Bromeliad Society

VOTING REPRESENTATIVES:

Bromeliad Guild of Tampa Bay

Tom Wolfe, bromscape@hotmail.com
Carol Wolfe, bromstudio@hotmail.com

Bromeliad Society of Central Florida

Betsy McCrory, betsymccrory@aol.com
Mike Saunders, presbyter64@gmail.com

Bromeliad Society of Palm Beaches

Tom Ramiccio, tramiccio@aol.com
Nick Bethmann, nbethmann@bellsouth.net

Bromeliad Society of South Florida

Michael Michalski, pgonza7782@aol.com
Patty Gonzalez, pat.gonzalez3@aol.com

Caloosahatchee Bromeliad Society

Vicky Chirnside, dampearth@me.com
Pete Diamond, lygodium63@hotmail.com

Florida East Coast Bromeliad Society

Calandra Thurrott, Calandra.thurrott@att.net
Jack Dunlop, Jgdkoi@gmail.com

Florida West Coast Bromeliad Society

Susan Sousa, susansousa1@yahoo.com
Robert Powell rpowell61@verizon.net

Gainesville Bromeliad Society

Sandy Burnett, sandyojo@gmail.com
Chris Waldman, venice39@cox.net

Sarasota Bromeliad Society

Marian Kennell, mmkennell@verizon.net
Nancy Abramson, abramsna@aol.com

Seminole Bromeliad & Tropical Plant Society

Sudi Hipsley, sudii@embarqmail.com
Greg Kolojeski, gkolojeski@gmail.com

Treasure Coast Bromeliad Society

Lyn Marino, teammarino@bellsouth.net

COMMITTEES MEMBERS:

The following Committee Members and guests have a standing invitation to FCBS Meetings as Non-Voting Members unless serving in the dual role of Member Society Representative.

Al Muzzel Weevil Fund

Jay Thurrott, Chairman, cajat@aol.com
Tom Wolfe, bromeliadsociety@juno.com
Rick Ryals, rickryals@bellsouth.net

FCBS Newsletter Editor

Carol Wolfe, bromstudio@hotmail.com

FCBS Roster Maintenance

Susan Sousa, susansousa1@yahoo.com

FCBS Webmaster

Michael Andreas, webmaster@fcbs.org

Weevil Research

Howard Frank, PH.D, jhfrank@ufl.edu
Ron Cave, PH.D, rdcave@ufl.edu
Teresa M. Cooper, PH.D
SFBCP@savebromeliads.com

BSI Officers from Florida

Gregory Kolojeski, Vice President,
gkolojeski@gmail.com
Barbara Partagas, Secretary,
bpartagas@bellsouth.net

BSI Directors from Florida

Bruce Holst, bholst@selby.org
Rick Ryals, rickryals@bellsouth.net
Alex Bello, bellotropicals@yahoo.com
Alan Herndon, aherndon37@outlook.com

BSI Archives Committee

Steven C. Provost
3fox3@att.net

*I love Bromeliads... By Carol Wolfe, Editor*

Dear Bromeliad Friends:

Mike Saunders, Betsy McCrory and the Bromeliad Society of Central Florida are to be congratulated on hosting the successful 2019 FCBS Extravaganza. The hotel was first class and a real bargain, especially so close to Disney! The complimentary cooked breakfasts were delicious and the rooms were spacious. The sales area was packed full of beautiful bromeliads and buyers had plenty of opportunities to purchase their favorites! The auction was a fun night and donations amounted to \$4,173.00. Our thanks to all the FCBS societies members for donating and supporting the FCBS's semi-annual fund raising event.

Prior to the opening of the Extravaganza, the BSI Board held their annual meeting at the hotel in support of the event. Although, our BSI President, Lyn Wagner, didn't make it from South Africa, she promises to be in Sarasota for the 2020 World Bromeliad Conference. Some of the attendees from out of state were: Martha Goode from Arizona: the President of the Bromeliad Society of Houston, Cherie Lee; Carol and Rick Richtmyer, Plano, Tx; the attractive former Mayor Margo Racca from Iowa, LA, and other Board members.

The 2nd Judges School will be in Fort Myers on Saturday November 2, 2019. If you are interested in attending, please contact Betty Ann Prevatt at bprevattppc@aol.com or call her right away at 239-334-0242.

In the midst of all these wonderful activities, we pause to say "Goodbye" to some great bromeliad people that passed away recently, Herb Plever for New York Bromeliad Society (NYBS), Gary Gallick of Houston Bromeliad Society (BSH), Anita Ankerburg of Houston and Grace Goode of the Sunshine Coast, Australia. You can read more about them from the article reprinted from the Bromeliad Society of Houston Newsletter and excerpts taken from Nita's obituary and Grace Goode's story from the Sunny Broms on the Sunshine Coast.

Herb Plever holds the record of having attended every BSI World Conference to date. In one of the last emails I received from him, he said he hoped he would make it to the Sarasota World Bromeliad Conference in 2020. Unfortunately he will not be with us as he passed away on September 9, 2019. I noticed that my last issue of the NYBS Newsletter, "*Bromeliana*" was in May and I began to hear of Herb's health decline. Herb was a Director and Honorary Trustee of the Bromeliad Society International, a founding member of the New York Bromeliad Society, Editor since 1970 of NYBS's Newsletter "*Bromeliana*" and by vocation an attorney.

Herb (95) and Sylvia Plever (92) were married for 67 years until Sylvia's death in 2018. She was a remarkable woman who quit school during the depression era to support her family. Later she worked to put Herb through law school. Tom and I met Herb and Sylvia in Miami at the WBC in 1988. They were friendly and welcoming to us. Herb was busy filming the attendees that night and later shared his video with us. Ah, we were so young at the time! Later, when they came to visit us in Lutz, it was like having a visit from royalty!

Gary Gallick, PhD, from Houston, Texas served on the BSI Board as a Director when Tom was BSI President (1999-2005). He was enthusiastic about bromeliads and later became a BSI Judge. He was very caring about people, especially those they were going through cancer or had a loved one with cancer. Gary spent years in cancer research and was hopeful that a breakthrough in research would result in saving many lives. We thank God for Gary's contributions and accomplishments to benefit mankind.

Nita Ankenbruck, Pearland, Texas, 86, passed away on October 11, 2019. She was preceded in death by her husband Joe. They were members of the Houston Bromeliad Society and after their annual shows, Nita and Joe would have everyone to their house for dinner and an auction. It was on such occasions, that we visited their home. They were remarkable people with a great gift of hospitality and many people were the recipients of her kindness and caring from a life well lived.

We are truly blessed to have met such wonderful people through our mutual love of bromeliads. During the coming holidays, let's be grateful for each other and for those we lost this year and remember their families with prayers for God's comfort, and let's fill our days with kindness and caring.

My heartfelt thanks to the faithful supporters contributing to this newsletter, for my loving, supporting husband, Tom Wolfe, Jay Thurrott, Terrie Bert, Greg Kolejeski, Derrick Butcher, and Calandra Thurrott!

*Tom and I wish you and your family a wonderful Thanksgiving, a blessed
Christmas and a Happy, Healthy and Wealthy New Year in 2020!
Carol*



THESE ARE A FEW OF MY FAVORITE TILLANDSIAS...

Carol Wolfe

Tom Wolfe grew some of these in hanging baskets, on driftwood, and in pots and others were from my picture collection of Bromeliad Shows.



Tillandsia capitata rubra



Tillandsia capitata

by Sandy Roth Artistic arrangement in
2019 BSSF annual show



Tillandsia capitata Brilliant Yellow 'Gold' and aka *T. rubra*

Tom Wolfe grew my favorite, favorite *T. capitata* in a plastic pot with an orchid mix.

©Photos by Carol Wolfe



Tillandsia capitata pink form
grows beautifully on driftwood or in a basket.
The baby soft pink foliage produces purple flowers.



Tillandsia capitata Gold

Tillandsia capitata Gold has brilliant yellow bracts and purple flowers.
According to our tag dated 2005, this T. capitata came from Dave Barry in California by way of the McCrory's Boggy Creek Nursery.





Tillandsia capitata
yellow form

Tom said this *Tillandsia capitata* yellow form loves growing on driftwood.



Tillandsia capitata
Tom grew this beautiful *T. capitata* in a hanging basket with a shade cloth liner and orchid mix.





Tillandsia Jackie Loinaz (concolor x capitata Rubra) was entered in the 2002 show of the Greater New Orleans Bromeliad Society (GNOB) by Judy Zinglersen



This beautiful *Tillandsia capitata* Susie was entered into the annual show of the Bromeliad Society of South Florida (BSSF) Annual Show in 2017 by Peter Kouchalakos



Tillandsia capitata
BGTB Show 2010
entered by
John Miller



Tillandsia Corrinne x *T. capitata* forma red



Photos by Carol Wolfe

This *Tillandsia* is growing very well in a 4" slat basket with shade cloth liner. It goes through a real color transformation from pale green, but when it blooms it changes to a beautiful bronze with purple flowers.



