



Photo credit: Norma Kisida

No room for a garden, but have a hankering for your own “just-picked” tomatoes, okra, or basil? How about growing veggies in buckets? You may have limited space (a patio or balcony) or may be too busy for a full-size garden. Perhaps you have HOA rules that don’t allow vegetable gardens or have a cranky back or knees, and your rototilling days are over. Buckets are reusable, and movable for convenience, changing light, and temperature conditions. It is also easier to control soil for pH and diseases than in a garden. Buckets filled with “Bright Lights” Swiss chard, leafy lettuce, or eggplant can be an attractive focal point and certainly a conversation starter!

Over the past few years the Master Gardener program has fine-tuned methods for growing vegetables in 5-gallon buckets. Building on the popularity of Extension’s “Bucket Brigade,” the Master Gardeners initiated a successful community Plant-A-Pail™ Project in 2016.

How does the grow bucket system work? Water is poured into a PVC fill-pipe which goes to the bottom of an outer pail and is drawn up into potting mix in an inner pail by wicking action. Excess water spills out an overflow hole in the outer pail. The overflow hole prevents you from overwatering your vegetable plants. Can’t get more carefree than that!

What supplies and tools are needed? Grow buckets consist of two 5-gallon buckets (one set inside the other), a PVC fill pipe, a wicking container (4 inch plastic pot), plastic cable ties to hold the buckets together, and a black plastic cover (garbage bags work well). You will need potting soil (not soil from your yard), fertilizer, dolomite (available at most big box stores and nurseries), two plastic cable ties, twine, and plants or seeds. A power drill, two drill bits (1/4” and 9/32”), two hole saws (1” and 3.25”) are needed for construction. You can call our Plant Diagnostic Clinic for detailed instructions for construction of the grow buckets and planting and care of vegetables.

If you don’t have power tools, join us at our upcoming Vegetable Grow Bucket Workshop on Saturday, May 6th, 10 A.M.-Noon at the Extension office. Lisa Hickey, Urban Horticulture Agent, will provide everything you need to know about grow buckets. This hands-on class will include a grow bucket system, potting soil, fertilizers, and Florida summer-friendly vegetables. For each participant the cost is \$15.

For more information, the vegetable grow bucket instructions, or to sign up for the workshop call the Extension Master Gardeners at (941) 722-4524.





A weed is no more than
a flower in disguise,
Which is seen through at
once, if love give a man
eyes.



James Russell Lowell
American Romantic poet

QUOTEID.COM

1819 - 1891



What's This?

By Nancy Porter, Master Gardener 2014

After reading about *Emilia fosbergii*, or Cupid's shaving brush, I have to agree with the above quote. Depending on what article you read, this little flowering weed plant can either be friend or foe.

Cupid's shaving brush also referred to as Cupid's painting brush or Florida tasselflower, is in the Aster/Sunflower family, *Asteraceae*. It is a native of the Old-World tropics and can be found throughout Central and South Florida, as well as Louisiana and Texas.

A cluster of basal leaves is formed early, and the leaves have a broad tip and winged petioles (leaf stalks). When the slender flower stem is formed, the top leaves have no petioles, as they attach directly to the stem. All the leaves have toothed edges. Blooms occur all year, but are more prevalent during mid to late summer and early fall. Flowers vary in color from pinkish to purple and/or red and bloom atop long slender stalks. Tiny seeds can be found connected to a mass of fine white bristles. They are easily carried by the wind, thus ensuring its propagation.

Even though this plant has been used for medicinal purposes, parts of the plant are poisonous if eaten. The Chinese have used parts of the plant in traditional medicine for the treatment of such maladies as fever, sore throat, diarrhea, eczema, and some snake bites. The young leaves appearing before the flower are safe for consuming. That being said, I did find conflicting information regarding the safety of consuming parts, or all, of this plant. I would definitely err on the side of caution. Enjoy through your eyes and not through consumption!

