

Bromeliads for the South Florida Homeowner

This brochure on bromeliads is written for the South Florida homeowner who is interested in taking horticultural advantage of this extraordinary place we call home. The drama of our subtropical flora causes visitors to swoon with delight. Yet beyond the professionally-designed landscapes of our hotels and public spaces, how many of us capitalize on the multitude of plants that thrive in our warm climate? We, the Bromeliad Society of South Florida, want to introduce you to the dazzling array of bromeliad species that flourish in our geographic area. Because South Florida residential landscapes have the potential to display greater varieties of plants, we hope that this publication inspires some of you either to search out some lesser-known species of bromeliads or to ask your landscape professional to give you something other than what is available in the large retail stores. We believe you will be inspired to bring some of our famed tropical lushness to your garden.

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I. What is a bromeliad?

Bromeliads belong to the Bromeliaceae family, which is divided into about 56 genera and over 3,000 species. While many bromeliads are easily identified with their stiff pointed leaves and spiral growing pattern, you will be surprised by the variety found in this New World family. The pineapple we eat is the fruit of a bromeliad, and the very different-looking bundles of Spanish moss found in many of our oak trees are also bromeliads! There are giant *alcantareas* and tiny *tillandsias*. They grow in the arid desert, in the moist jungle and in cold montane regions.

With one African exception, bromeliads are neotropical, which means that they originate in the New World tropics and subtropics. Most bromeliads come from Brazil, but their natural range stretches from South America to Virginia.

On his second voyage to the New World in 1493, Columbus was introduced to *Ananas comosus*, the pineapple, and brought it back with him to Europe. Thus began a Western fascination with the bromeliad.

Bromeliads can be differentiated by their growing environments: terrestrial, saxicolous and epiphytic. Terrestrial varieties grow in the ground like most plants we know. Saxicolous varieties grow on rocks where their roots find ways into cracks which may hold moisture and organic nutrients. Epiphytic varieties are often called “air plants” because they get their nutrients and water from the air. These survivors can be found growing on other plants and trees, but some species are at home even on telephone cables!

Growth Habits:

The leaves of bromeliads grow in a spiral arrangement referred to as a rosette. In tank bromeliads, the bases of the leaves typically overlap and form a natural receptacle where water is stored. This cup is also home to insects and organic matter from falling leaves. There are older terrestrial bromeliads which do not form a cup, but instead behave as most plants by using their root systems for water and nutrient absorption.

II. Design

Bromeliads are multifunctional. They can be used in containers, as interior plants, in vertical gardens and planted in the landscape. This brochure can help you determine whether you want to design your garden yourself or work with a design professional. Be inspired by the variety of choices available!

II (a). The Plant that Keeps on Giving

Bromeliads are monocarpic, meaning that they flower just once and then die. Unlike the cut flowers you buy for temporary decoration at home, bromeliads are generous in that they have blooms that often last for several weeks. They also start to produce pups, or new plants, after, or sometimes concurrently with, blooming. If you purchased a bromeliad for inside decoration and it has bloomed and is starting to deteriorate, you can take it outside and plant it in the ground or attach it to a tree. The mother plant will more than likely produce several pups before it slowly perishes. These pups will then grow to maturity, flower and start to produce their own pups as they decline. For their longevity, affordable cost and often colorful foliage and flowers, bromeliads are perfect indoor plants.

Some bromeliads are prized for their foliage. My personal favorite for indoor conditions is the genus *Vriesea*. I have a *V. fosteriana* hybrid under a skylight so that I can better admire the striations on the leaves. Placing such plants near a window where the sunlight can further accentuate their dramatic foliage also works.



II (b). The Original Vertical Garden:

Bromeliads are the original vertical garden. Many species of bromeliads are found in nature growing on the trunk and branches of trees. The latest trend in garden design, the vertical garden, can be accomplished with the purchase of woolly pockets and a drip irrigation system. Or you can take the DIY approach and utilize the mature trees and palms already found in your garden. South Florida yards have a plethora of single-trunked palms, including Solitaire or Montgomery palms. When young, their beautiful arching fronds add movement and a tropical feel that is very desirable to many homeowners. However, these fast-growing palms soon reach heights that can only be appreciated from a distance. Up close or viewed from a window, these skinny columns beg to be dressed up. What's the answer? You guessed it: bromeliads. Result? You can now be a neighborhood trendsetter with vertical gardens.