Artistic Design Arrangements

By Tom Wolfe

The BSI Handbook for Judges and Exhibitors and Affiliates covers this subject on pages 42 to 50.

“Flower arranging is the art of organizing design elements according to the principals of design to attain beauty, harmony, distinction, and expression. Design principles govern flower arranging as they do all art forms. The difference between flower arranging and the other arts is in the medium. As gardeners, our medium is plant material.

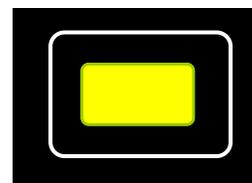
The artistic division of the bromeliad show serves to educate the public to the unending uses of bromeliads in their homes and offices. Arrangements on your dinner table, coffee table, or your entrance way are just a few suggestions.

There are eight elements of design that need to be followed to achieve a good design. The following are the elements used in the design construction are things you can touch and see:

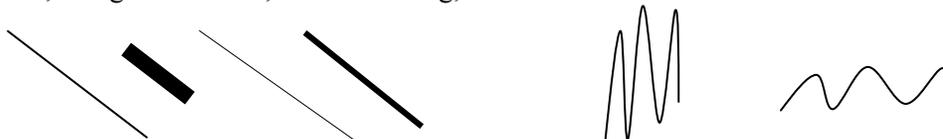
Space, Line, Form, Size, Color, Light, Texture and Pattern.

SPACE

1. The real or total space allotted on the table.
2. Space that exists within the plant material and other components.
3. The space established within the design.

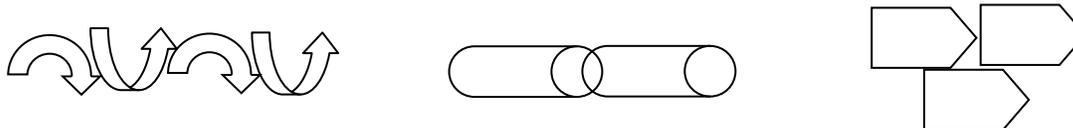


LINE Line is defined as a one dimensional path through the design. Characteristics of line are long or short, straight or curved, weak or strong, thick or thin and delicate or bold.



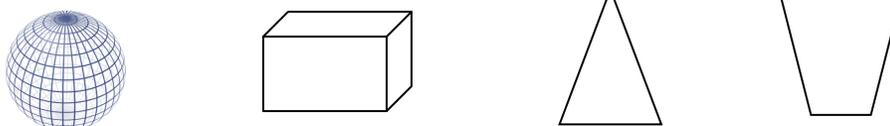
Techniques for creating line in design are twofold:

1. Actual line—the creation of line through physically linear materials such as: branches, blooms spikes, long stiff leaves, etc.
2. Implied Line: the creation of line through the repetition of forms, sizes, textures and for colors in a linear direction.



FORM Forms are three dimensional

Basic geometric forms are sphere, cube, pyramid, and cone. Most designs are modifications of geometric forms.





LIGHT Types of light:

1. Natural illumination (sunlight). Bromeliad shows are rarely exhibited in natural light.
2. Artificial illumination
 - a. Incandescent is a concentrated direct source of warm yellow light, enhancing yellow, orange and red.
 - b. Fluorescent and halogen. Soft, diffused light which casts a bluish-grey tinge on objects producing the clarity of yellow, orange, and red and enhancing blue, green and violet.
 - c. Special effects such as clear flood or spot light block light, colored lights, strobe, etc. Lightning may affect colors of components, enrich textures, modify forms, create shadows and/or convey a mood. It also effects depth which causes eye movement throughout the design.

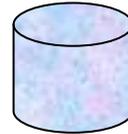
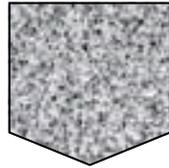
COLOR Color is the most important consideration when choosing materials for a design. Color commands the most attention, causes the strongest reaction, and often accounts for success or failure.

See if you can identify the elements used in these arrangements.





TEXTURE Texture refers to the surface quality of materials which appeals to the senses of touch and light. Textures modify both form and color and for a design to have visual interest there must be textural variety.



PATTERN: Pattern is composed of lines, shapes, forms and the spaces between them.

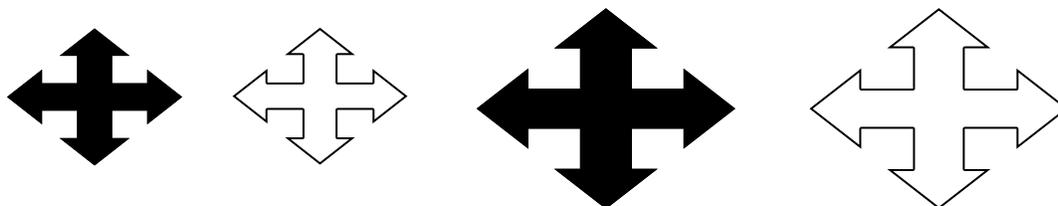




SIZE: Size is the design element closely related to the design principles of scale and proportion.

1. Distance from the viewer.
2. Color and texture visually affects size.
3. White will appear larger, black will appear smaller.
4. A component having a very coarse texture or a shiny texture

will appear larger than a component of the same size having a fine or dull texture.



Artistic Design by Kay Miller
2005 BGTB Show
BEST OF SHOW ARTISTIC



Cryptanthus Absolute Zero &
Nidularium inocentii
by Larry Giroux

In this next issue, I will discuss the Principles of Design:

- Balance
- Rhythm
- Proportion
- Scale
- Contrast
- Dominance

Credits: Handbook for Flower Shows, The National Council of State Garden Clubs, Inc. 2007
Handbook for Judges, Exhibitors and Affiliates.

©Photos by Carol Wolfe



Southwest Bromeliad Guild and Cryptanthus Society Show and Sale in Corpus Christi

By Jay Thurrott

The Corpus Christi Bromeliad society recently hosted the Southwest Bromeliad Guild's 40th annual bromeliad show and Florida was well represented in the list of attendees. This semi-annual event was combined with the 16th annual International Cryptanthus show, so for bromeliad lovers there was truly something for everyone! The conference hotel was the Emerald Beach hotel and although the hotel opened directly onto the beach, a fast moving cold-front kept most of the guests indoors for the weekend.



Registrants for the conference were treated to a special 2 hour preview of the plant sales and the choicest plants were quickly snatched up.

The vendors for the sale included some friendly and familiar Florida faces.



Dyckia 'Yellow Glow' truly living up to its cultivar name!

They like to grow the spiny ones in the SW, and they're grown to perfection! This is Dyckia dawsonii cv. pink spines.

Judging for the BSI Standard Show took place on Saturday morning and the judges quickly found that the plant entries were very high quality - making the judging quite difficult.



Dyckia dawsonii cv. pink spines.



Two panel judges look on as the paperwork gets brought up-to-date



**EARLY MORNING
CRYPTANTHUS SOCIETY BOARD MEETING**

Saturday evening's activities included a banquet, followed by a rare plant auction. The auction included everything from brass figures to first-releases of new hybrids, and even a beautiful and rare Georgia O'Keefe Neoregelia print.

Sunday morning began with a Cryptanthus Society board meeting, followed by my favorite part of bromeliad conferences – the tours.



Tour of the beautiful home and greenhouses of David and Eva Gardner



HOME TOURS

Lorna Hayes
welcomes
visitors to their
home and garden
on South Padre
Island



Gene Haynes' concrete work in the front yard includes a Koi pond and plenty of room for landscape planting of bromeliads

If you've never attended a SW Guild show, you might want to mark your calendar for 2021 when their next show will be held in Kenner, La.

Where is Kenner you might ask? It's just 13 miles from New Orleans – let the good times roll!



Photos for this article were submitted by Jay Thurrott



Bidding Wars

by Greg Kolojeski

My favorite part of a Bromeliad Extravaganza or a World Bromeliad Conference is the Rare Plant Auction. The auction features numerous superb plants as well as Bromeliad art and artifacts. I usually try to acquire some art or artifacts at the auction. (I can't kill them!)

The best part of the auction is at the end when the most intriguing Bromeliads somehow always show up. The Rare Plant Auction at the 2019 Bromeliad Extravaganza was no exception. It is generally quite easy to spot the plants that will set off bidding frenzies. You just walk around looking at the auction plants, and the ones you like the best will be the ones that fetch the highest bids! It never fails!