Sessile leaf



Prominent basal leaves



YOU SAY ALOE, I SAY AGAVE

BY JOY DERKSEN, MASTER GARDENER 2004



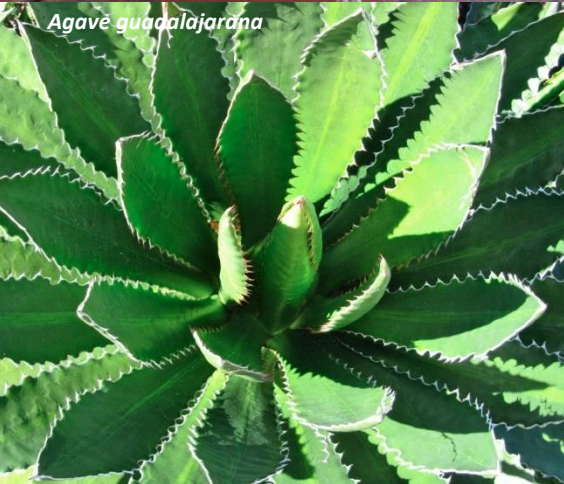
Agave desmetiana



Aloe vera aloe barbadensis



Agave guadalupensis



Agave guadalupensis

Agaves and aloes look alike and have similar horticultural needs. The plants are structured with their leaves growing around a central stalk in a rosette. Both are succulents that store water in their leaves and prefer dry hot climates. Both have tubular flowers on tall spikes. Both have been of use to their local people. But they are actually very different species.

Agaves are native Americans. They originated in Mexico and the U.S. Southwest, eventually spreading north to Utah and southward to the Caribbean and northern South America. We actually have two native agaves in Florida: the false sisal (*Agave decipiens*) and the wild century plant (*A. neglecta*). Striking architectural forms make agaves popular landscape and container plants. Many agave leaves are armored with sharp end spikes and toothed borders. It takes a long time for the agave to flower (10 to 30 years), giving rise to its popular name of "century plant." Once it has flowered, it dies. But most agaves produce "pups" off the main plant before death. Pups and the flower spikes "bulbils" ensure continued propagation.

Agaves are quite useful. Early usage was for fibers in weaving and making baskets and rope. Even today we have sisal ropes and sisal mats made from agave. Their spikes were used as needles and fasteners. The flowers were eaten. Native Americans had also discovered that agaves could provide a sweet sap when the plants were putting up a flower stalk. Agave nectar has become popular enough; today you will find it in the grocery store. And Native Americans developed a mildly alcoholic drink from agave called "pulque." When the Spaniards arrived, the colonists found a way to make a stronger drink; we also can find this in local stores --- tequila!

The University of Florida reminds us that some agaves' sap and thorns can be irritating to our skin, mouth, and stomach. So do not use agave on your skin as you would aloe.

While the agaves have fibrous leaves, the aloe's leaves are filled with a gelatinous substance. There are about 500 different aloes. The most common aloe --- aloe vera (*Aloe barbadensis*) is used as a skin soother for sunburns and minor skin irritations. Many of us keep a small pot of aloe for kitchen burn accidents. Aloes are originally North African/Arabian peninsula plants that spread to African deserts and Mediterranean countries. The word aloe probably comes from the Arabic word *alloe* that means "shining bitter substance." Aloe vera has been used as folk medicine by people in those areas for a long time. There are pictures of it in ancient Greek and Roman texts.

Aloes are also popular garden and potted plants. Their pretty tubular flowers attract hummingbirds. Unlike the agave that flowers once and then dies, aloes produce flowers every year to brighten up your gardens. Also unlike agaves, aloes can grow into trees and there are spectacular tree aloes.

If you're interested in growing these succulents and seeing pictures, here is more information:

<http://edis.ifas.ufl.edu/ep419> Agaves and Yucca: Tough Plants for Tough Times,
<http://succulent-plant.com/families/aloaceae.html> Aloes,
<http://succulent-plant.com/families/agavaceae.html> Agaves.



Q: I bought this plant a while ago as I loved the color. But I don't remember what it's called. Can you help? - I.B., Bradenton

A: This colorful beauty is Bolivian sunset, *Seemannia* (formerly *Gloxinia*) *sylvatica*, or possibly the larger cousin, *Seemannia medea*. This plant originates in South America and does well in our climate as it likes high humidity. This is a winter bloomer in our area, so when other plants are looking rather blah, this stunner stands out. It has a rapid growth habit originating from rhizomes so this plant can fill a confined area quickly. Die back can occur if we suffer a frost; however, as long as its rhizomes aren't frozen (unlikely in our area) the plant will recover nicely. This plant is also grown indoors, making it desirable for indoor or outdoor gardening.