Since many bromeliads are admired for their mottled, spotted or lined foliage, what better way to appreciate these variations than to observe them on a tree? There are also some genera, such as *Quesnelia*, which will grow at an angle away from the trunk and whose inflorescences hang; these properties make viewing them at eye level more interesting.

Trees are also excellent places for attaching bromeliads. Following are some local favorites that support epiphytes well:

Mango (the only danger here is that a falling mango can damage or loosen an attached bromeliad)

Avocado

Citrus

Tabebuia

Oak

Royal Poinciana



This photo shows a collection of *Vriesea ospinae* growing on a palm in The New York Botanical Garden.



These *Aechmea orlandiana* 'Bert' were placed on existing palms by Palmetto Middle School students

Placing bromeliads on palms or trees.

There are two problems that homeowners typically encounter which prevent the successful establishments of plants. The first is that the plant is not secured firmly enough; if the plant is not securely placed, the roots will not adhere to a surface well. The second common problem is that the plant is not provided with a medium from which the roots can receive water and nutrients until they have attached themselves firmly to the trunk or limb.

Materials needed:

1. Wire. The options include three-strand insulated phone wire, fishing line, cable ties, and ungalvanized steel. This last option is my favorite as I feel it gives me more control. I have been able to find this material only at Ace Hardware.
2. Sphagnum Moss.
3. Something to hold the sphagnum moss in place. There are two options:
 - a. Gutter mesh. I have been able to find this material only at Ace Hardware.
 - b. Coconut fiber. (I use the fiber that falls from my many *Livistona chinensis* [Chinese Fan] palms.)
4. Twine.
5. Pliers (for tightening wire).
6. Wire cutters.



Steps:

1. Select the trunk or branch where you want to place the bromeliad.
2. Wrap the wire firmly around the roots and base of the plant. Use the pliers if necessary. Cut the wire as needed.
3. Grab a large handful of wet sphagnum moss and place it over the roots of the bromeliad.
4. Cover the moss with the palm fiber or gutter mesh.
5. Wrap twine around the fiber to hold it in place or use wire or twine to secure the ends of the gutter mesh.
6. Stand back and enjoy!



II (c). Planting

For those of you who have that South Florida initiative and are DIY enthusiasts, here are some tips on how to artistically plant those unusual bromeliads you have just purchased.

- ▶ Lay 4-6 inches of mulch down on the ground. Move the mulch aside to place plants and then re-cover the roots with the mulch. This allows you to easily remove plants at a later date to cut off the pups and replant in an aesthetically pleasing manner.
- ▶ Place plants in a zigzag pattern and try to work with odd numbers.
- ▶ If you are planting a variety of species, try to work in multiples and group them according to type with the taller varieties in the back. It is important to know the height of mature specimens, since the plants you purchased may not have grown to their full size.



These *Neoregelia 'Franca'* provide a burst of hot pink for this homeowner. They are under a canopy of oaks and receive quite a bit of shade. Notice the spacing which allows the garden observer to see the full shape of the plant and provides space for pups.

III. Light Conditions

What makes bromeliads so easy to grow here in South Florida? Placing them in the right location! Some bromeliads can take the full force of our sun in the summer, while others need the more shaded space under an oak or other dense-canopied tree. Here is a list of easily available bromeliads assigned by light requirements.

Sun Lovers

South Florida summers are accompanied by a brilliant sun that can scorch plants to a crisp. Many of the bromeliads I have listed here will grow in the shade, but you will not achieve ideal coloration if they do not get enough light.