Two Pitcairnia and the Syndicate - One offering that caught my eye was actually two plants: a pair of Pitcairnia donated by Tropiflora. They were Reginald Deroose hybrids with a parentage of *Pitcairnia brongniartiana*: *Pitcairnia* 'Starry Delight' and *Pitcairnia* 'Starry Night.' Standing in front of them was Terrie Bert who remarked that she thought they would fetch the highest price of the night. I did not think much about that statement at the time, but I remembered it later in the evening when they fetched the second highest price of the night.

I had competed with Terrie in the past while bidding for Bromeliad art (I have only won once in such encounters). However, Terrie had taught me a technique of employing a "Syndicate" for items that were likely to go for a high price. And this student thought he was now ready to compete with the teacher. (How foolish I was!) Simply stated, you just pool your funds with one other person to try to make an acquisition at a higher price. After all, if you only have to come up with \$100 to acquire a \$200 plant (pooling your funds with one other person), you could go twice as high as you might have otherwise!



Reginald Deroose hybrids Pitcairnia brongniartiana: Pitcairnia 'Starry Delight' and Pitcairnia 'Starry Night.' donated by Tropiflora

I was seated at a table with my wife Ronnie and two other couples among others. I convinced one person (you just need one other dedicated Bromeliad crazy connoisseur) from one of those couples to partner with me to form a bidding Syndicate. We pooled our funds in order to bid on the Pitcairnia (our spouses have learned not to say anything when it comes to Bromeliads—either they must think we will someday come to our senses, or they realize that Bromeliad collectors never come to their senses!). So we agreed to pony up \$100 apiece and go up to \$200 during the bidding.

Once the bidding started, the numbers climbed very quickly. We were on opposite sides of the room from our main bidding challenger who (surprise!) turned out to be Terrie. My Syndicate partner was

Continued next page



Bidding Wars continued..



doing the bidding for us, and we then began to do our very best to raise funds for the FCBS (who would receive the proceeds from the auction). Aided by several other bidders, the values rose above \$200 with the Syndicate's top bid being \$260 (Hey, what happened to that \$200 limit we agreed to?) before another bidder and Terrie pushed the price up to \$300 with Terrie being the winner.

I then began to think that maybe it was a good thing that the Syndicate had lost since the plan was to grow the Pitcairnia in my garden. If I managed to be unsuccessful in growing the Pitcairnia, I would be killing plants 50% owned by another. (This whole thinking process is called rationalization.) But there's always tomorrow. The next rare plant auction will be in June at the WBC 2020 in Sarasota and I plan to have a bigger Syndicate!

Vriesea 'Volcano' donated by Larry Searle

'Volcano' which was donated by Larry Searle. With its exquisite variegation that is just as spectacular as the inflorescence, it was a plant that would have many bidders. Early on, there were many bidders. Once again, the two main bidders were on opposite sides of the room. Once again, it was Terrie on the other side of the room and another bidder, coincidentally, who was seated at my table. However, this time it was Mike McMahon from the Bromeliad Society of Central Florida (the host of this year's Extravaganza). After the other bidders dropped out, Mike stood up and the bidding went back and forth as each outbid the other. Ray Lemieux, the auctioneer, must have developed a case of whiplash as he kept looking to one side and then the other as the bidding soared past \$200 and then past \$300, finally ending up at \$320 with Terrie winning the plant.

Vriesea 'Volcano': the Eruption!

The plant with the most spectacular inflorescence was a *Vriesea*



I felt a sense of pride (or was it something less prideworthy since I was thinking of how much money we had cost a bidding adversary!) as I came to realize that bidders at my table had helped push the price way up on the evening's two highest-priced plants. Of course, the real winner of the night was the FCBS which receives the proceeds from the Rare Plant Auction. Thanks go out to Terrie and all the bidders who helped make the Rare Plant Auction such a great success!

Photos in this article by Greg Kolojeski



**New genus *Karawata*
by Derek Butcher
Sept 2019**



This new genus was created by J. Marciel et al. in *Systematic Botany* 44(3): 519–535. 2019 Phylogenetics work revealed that *Aechmea* subg. *Chevaliera* is not a monophyletic group. Seven species previously assigned to the subgenus form a clade with strong statistical support and in sister position to morphologically distinct members of other genera. Morphological and phylogenetic evidence segregates these seven species in a new genus named *Karawata*, which requires the following new combinations: *Karawata depressa*, *Karawata gustavoi*, *Karawata hostilis*, *Karawata multiflora*, *Karawata nigibracteata*, *Karawata prasinata*, and *Karawata saxicola*.

These days the trend seems to be to create new genera rather than trying to solve the problem at sub-genus level. This in turn creates problems with naming of man-made hybrids. In this case a quick check of the Bromeliad Cultivar Register has revealed that none of the 7 taxa have been reported. All named have impressive inflorescences but are large plants and take many years to flower which may be the cause of reluctance to hybridise.



Bromeliad Ecology, Diversity in an Ecological Wonderland: Distribution and Abundance—Diversity Matters

By Terrie Bert, PhD



Bromeliad genera differ greatly in their geographical distribution and number of species. For example, the genus *Tillandsia* has about 700 species and, collectively, *Tillandsia* species range from the southern USA to southern Argentina and throughout the Caribbean islands. *Pitcairnia* has more than 400 species and ranges almost as extensively. In contrast, more than half of all bromeliad genera have 10 or fewer species; and about 25% of all bromeliad genera are composed of only one or two species. Many of these genera have very limited ranges. In general, the ranges of genera with many species (i.e., approximately 100 – 700) extend through most or all of multiple countries, whereas the ranges of genera with few species (1 – 10) extend through parts of single countries or even on only one or two mountains (e.g., *Fernseea*). Genera with intermediate numbers of species (moderately high, 99 – 51; moderately low, 50 – 11) tend to cover multiple counties or extend through large parts of single countries.

We can ask, why is the geographical range of a genus related to the number of species in the genus? Of the many avenues of exploration we can take, four questions can be easily answered with a little knowledge of bromeliad ecology. We can ask:

- (1) are genera with many species (“many-species genera”) older (i.e., have existed longer) than genera with few species (“few-species genera”);
- (2) do many-species genera use more different types of habitats than few-species genera;
- (3) do many-species genera have broader seed dispersal than few-species genera; and
- (4) do the various species in many-species genera have more diversity in their plant forms than do the species in few-species genera?

We might expect that genera that have existed for longer time periods have many species and that, together, the species within each of those genera live in different habitats, can spread their seeds farther, and have more shape and form adaptations for living in those different habitats.

We can test this hypothesis by addressing each question. First, do “old” genera have many species and “young” genera have few species? Techniques in the field of population genetics can provide information on the age of species. According to the most comprehensive study completed (Givnish et al. 2011), the ancestor of the oldest bromeliad genera existing today--*Connelia*, *Lindmannia*, and *Brocchinia*--originated about 19 million years ago (“Mya”). Those three genera have, respectively 6, 39, and 20 species. The many genera (32) with the most recent common ancestor, which dates to about 9 Mya, range broadly in species number; but more than ¾ have 10 species or less, as we might expect. So, where in this evolutionary history are the most genera with many species? Most are “middle-aged” genera. *Dyckia*, *Guzmania*, *Pitcairnia*, the *Tillandsia* group, and the *Vriesea* group (respectively, including all species formerly in *Tillandsia* and *Vriesea* but reclassified by Barfuss et al. 2016) all have common ancestors from the time period that ranges from 13 to 16 Mya. That was a time of bromeliad diversity explosions. Five of the eight bromeliad subfamilies originated during that time. So, as we expected, most young bromeliad genera have few species; but unexpectedly, the oldest genera have far fewer species than we might expect and, in general, middle-aged genera have the most species.

Moving forward, we wonder: Do questions (2) – (4) meet our expectations? Are they completely true; partially true, as was question (1); or completely false?

Question 2: Do many-species genera utilize more habitats than few-species genera? There are many components of habitat. Information on altitudinal range, moisture levels, temperature range, and substrates used are relatively easy to find for nearly all species. To compare habitat components among the genera, we need to define these components. Table 1 shows one way to categorize the components. According to our hypothesis, the various species in many-species genera should collectively inhabit several categories of each habitat component. For example, some species in a particular many-species genus could be terrestrial and inhabit low-altitude rainforests (altitude = a, moisture = e, temperature = d – e, substrate = a); whereas other species in the same genus might live in trees on seasonally dry mountainsides (altitude = b - c, moisture = b, temperature = a - b, substrate = c). Therefore, that genus has scores of 3 habitat categories for altitude, 2 for moisture, 4 for temperature, and 2 for substrate.