I've included a link to a publication about this ever blooming beauty. http://gcrec.ifas.ufl.edu/GCREC-Garden/docs/pdf/Bolivian_Sunset.pdf

Visit our Plant Diagnostic Clinic every weekday except Wednesday, 9am to 4pm at the Manatee County Agriculture and Extension Service, 1303 17th St W, Palmetto, or call us with questions @ [941.722.4524](tel:941.722.4524) and ask for a Master Gardener. Or email us at ManateeMG@gmail.com. Include photos if you can.



As deeply satisfying as it feels (both mentally and physically) to get out and churn up the soil in preparation for planting new ornamentals or your vegetable garden, it is largely a waste of time.

Deep tillage (5 inches deep or more) destroys "soil structure." This consists of microbes, fungi, and earthworms and other insects that contribute to the composition (and well-being) of soil. Even the most compacted, weed-infested topsoils will have an ecosystem that supports and is supported by surface flora and fauna.

Next, consider that most plant feeder roots subsist on the shallow surface, getting nutrients from the top layers of soil that may consist of leaf litter, mulch, and other composting materials. Burying this composting layer through tillage is not helping those shallow feeder roots that are seeking nitrogen. (Deeper roots are more interested in minerals, which are usually available below top soil level.)

Another myth is that tilling (also called "cultivating") will eliminate weeds. In fact, tilling is a form of soil disturbance that many weed seeds thrive on for germination

We recommend "turning" as opposed to "tilling." Turning is blending in a cover crop to your surface soil. A cover crop (usually nitrogen-fixing plants such as peas, beans, and clovers) adds nutrients to the top layers of your soil.

Your soil should be layered as follows, from the top down: mulch to protect bare surfaces, compost, intact soil, and subsoil (the mineral layer.)

For more information, visit <http://edis.ifas.ufl.edu/ep390>.

For specifics on preparing vegetable beds visit <http://edis.ifas.ufl.edu/vh024>.

For raised bed preparation go to <http://edis.ifas.ufl.edu/ep472>.

Lastly, for lawns, go to <http://edis.ifas.ufl.edu/lh012>.



Photo credits: <http://smith.edu> and <http://nwf.org>

Bird Window Collisions

By Jim Haupt, Master Gardener 2015

Threats to avian survival, both in the air and on the ground, include airplanes, deforestation, pollution, and outdoor cats, but window collisions in the U.S. result in the death of a billion birds every year. According to Daniel Klem, at the Acopian Center for Ornithology, Muhlenberg College, "Except for habitat destruction, collisions with clear and reflective sheet glass and plastic causes the deaths of more birds than any other human related avian mortality factor." Windows are transparent and reflective enough so birds cannot detect them as barriers. What they actually see are the reflections of trees, vegetation, or the sky.

Avian mortality is highest during migration. Many birds fly up to 35,000 km round trip. Odds of survival are already piled against them. Florida is a major migratory route and destination refuge for an abundance of birds from northern areas seeking winter locations. As they fly into urban and residential areas, collisions are common and often unavoidable.

During the breeding season, it is a common occurrence that birds become more aggressive in protecting and defending their territory. A cardinal seeing its reflection in a window, for example, perceives it as another male and charges the window.

More than 50 million Americans put out a billion

pounds of bird food each year. The location of a feeder also impacts mortality rates. Studies show that more birds strike windows when leaving feeders. Placing a feeder closer to a window will actually cause less strikes than placing it further away. Placing a feeder less than 3 meters (approximately 10 feet) away will prevent birds from building up momentum when leaving the feeder.

Considering the overwhelming dangers to their survival, several things can be done to decrease avian mortality. Strikes and collisions with reflective glass can be avoided by replacing with tinted or colored glass, using window films, or by closing blinds and extinguishing outside lights. Window panes can be angled downward so that birds see the ground as opposed to seeing themselves, shrubbery, or the sky.

Those involved with The Bird Collision Project at the University of Florida, recommend that upon discovering an injured bird, it should be placed in a box, with the lid closed. Since it is illegal to handle migratory birds, UF suggests taking the injured bird to a vet or wildlife rehab center. Visit the following site for more information:

http://www.wec.ufl.edu/extension/wildlife_info/birdcollisions/index.php or <http://www.bsatroop680.org/wildlife/UW05400.pdf>.

Air Layering

Text and photos by John Dawson, Master Gardener 2007

Many low sprawling plants can naturally reproduce themselves by a process known as layering. Layering occurs when a portion of a plant (limb, branch, or vine) makes contact with the ground. Friction with the ground removes the protective portion of the plant and starts the process of creating roots, which initially anchors the contact and eventually provides nutrients for what becomes a new plant. While this is happening, the new plant is still receiving nutrition from the mother plant giving it a greater chance of survival than if it was started as a cutting. Think of it as a plant's umbilical cord.