Neoregelia cruenta This species can be used in bright light to shade. Leaves go from yellowish-green with red tips to maroon red. Spiny margins. This plant is native to Brazil and grows about 12" high and will grow about 12" across. *Neoregelia cruenta* (red clone) has red leaves with pink tips.



Aechmea blanchetiana
Use to add sculptural rusty orange foliage to your yard. The inflorescences are most noticeable for the red and yellow bracts. These springtime blooms last for several weeks and can be used as cut flowers inside. The plants grow 2-4 feet high and have spiny margins.



Aechmea mulfordii
The green foliage develops a copper hue in bright light. The 'Malva' cultivar has dark purple foliage with a silver sheen. It has a more compact form than *Aechmea blanchetiana*.



Portea petropolitana This plant grows in hostile conditions. It has narrow leaves with 5-6 foot tall inflorescences. The bracts are bright blue with pink flowers.



Aechmea eurycorymbus
This large plant has yellow-green leaves which flush mauve-purple towards the leaf tips. The bright yellow and red inflorescence reaches 7 feet and looks like a Norfolk Island Pine. This plant is grown for its impressive inflorescence

Aechmea mexicana

Burgundy foliage with white-berried inflorescence. The variegated form doesn't tolerate all-day sun.

Ananas bracteatus variegata

The beautiful red fruit of this highly ornamental pineapple plant is edible, but does not taste good. Sharp spines.

Neoregelia macwilliamsii

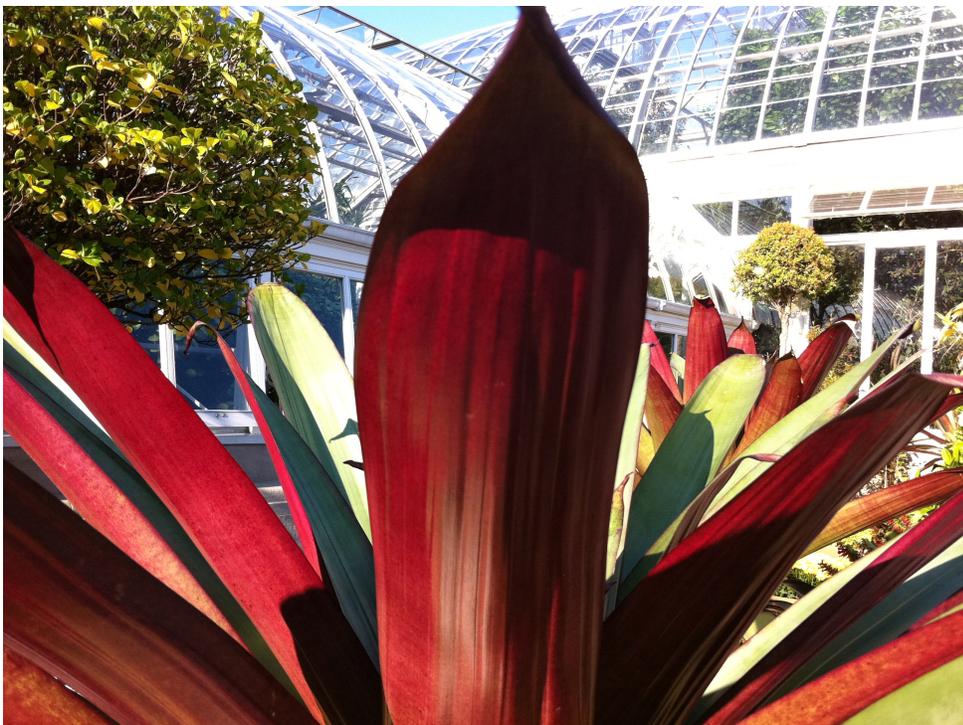
This plant features leathery long green leaves. The inflorescence has bright red bracts with white flowers.

Neoregelia 'Catherine Wilson'

Bears many leaves which are heavily spotted and spattered with yellow-green markings. The foliage becomes red-orange in strong light. Features light lavender flowers.



Aechmea 'Little Harv'



This *Alcantarea imperialis* is in a container at the New York Botanical Garden. Just look at the majestic color of its foliage!