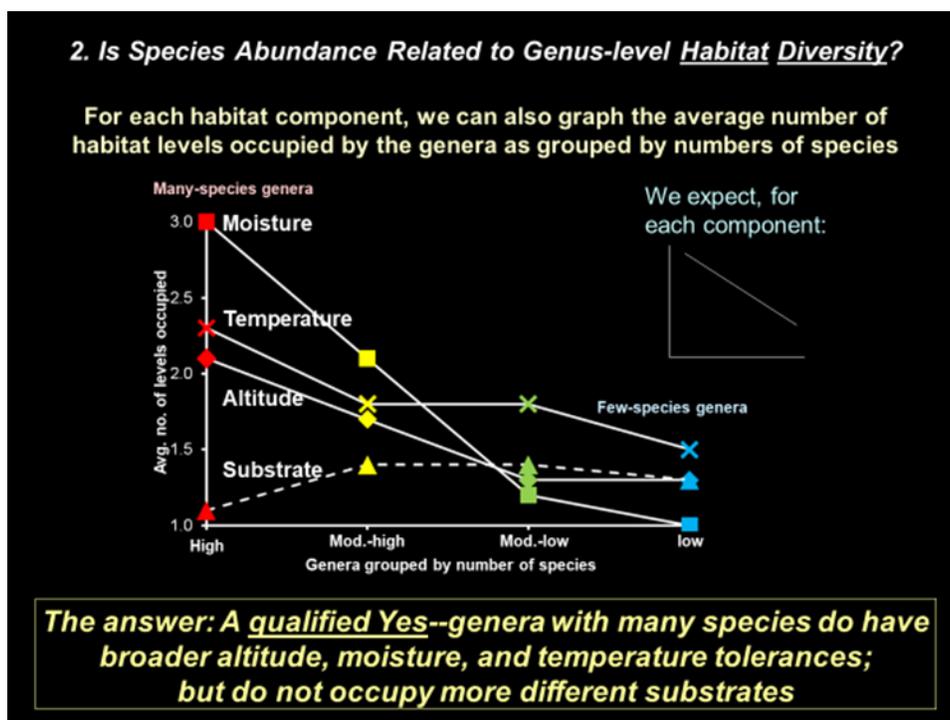


In contrast, all species in a few-species genus might be found only on rocks in dry, hot lowlands (altitude = a, moisture = a, temperature = e, substrate = b). That genus would get a score of only 1 for each habitat category. We can average the scores for the genera in each species abundance class (high, moderately high, moderately low, low) and graph them to search for trends (Figure I).

Table I: Categories of four ecological habitat components.					
Habitat component	Category				
	a	b	c	d	e
Altitude	Low	Intermediate	High		
Moisture	Desert	Seasonal	Average	Moist	Wet
Temperature	Cold	Cool	Pleasant	Warm	Hot
Substrate	Terrestrial	Saxicolous	Epiphytic		

Based on this scoring system, is our habitat question true? The answer for altitude, moisture, and temperature is yes (Figure 1). The various species in many-species genera collectively occupy 2 or 3 altitudinal ranges, 2 – 5 moisture regimes, and 2 – 5 temperature realms; so for these three habitat components, the collective average scores for many-species genera range from 2.1 to 3.0. In contrast, nearly all genera with few or low-intermediate numbers of species occur in only one or two altitudinal ranges, moisture regimes, or temperature realms; so the average scores for those groups of genera for those habitat components range from 1.1 to 1.6. Substrate type is a different story. Most genera, regardless of their numbers of species, occupy one type of substrate; so the average scores for all groups of genera are less than 1.5. Within any genus, all or most species (60-80%) are epiphytic, or saxicolous (live on rocks), or terrestrial.

Figure 1. Relationship between four habitat components and numbers of species in bromeliad genera.





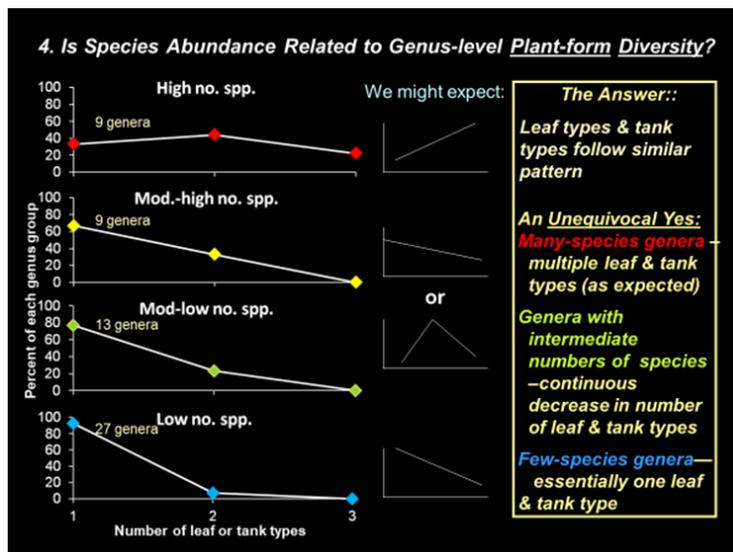
Lastly (Question 4), do many-species genera have more diversity in their morphological forms than few-species genera? Since many-species genera occupy more ecological niches (as defined by our habitat components, Question 2) and have a greater diversity of seed dispersal methods (as established in Question 3) than few-species genera, we might expect that many-species genera have more diversity in plant form among their constituent species than do few-species genera. Two aspects of plant form are easy to categorize and determine for many species: leaf type and degree of tank formation. There are many forms of leaves and tanks in bromeliads, but these forms can each be classified into three types (Table 3). Various combinations of these morphological features are abundant. For example, some tillandsias have filamentous leaves and no tanks. Shade-tolerant genera, such as *Cryptanthus* and *Pitcairnia*, may have soft leaves and no tanks. Other genera in the Tillandsioideae, particularly vrieseas and guzmanias, have soft leaves and tanks of intermediate sizes; as do many species in the numerous genera within the Bromelioideae. Most species in succulent bromeliad genera (*Deuterocohnia*, *Dyckia*, *Encholirium*, *Hechtia*) have stiff leaves but no tanks. Sun-tolerant aechmeas, hohenbergias, and other genera in the Bromelioideae have stiff leaves and long, voluptuous tanks that hold considerable amounts of water. In general, we might expect to see all leaf types and levels of tank formation among the species in most many-species genera but only one leaf type and level of tank formation in the species within most few-species genera. Is this true? We can tally the numbers of leaf types and tank types that the species have within a genus and graph the percent of genera within each abundance class that have one, two or three leaf or tank types (Figure 3).

Table 3. Categories for plant appearance.

Plant form component	Form		
	a	b	c
Leaf type	Filamentous	Soft (flexible)	Hard (stiff)
Tank formation	No tank	Small to medium-sized tank	Large tank

In this analysis, interestingly, leaf type and tank type follow each other so closely that they can be summarized together; and for these morphological characteristics, the answer to our question again is “a qualified yes” (Figure 3). Some many-species genera have only one leaf and tank type in their constituent species. The constituent species in other many-species genera collectively have two or three leaf and tank types. We might expect this result because, as we’ve already established, the various species within most many-species genera live in different habitats. Their morphological forms vary according to the habitat that they occupy. For example, the species in *Aechmea* collectively have all three plant forms; whereas nearly all species in *Pitcairnia* have a single plant form—flexible leaves and no tanks. Also as for dispersal method, many genera with moderate numbers of species and nearly all genera with low numbers of species have only one leaf type and tank type.

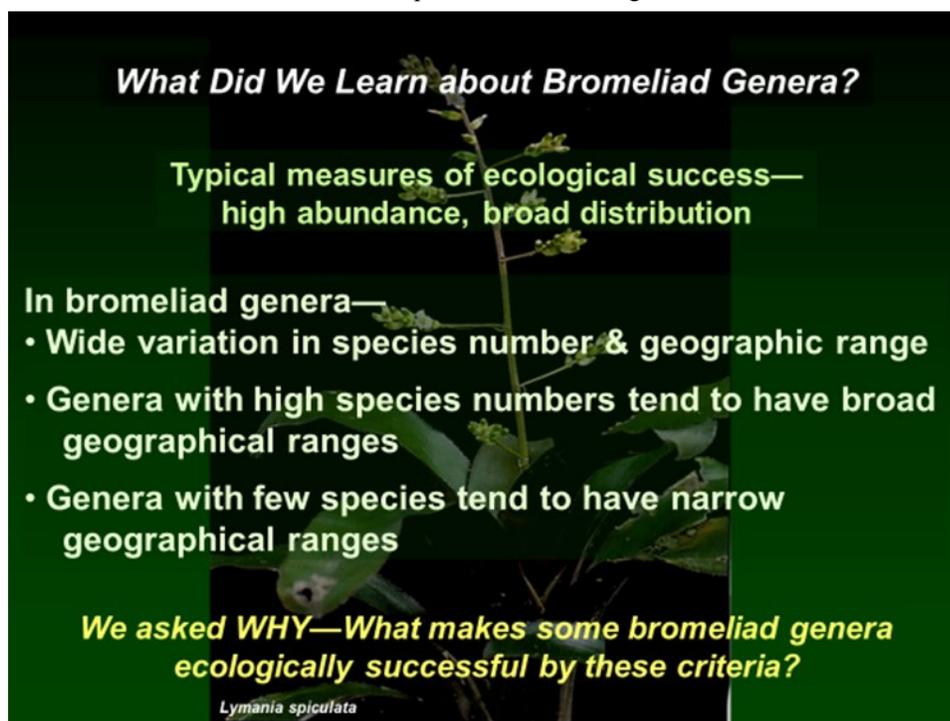
Figure 3. Relationship between leaf type, tank type, and numbers of species in bromeliad genera.
Mod = moderately; no. = number; spp. = species





What did we learn from this informal survey of bromeliad genera? We wondered if genera with many species had, overall, broader geographical distributions than genera with few species; and we found that genera with many species do indeed tend to have much broader distributions than genera with few species (Figure 4). Assuming that high species numbers and breadth of geographical distribution were measures of ecological success, we wanted to investigate why some genera had those attributes whereas other genera did not. Were genera with many species older? Did they have more time to form species and to spread geographically? Unexpectedly, we found that genera of intermediate evolutionary age tended to have more species than either evolutionarily young or old genera. Genus age wasn't the answer.