IV. Mosquitoes

There are 3,500 named species of mosquito, of which only a couple of hundred bite or bother humans. We have two native mosquito species in South Florida which are known to lay their eggs in the leaf axils of bromeliads: *Wyeomyia vanduzeei* and *Wyeomyia mitchellii*. Neither of these is known to transport significant diseases (Rey and Connelly 2010). If you are concerned about minimizing populations in your yard, you can simply flush out the leaf axils with water once a week to get rid of any larvae. It is the same procedure you need to follow with birdbaths, pet dishes and other small containers that may collect water outdoors.

V. Suppliers

Following is a list of nurseries which have nice selections of bromeliads and which are open to the public:

Antonio Arbelaez
10625 SW 112 St.
Miami, FL 33176
(305) 279-8674 (Call for an appointment)

Ree Gardens
7860 SW 124th St.
Miami, FL 33156
(305) 232-2257 (Call for an appointment)

Galloway Farms
www.gallowayfarm.com
790 SW 87th Ave.
Miami, FL 33173
(305) 274-7472

Sunshine Bromeliads, LLC
www.sunshinebromeliads.com
14601 Old Sheridan Rd.
Southwest Ranches, FL 33330
(954) 252-3330 (Call for an appointment)

Palm Hammock Orchid Estate, Inc.
9995 SW 66th St.
Miami, FL 33173
(305) 274-9813

VI. Acknowledgments

My thanks to the Bromeliad Society of South Florida for offering the scholarship which allowed me to research all the information contained in this brochure. It is a warm and welcoming group. Its members include professionals, collectors and lay people who have fallen in love with bromeliads and want to learn more. I recommend coming to a meeting. You can ask questions, buy interesting specimens, attend lectures and learn from those who simply want to share their enthusiasm for this fascinating family of plants. The meeting and events schedule can be found at www.bssf-miami.org. The BSSF site has a large photo section, as well as links to even more vast photo archives. Also, facebook pages for the BSSF are:

https://www.facebook.com/pages/Bromeliad-Society-of-South-Florida/84661684279?bookmarks_t=page and
https://www.facebook.com/groups/BromeliadSSF/?bookmarks_t=group

Craig Morell, Horticulturalist at Pinecrest Gardens, is responsible for my training. His vast knowledge keeps me in awe, and I am grateful for his erudition, accessibility and sense of humor.

VII. References/Bibliography

1. Fang, Janet. Ecology: A world without mosquitoes. *Nature* 466, 432-434. Published online 21 July 2010. <http://www.nature.com/news/2010/100721/full/466432a.html>
2. Rey, Jorge R. and Connelly, Roxanne R. Florida Container Mosquitoes. June 2010. <http://edis.ifas.ufl.edu/in851>
3. Frank, J.H. Bromeliads and Mosquitoes. Entomology Circular No. 331 Fla. Dept. Agric. & Consumer Serv. June 1990 Division of Plant Industry.
4. Frank J.H., and Lounibos L.P. Insects and allies associated with bromeliads: a review. *Terrestrial Arthropod Reviews* 2009; 1:125–153. doi: 10.1163/187498308X414742. [PMC free article] [PubMed]
5. Floridata.com
6. Gilman, Edward F. *Aechmea blanchetiana* Bromeliad. University of Florida Publication #FPS14. Original publication date October 1999. Revised October 2004. <http://edis.ifas.ufl.edu/fp014>.

The following web sites were accessed in preparation for this brochure:

1. <http://fcbs.org/>
2. <http://www.bssf-miami.org/index>
3. <http://www.bsi.org/>

4. <http://fcbs.org/pictures.htm>
5. <http://sarasotabromeliadsociety.org/pages/broms4srq.php>
6. https://www.facebook.com/pages/Bromeliad-Society-of-South-Florida/84661684279?bookmark_t=page
7. https://www.facebook.com/groups/BromeliadSSF/?bookmark_t=group
8. https://www.facebook.com/groups/planetbromeliad/?bookmark_t=group