Figure 4, Summary of relationship between geographical variation and numbers of species in bromeliad genera.



We then asked, “Within genera, were high species numbers and broad geographical distributions related to high ecological diversity?” We investigated this by hypothesizing that higher diversity in factors such as habitat tolerance, dispersal methods, and plant form would lead to greater ecological success as we defined it (Figure 5). We found that our hypothesis was true for three habitat characteristics. Genera with many species were distributed across multiple altitude levels, moisture regimes, and temperature realms; whereas genera with few species tended to have limited altitudinal ranges, specific moisture needs, and limited temperature tolerances. Specifically, genera with few species tended to inhabit only one or two altitude levels and temperature realms and only one moisture regime. Only our substrate category did not conform to our hypothesis. From 60% to more than 80% of the species within any genus use only one substrate type. A genus is essentially composed of epiphytic or rock-inhabiting or terrestrial species.

Figure 5. Summary findings for investigation into reasons why some bromeliad genera have many species and are broadly distributed, whereas other bromeliad genera have only few species and are narrowly distributed.



What Did We Learn about Bromeliad Genera?

Older isn't better—

- Genera with many species tend to be of intermediate age (10-17 My)
- Genera with few species tend to be old (> 20 My) or young (<10 My)

More diversity is better—

Genera with many species have broader habitat characteristics—

- Altitudinal distribution
- Moisture tolerance
- Temperature tolerance

morphological variation—

- Seed packaging & dispersal
- Leaf type
- Tank form

Lymania globosa

Our results for dispersal methods and plant form were similar to each other in that dispersal methods, leaf type, and tank form varied in genera with many species but were limited in genera with intermediate numbers and very restricted in genera with few species. This might be expected; since collectively, the species in many-species genera inhabit many habitat types as we defined them; whereas few-species genera were limited in the habitats they occupied. For the many-species genera, different seed dispersal mechanisms and plant forms should be needed for survival and reproduction in different habitats; and that is what we saw. Dispersal methods in many-species genera ranged from wind-blown fluffy or winged seeds to fleshy seeds eaten and dispersed by birds and mammals. In contrast, most genera with moderate numbers of species and nearly all low-species genera have fleshy seeds spread by animals. Similarly, leaf type and tank form varied among species in many-species genera; and generally, as numbers of species decreased in genera, the number of different leaf and tank types also decreased.

Ecological diversity isn't the only avenue for species diversity in a genus (Figure 6). Situations that have allowed high levels of diversification in genera include growing where nothing else can grow (*Puya*) or being a weedy, grassy colonizer (*Pitcairnia*). Both of these genera are most common in Andean highlands. Pleistocene climatic fluctuations also likely contributed to speciation (the formation of species) in these and other genera that inhabit terrain with great altitudinal variation. Repeated intervals of ice ages and warmer climatic conditions caused existing species to shift their ranges either lower or higher in the Andes, depending on whether an Ice Age was in effect or the climate was very warm. Such distributional changes in mountainous areas can leave colonies of plants that were formerly connected isolated on mountaintops or in valleys for millennia. As the isolated colonies adapt to local conditions while, simultaneously, random genetic changes also occur, the colonies can differentiate to the point that they form separate species. It is also likely that some large genera may actually be multiple genera. The large genus *Aechmea* has been repeatedly studied both morphologically and genetically, yet no firm consensus has emerged regarding the validity of assigning any species to that genus or separating that genus into multiple genera, as happened with the traditional tillandsioid genera.

Lastly, there are many ecological and morphological characteristics that weren't considered here (Figure 6). It would be interesting to see the results of hypotheses that included those characteristics.



Question 3: Does seed type and dispersal method (ways that seeds spread around) generally differ among genera, depending on numbers of species in the genera? Seeds and seed dispersal can be categorized in three ways (Table 2). As examples, seeds with fluffy, filamentous appendages are common in the Tillandsioideae; winged seeds are common in genera such as *Puya* and *Pitcairnia*; and fleshy seeds are common in genera in the Bromelioideae (e.g., *Aechmea*, *Billbergia*, *Neoregelia*, *Portea*). If the numbers of species in genera are related to seed type and dispersal, then many-species genera should have, predominantly, the seed type that has the greatest dispersal capability—that is, fluffy, wind dispersed seeds. We might expect that genera with this type of seed have the highest probability of being dispersed farther than genera with larger, heavier seeds that are blown about or fleshy seeds that are dispersed by animals. But is this true? As with the other parameters we examined, only partially. All three types of seed dispersal methods are used in roughly equal proportions by many-species genera (Figure 2). So, dispersal by fluffy seeds is not a “preferred” method of dispersal in those genera. However, most genera with intermediate numbers of species and nearly all few-species genera have fleshy seeds spread by animals. Birds spread such seeds when they are stuck to their feathers or feet; or when they fly away with the seeds, eat the pulp, and discard the seeds. Mammals disperse these seeds when they stick to fur or feet or when they eat the fruit and defecate the seeds. These dispersal methods generally result in localized seed dispersal. Some bromeliad species require passage through an animal digestive system to remove the pulp so the seeds can germinate and are thus limited to animal dispersal.

Table 2. Categories for seed form and dispersal mechanism.

Seed capsule type	Appearance	Dispersal method
Dry	Seeds with fluffy, plumose appendages (like dandelion seeds)	Wind dispersed
Dry	Seeds with or without ornamentation (usually small “wings” or “saucers,” somewhat like maple seeds)	Some wind dispersed, some bird or mammal dispersed
Fleshy	Seeds relatively large; pulpy outer layer; may have projections for attaching to feathers, fur, or skin	Bird or mammal dispersed

Figure 2. Relationship between seed type - dispersal method and numbers of species in bromeliad genera. Mod. = moderately; no. = number; spp. = species

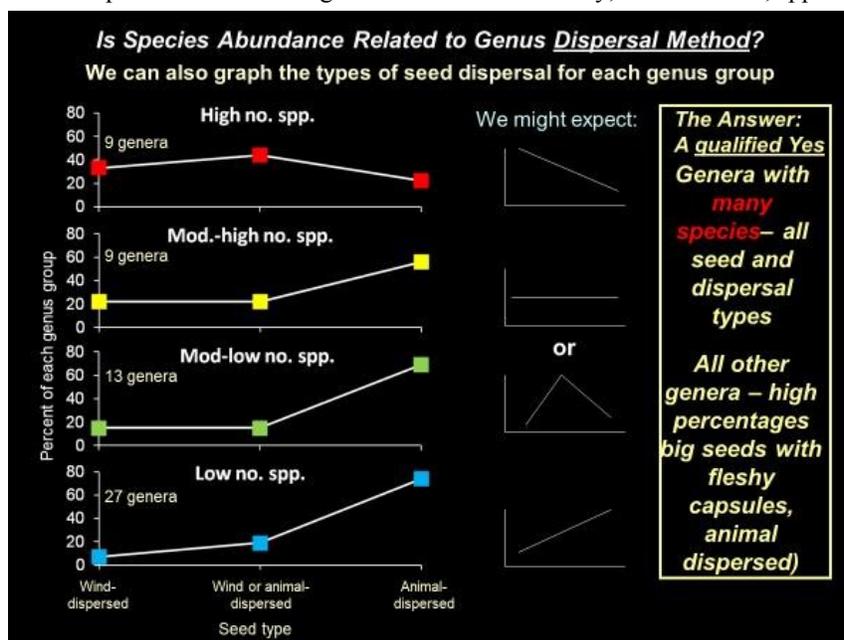
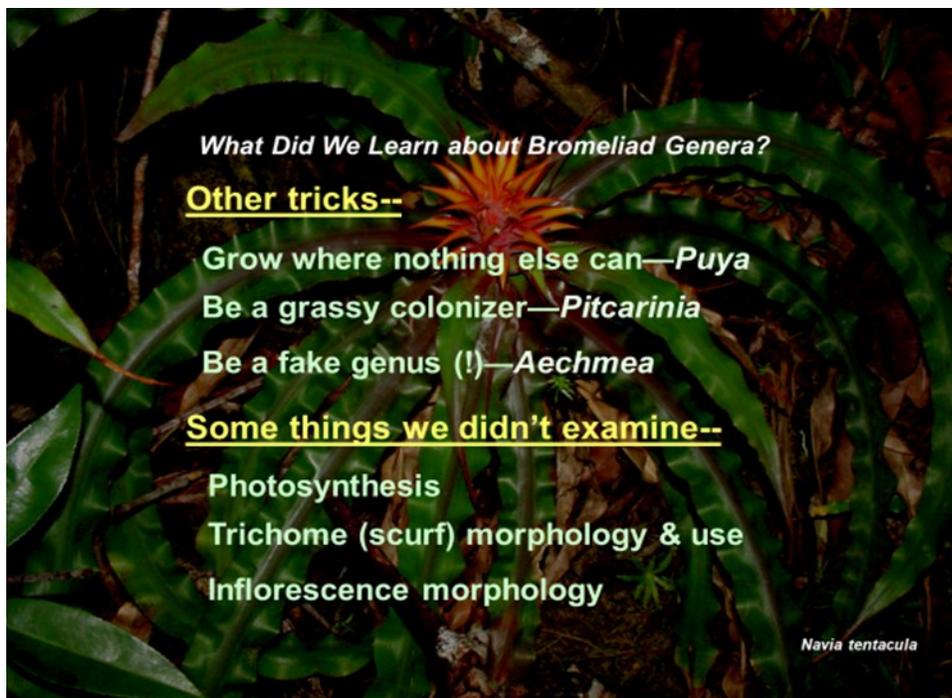




Figure 6. Some other ways that bromeliad genera can contain many species; and other factors that could be examined in a study of species diversity in bromeliad genera.



REFERENCES

Barfuss, M.H., W. Till, E.M.C. Leme, J.P. Pinzón, J.M. Manzanares, H. Halbritter, R. Samuel., & G.K. Brown. 2016. Taxonomic revision of Bromeliaceae subfam. Tillandsioideae based on a multi-locus DNA sequence phylogeny and morphology. *Phytotaxa* 279(1):1-97.

Givnish, T. J., M.H. Barfuss., B. Van Ee, R. Riina, K. Schulte, R. Horres, P.A. Gonsiska, R.S. Jabaily, D.M. Crayn, J.A.C. Smith, and K. Winter. 2011. Phylogeny, adaptive radiation, and historical biogeography in Bromeliaceae: insights from an eight-locus plastid phylogeny. *Journal of Botany* 98(5):872-895.

The Bromeliad Guild of Tampa Bay (BGTB) sale at USF Botanical Gardens



The BGTB members stayed cool under the new tent purchased for the club sales. Thanks to Marilyn Byram for making the display banner with the Guild's name.



Marilyn and Steve Byram are also responsible for creating and bringing "Pineapple Pete," (with a real Pineapple head) who welcomed all visitors!



Two Icons of the Bromeliad World

(Reprinted from the Bromeliad Society of Houston, October 2019, Volume 52, No. 10)

2019 has been a very sad time regarding our losing some of the best and most generous of BS/H as well as Bromeliad Society International. Two more of our friends passed within the last month, Gary Gallick and Herb Plever.

Many of the members of our BS/H knew Gary Gallick very well. He was a very active member in the society until he was hit so badly with ALS. Also, Herb Plever was a brilliant and active gentleman with his group in New York and BSI. And Herb thanked me every month when he received our Houston newsletter. He often helped me with plant identification and provided guidance on how to obtain good information.

Please note these brief obituaries cannot begin to express the magnitude of their work and their support.

Gary E Gallick, Ph. D.



Born August 27, 1952 in Champaign, Illinois. Deceased September 10, 2019 in Kingwood, Texas. Dr. Gallick received his Bachelor's degree in Microbiology from the University of Michigan and his Master and Doctorate degrees in Microbiology from the University of Illinois at Urbana-Champaign. He was a cancer researcher at the University of Texas M. D. Anderson Cancer Center (MDA) for 38 years achieving the rank of tenured full professor in the Department of Cancer Biology and the Department of Genitourinary Medical Oncology. His major research interest was to understand how the tumor-causing gene Src was involved in colon and prostate cancer progression. He collaborated with both basic scientists and clinician scientists to focus on research that are of potential clinical importance.

During his tenure at MDA, Dr. Gallick was also a faculty in the Graduate School of Biological Sciences (GSBS) at the University of Texas Health Science Center in Houston. He had a passion for teaching and mentoring graduate students. He organized and taught many courses and served on hundreds of student committees, as well as served once as the president of the GSBS faculty. In addition, he trained many Ph.D and master students as well as clinical fellows in his laboratory, many of whom are now professors. Among his greatest contributions to education was to establish and lead the first Graduate Education Committee to improve the quality of graduate education at both MDA and GSBS. As a result of his devotion to research, teaching and mentoring, he received numerous awards including the John P. McGovern Outstanding Teaching Award from GSBS, Faculty Achievement Award in Education from MDA; The William Randolph Hearst Foundation's Faculty Achievement Award in Education; The University of Texas System Regents' Out-standing Teacher Award; the Paul E. Darlington Mentor Award from GSBS & MDA; the Special Challenge Award from the Prostate Cancer Foundation; and the John Mendelsohn Lifetime Achievement Award from MDA.

Dr. Gallick received the Mary and Howard Lester Endowed Chair in Genitourinary Cancer at MDA in 2016 when he was diagnosed with ALS (amyotrophic lateral sclerosis), also known as the Lou Gehrig's disease, for 9 months. He kept working throughout his disease until his retirement in August 2019. He was an inspiration to all who saw him attend the weekly lab meetings for the last 18 months when he could no longer walk, talk, eat and breathe on his own. He depended on his wife and a caregiver to take him to MDA in a motorized wheelchair that's equipped with a portable ventilator. This horrible disease took away most of his body functions but not his sharp mind. So for as long as he felt that he could still make some contributions to science, he kept going. During his retirement party, it was announced by both the MDA and GSBS leaders that a GSBS classroom was dedicated to him for being an educator, scientist, mentor and champion of integrity for MD Anderson faculty and GSBS students from 1981 to 2019.

Dr. Gallick had many hobbies. He loved classical music; he was a Houston Symphony season ticket holder for 35 years. He loved Bromeliads (a type of tropical plant) and he was a member of the Bromeliad Society of Houston (BS/H). During his illness, his friends from the BS/H kept his large collection of bromeliads alive by moving them into the garage in the winter and taking them out in the spring. They even named a bromeliad to honor him (Neoregelia "Gary Gallick"). Gary and his wife Jan have been members of the BSH since 1993.

Continued next page



Continued Two Icons of the Bromeliad World:

Gary is predeceased by his mother Dr. Mary Catherine Gallick. He is survived by his wife Dr. Jan Liang, his father Dr. Harold Gallick, brother Dr. Harold L. Gallick, sister-in-law Dr. Marilyn Gallick, nephews Mathew and Nickolas Gallick and niece Karista Gallick, Jan's sister Rebecca Middleton, brothers Michael, Larry and David Liang and their families.



Herb Plever
1924-2019 (95)
Veteran of War World II
Vocation: Attorney
Married to Sylvia Plever for 67 years.
Sylvia passed away in 2018 at age 92.
Director and as Honorary Trustee
of the Bromeliad Society International
Founding member & former President
of New York Bromeliad Society
Editor of Bromeliana of NYBS Newsletter since 1970

On September 9, 2019, the bromeliad world lost a patriarch -- Herb Plever.

A New York lawyer for decades, he lived in the outskirts of the city for a lifetime. Herb died in his nineties.

He holds accomplishments which may never be matched -- he attended all BSI World Conferences for four or five decades.

He was the editor of the *Bromeliana* for his NY Society forever.

He was married for over 60 years, until his wife passed away a few years ago. She was a saint as their apartment had more plants than any other apartment I have ever seen. And the plants required weeks of bathing four times a year.

He always wrote an email to us saying "Thank You" when receiving the *BromeliAdvisory*. Not until I did not receive that return email did I inquire about what had happened.

He was to the NY Society what Nat DeLeon was to the BSSF.

His loss will be very much felt worldwide, and especially to the NY Society.—Robert C. Meyer

Obituary from NY Times:

PLEVER--Herb. 95, husband of Sylvia (died in 2018); father of Terry Kalb (Paul) and Steve Plever (Ginna); grandpa of Joanna (Gabe), Ben, Joe, Louise; great-grandpa of Noah, died on September 9. He was a WWII vet, lawyer, and civil activist in Rochdale Village. Herb had passion for social justice, Italy, opera, folk dancing. He co-founded NY Bromeliad Society, wrote its journal, and was a trustee of Bromeliad Society International.



JUANITA “NITA” RUTH ANKENBRUCK, 86

January 22, 1933 to October 11, 2019

She was preceded in death by her loving husband of 46 years, Joseph Ankenbruck, Sr., daughter, Patti Powell.

Nita is survived by her children; son, Joseph Ankenbruck, Jr. of Pearland, daughters; Shelly Durst of Katy, Lisa Frey of Pearland, Cindy Collier of Friendswood, Lori Lott-McCue of Friendswood, Kay Petersen of Arlington, She has 20 grandchildren and 11 great-grandchildren.



In 1968 she moved with her family to Pearland where she has resided for the last 51 years. Her greatest joy in life was being a mother, grandmother and great-grandmother. Outside of her family, Nita was also involved in many activities and organizations that kept her life busy and fulfilled until her final days. She was also a member of The Catholic Daughters for over 60 years, Altar Society, Eucharistic Ministry, Funeral Meals Chairman and Meals on Wheels for 25 plus years.

When Nita wasn't serving others, she could most likely be found at home working in her favorite place, her backyard. She found peace and serenity there and had a passion for gardening and keeping her yard immaculate. She was a woman of many trades and talents that included cooking, baking, and sewing and could whip up any breakfast, lunch, dinner or dessert on demand without a thought or need to run to the grocery store. Her kitchen was stocked as well as any HEB in town.

To know Nita was to love her. She will be missed by all, but her memory will live on in us all forever.

**VALE GRACE GOODE
102 Years old
Died 10/20/2019**

I have just received the sad news that Grace Goode OAM (age 102) passed away peacefully this morning. Grace will be missed within the Bromeliad world, however she has left all of us with some wonderful plants as a reminder of her presence. Grace's neice , Leonie advises that there will be no funeral, something Grace stipulated in her will and kept reminding Leonie of throughout the years - She just wanted to slip away without any fuss. Please pass this sad news onto your members.

Regards

Peter Cook, Secretary
Sunny Broms on the Sunshine Coast

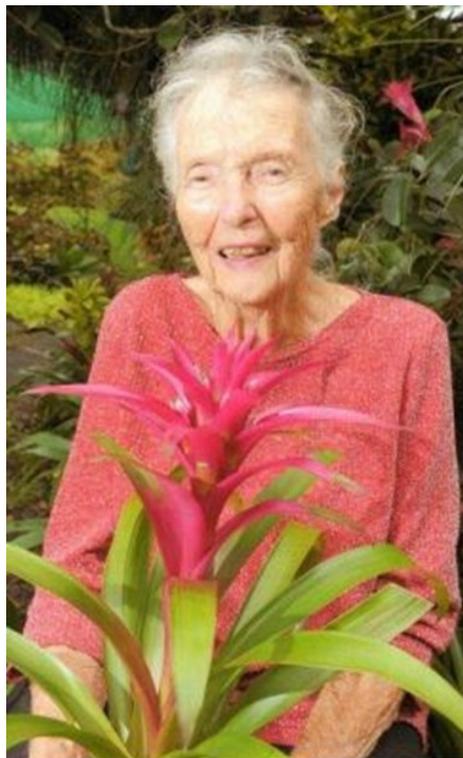


Photo by Rick Ryals



GRACE GOOD

102 Years

7-23-1917 to 10-20-2019

By Peter Cook

Sunny Broms on the Sunshine Coast

<http://scbs.org-au>

Grace Goode, OAM will celebrate her 102nd birthday in July this year. The Sunshine Coast Bromeliad Society Inc. wish her all the best and thank her for the fantastic contributions she had made over many years to the bromeliad world.

Grace was born on the 23 July 1917 at Nambour and has spent most of her life on the Sunshine Coast. She was always a gardener, roses, carnations, dahlias, orchids all sorts of flowers . By 1970 she had discovered the love of her life – bromeliads.

This started when Grace was introduced to Bromeliads by her mother who gave her a plant later identified by Olwen Ferris as *Billbergia Pyramidalis Concolour*. Grace was well into her 50's when she was introduced to Bromeliads and her only regret is that she hadn't found out about them earlier.

Within a few years she was travelling to conferences around the world, and became a well known hybridist.

Most people know Grace through her hybrids. She started hybridizing in the early 1970s, largely in response to the very limited number of bromeliads available then in Australia. Initially, she concentrated on neoregelias. Some of her earlier hybrids are: 'Sheer Joy,' 'little Joy' 'Blackie,' 'Red Plate' and the well known 'Amazing Grace'. Her best known hybrid is probably 'Charm" which is a cross between *Neoregelia marmorata* and *N chlorostricta*. As a matter of interest, Grace considers Charm is exactly the plant she was trying to produce from this cross, as it combines the form (conformation) of *N marmorata* and the colouration of *N chlorostricta*.

Another major area of hybridisation activity has been with cryptanthus. Some of her early hybrids are: 'Misty Charm. Misty Dawn. Misty Glow, and 'Misty Flame.' Bob Whitman brought many of Grace's cryptanthus hybrids to the United States of America (USA). They included: 'Melanie,' 'Seven Veils,' 'Black Mood: 'Hells Bells,' and 'Spellbound'. She also sent hybrid cryptanthus seed to the USA, from which have been produced plants such as: 'Fond Memory: Happy Thoughts,' 'Texas Star' and 'Crown Jewels'

Grace has produced close to 1000 named hybrids. As well as neoregelia and crypthansus hybrids, she has produced aechmea, billbergia, nidularium, and tillandsia hy-

brids. She has also made several bigeneric hybrids, with perhaps the best ones being X *Niduregeilas* 'Something Special' and 'Vision Splendid':

Well into her later years Grace was still actively producing hybrids. Some outstanding neoregelia hybrids include: 'Amen, 'Africa,' 'Alley Cat', Mandela and 'One and Only.'

In the 2004 Australia Day Awards, Grace was awarded the Order of Australia Medal in recognition of her efforts in growing and, in particular, hybridizing bromeliads. Grace is also an honorary trustee of The Bromeliad Society International as well as The Cryptanthus Society and is a life member of the Bromeliad Society of Australia, Cairns Bromeliad Society, Bromeliad Society of Queensland, and the Sunshine Coast Bromeliad Society.

In the last few years her health has started to fade and she now lives in a nursing unit on the Sunshine Coast

PHOTOS OF PLANTS REGISTERED BY GRACE (Photos supplied by Cheryl Basic)

Neo. Because



Neo Lavish



Neo Roseberry



Neo. Rise and Shine



Neo. Shep



Neo. Sweet Reward





OPENING NIGHT WITH LINES IN THE HALLWAY!



DOORS OPEN FOR SALES!



©Photos by Carol Wolfe





HANGING OUT WITH FRIENDS AND MAKING NEW ONES!



Left to right: Carl Bauer, Alan Herndon, and Robert Meyer



Sandy Roth, Melody Rae, Barbara Partagas (hidden), Suri Alexander, and in the center pic, Barbara Partagas!



Left to Right: Nick Bethmann, Margo Racca, and Ronnie Kolojeski



Marian Kennell, Nancy Abramson, and Penrith Goff



Penrith Goff, Nancy Dailey, Gary & Judy Lund, Mike Petrysak and Dick Dailey from Florida West Coast Society attended.



Marty and Monica Folk and Marilyn Howser



Top left: Martha Goode and Rick Ryals and Top Right: Cherie Lee, Rick Richtmyer, Carol Richtmyer, John Boardman, Frank Lee
Center Left: Carly Phalz, Paula White, Betty Ann Prevatt, & Terrie Bert and Center Right: Richard Poole and Bruce Holst
Bottom: Tom Wolfe, Mark Victor, Cheryl Victor, Robert Nelson

©Photos by Carol Wolfe





Seminar: Stephen Littlefield



Seminar: Teresa Eddy

SEMINAR SPEAKERS

©Photos by Carol Wolfe



Seminar: Terrie Bert



Seminar: Bruce Holst



Top Left: Mike Saunders greeting the banquet and auction guests.



Top Right: Ray Lemeux preparing to start the auction.

Center: Betty Ann Prevatt and Carly Phalz preparing to keep track of the winning bids!



Bottom: The bidding has started!





2019 BSI Judges' School

REGISTRATION FORM

SATURDAY, NOVEMBER 2, 2019
TO BE HELD IN FORT MYERS

BSI JUDGES SCHOOL

EASTERN JUDGING DISTRICT

I am interested in taking the BSI Judges Schools I through VI and I agree to pay for Schools I & II in advance.

NAME: _____

ADDRESS: _____

CITY/
STATE: _____ ZIP: _____

PHONE: (____) _____ EMAIL: _____

Please answer the following questions:

I am a member of the Bromeliad Society International: _____

I am a member of the BSI affiliate society: _____

I own (or can borrow) a BSI Judges, Exhibitors & Affiliates Handbook: _____

I grow at least 50 bromeliads in at least 10 different genera: _____

(If you don't now, you will soon!)

Per Class fee: \$25.00 _____ Cash or check

Email or Call

Betty Ann Prevatt
CONTACT INFO:
bprevattpcc@aol.com or



Bromeliad Show and Sale

Judged Show, Thousands of BROMELIADS for sale!

ARABA SHRINE TEMPLE

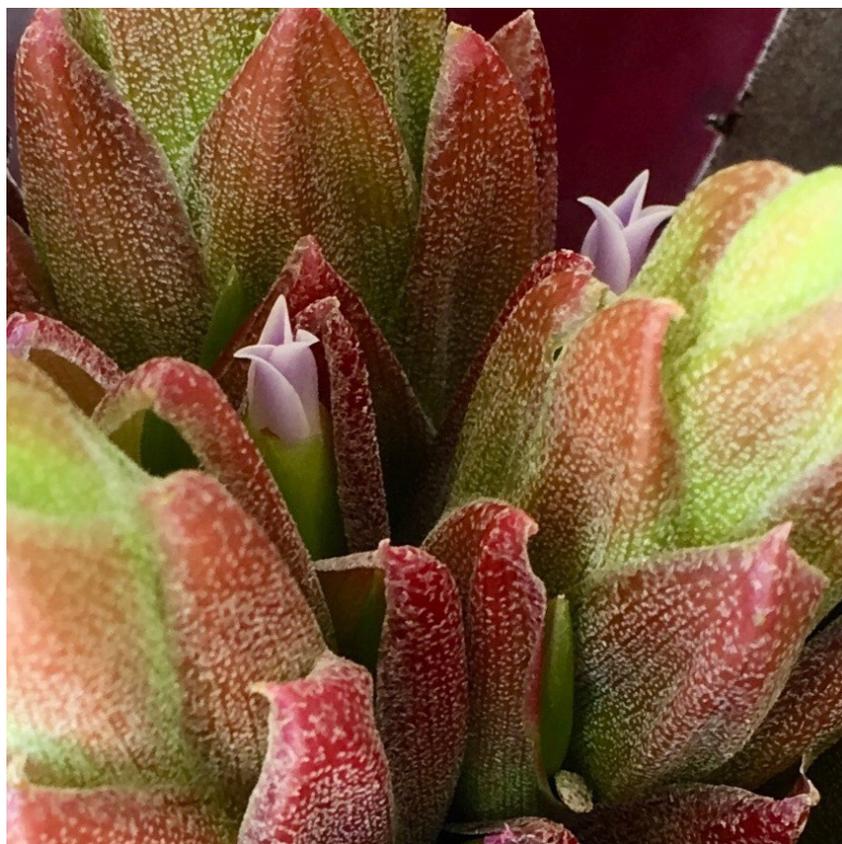
2010 Hanson Street Fort Myers

(Just South and Across Cleveland Ave from Lee Hospital)

Saturday Dec. 14th 2019 9AM-4PM

Sunday Dec. 15th 2019 10AM-3PM

Contact Larry Giroux at 239-850-4048 for Info.



Speakers:

Elton Leme – Brazil
Eric Gouda – Netherlands
Ivon Ramirez – Mexico
Julian Aguirre-Santoro – Colombia
Graeme Barclay – New Zealand
Bruce Holst – Florida
Cristy Brenner – California
Jerry Rack – Ohio

Events:

Conference Opening/Reception
Judged Plant Show
A Huge Plant Sale
Optional Bus Tours
 Behind-the-Scenes visits to:
 Michael's Bromeliads
 Tropiflora
Home Garden Visits
Guided Behind-the-Scenes Tour
 Marie Selby Botanical Gardens
Banquet with Keynote Speaker
Rare Plant Sale & Auction

World Bromeliad Conference June 10-13, 2020 Hyatt Regency Sarasota

World Bromeliad Conference 2020

Join Bromeliad lovers from around the world at the Bromeliad Society International's 24th World Bromeliad Conference which will be held in Sarasota for the first time!

Attendees will have the opportunity to go behind the scenes at **Marie Selby Botanical Gardens** (with its collection of over 1300 Bromeliad species) and **Michael's Bromeliads** and **Tropiflora** with their collector-grade Bromeliads.

Mix and mingle with attendees from all over the world at the Hyatt Regency Sarasota with its beautiful waterfront setting and nearby fine dining, beaches, shopping, museums, and other sightseeing opportunities. Join us for the 70th anniversary of the **Bromeliad Society International** with this amazing opportunity to learn, grow and explore at the World Bromeliad Conference!



www.BSI.org



WBC 2020 Schedule

Wednesday, June 10, 2020

Early Morning:

Plant Show entries with prior approval

Morning:

Optional Bus Tour to **Michael's Bromeliads**
and a Home Garden Visit

Evening:

Official Conference Opening, Reception and
Welcome Address

All day:

Plant Show Judging

Thursday, June 11, 2020

Morning:

Optional Bus Tour to **Tropiflora**
and a Home Garden Visit

Afternoon:

Plant Sale Setup

Plant Show Open for registrants only

Late Afternoon:

Cocktail Reception

Evening:

Plant Sale Open for registrants only

Friday, June 12, 2020:

Morning:

Bus Tour to **Marie Selby Botanical Gardens** (behind-the-scenes tour)

Afternoon: Four Speakers

Morning and Afternoon: Plant Sale Open

Saturday, June 13, 2020:

Morning and early afternoon:

Four Speakers

Morning and early afternoon:

Plant Sale Open

Evening: Banquet with Keynote Speaker,
Rare Plant Auction

For more information on WBC 2020, just go to the BSI website at <https://www.bsi.org> and click on the WBC menu choice near the top.

After you register for the conference, you can also make hotel reservations at a special price with free parking and no resort fees.

Conference Registration:

\$295 if paid by Dec. 31, 2019

\$335 in 2020 until May 26, 2020

\$395 at the conference

BSI Membership

To register for the conference, you need to become a BSI member if you aren't one already. Membership rates start at only \$15 for first-time members.

Join the BSI at <https://www.bsi.org>. Start by clicking on the **Big Show** logo or the **World Bromeliad Conference 2020** image and then select [Make your reservation now](#).

See you at WBC 2020 in June!

BSI MEMBERSHIP RATES			
Journal	First-Time Member	Indiv.	Dual
ONE-YEAR RATES			
Electronic Only	\$15	\$25	\$35
Printed Journal			
US Bulk	\$35	\$50	\$60
US First-Class	\$40	\$55	\$65
Int'l Air Mail	\$45	\$60	\$70
THREE-YEAR RATES			
Electronic Only	N/A	\$70	\$100
Printed Journal			
US Bulk	N/A	\$140	\$170
US First-Class	N/A	\$155	\$185
Int'l Air Mail	N/A	\$170	\$200

More Information

<http://theWBC2020.com>

**2019****CALENDAR OF EVENTS**

November 2, 2019

Judges School II, Fort Myers, FL

November 13, 2019

The Sarasota Bromeliad Society will have an Auction. There will be gorgeous bromeliads, driftwood and possibly a piece of art. The Great Room at [Selby Gardens](#) 6-9pm, 811 S. Palm Avenue, Sarasota, FL.

December 13 - 15,
2019**Caloosahatchee Bromeliad Society Show & Sale****Contact: Larry Giroux 239-850-4048****Araba Shine Temple****2010 Hanson Street, Ft. Myers, FL****Just South and across Cleveland Avenue from Lee Hospital****2020****CALENDAR OF EVENTS**

March 26 –29, 2020

BSSF Annual Show & Sale, Fairchild Gardens, Miami

April 11-12, 2020

USF Botanical Garden Sale, Tampa, FL

April 18-19, 2020

Seminole Bromeliad & Tropical Plant Society Annual Spring Plant Sale**Location: Sanford Garden Club, 200 Fairmont Drive, Sanford, FL 32773**

9:00 - 4:00 in air conditioned building.

Thousands of bromeliads will be for sale along with orchids, aroids, succulents, ferns, heliconias, gingers, fruiting/edible plants and tropicals of all kinds.

Members will be available to answer your questions and assist you in selecting the best plants for your conditions.

June 9-13, 2020

BSI World Conference**Sarasota Hyatt Regency****1000 Boulevard of the Arts****Sarasota, FL 34236**

October 10 - 11, 2020

USF Botanical Garden Sale, Tampa, FL