Gardeners can duplicate this process by scraping a portion of the outer protective layer (bark), pinning down the branch, stem or vine to the ground and covering with soil. The leafy portion must be kept above ground. Depending on the plant, the new plant can be separated from the parent plant after several months and replanted.

Air layering or "marcotting" is a process used for plants that have branches too far from the ground to reproduce this way naturally. Instead of bringing the plant to the ground, we bring the ground up to the plant!

Example: You have a small fruit tree you wish to propagate. You've tried growing from seed, growing from cuttings, and have had several attempts with grafting fail. Air layering is your next best alternative. Air layering should be attempted when new growth starts to appear (usually in the spring).

Choose a vertical limb that's one to two years old, about ¼" to ¾" in diameter. Measure from the tip of the branch down 12 to 18". At this point, clear the limb of any leaves or small twigs, leaving a cleared area about 12" long. At the midpoint of the cleared area, you should use a sharp knife to cut two parallel cuts about ½" to 1" apart around the limb just deep enough to remove the outer bark, revealing the cambium. The cambium layer then must be scraped away, if not, then new bark will form instead of roots.

A rooting hormone can be applied to the upper side of the exposed wood to promote quicker rooting. The entire exposed area then needs to be covered with moist (not sopping wet) sphagnum (not peat!) moss. The moss is then surrounded by a sheet of clear plastic and held in place by twist ties on each end. The ties need to be tight enough to keep insects out and trap moisture in. To prevent overheating, the plastic should be covered by metal foil.

After several months, check area under the plastic for roots by removing the foil. Roots should be clearly visible through the clear plastic. If no roots are visible, recover and check again weeks later. Some trees may require a year to develop sufficient roots. When ready, the new tree can be removed by cutting away below the new roots. Remove the plastic wrap and carefully remove excess moss while spreading out restricted roots. It is not necessary to remove all entangled moss.

Gently plant it in a right-sized container (big enough to avoid tipping over) filled with moist soil while taking care to avoid breaking tender roots. The new plant should then be moved to (mostly) shaded and protected spot (out of any strong winds.) It is important to keep the new plant moist (misting the leaves) for several weeks. You can also try placing a large plastic bag over the plant (ensure the bag does not contact leaves) to retain moisture. The new tree should be hardened off after several weeks and then planted in its new location.

If you wish to learn more about air layering, we will be offering a class on April 8, 2017, complete with demonstration, at the Manatee County Extension Office located at 1303 17th Street West in Palmetto. Call the Extension Master Gardeners to register 941-722-4524 or visit

<https://www.eventbrite.com/e/propagation-by-air-layering-tickets-30297497631?ref=ecal>. Fee is \$20 for each participant for propagation supplies, cash or check only. Space is limited.



Step 1

Gather materials – Sharp knife, clear plastic wrap, metal foil, sphagnum moss, twist ties, rooting hormone, water, and basin. Soak sphagnum moss for several minutes.



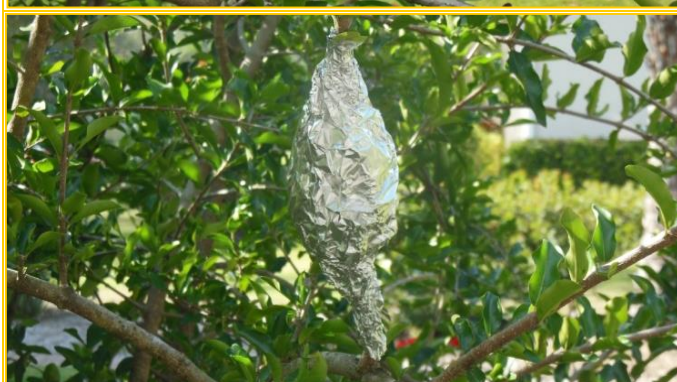
Step 2

Clear working area and make cuts to remove bark and cambium. Place rooting hormone near top of cut.



Step 3

Wring out sphagnum moss so that it is moist, not sopping wet. Place sphagnum moss around entire work area and wrap with clear wrap and secure both top and bottom with twist ties.



Step 4

Wrap foil around entire encasement to prevent overheating from sun. Check for roots in a couple of months.



March

CALENDAR OF EVENTS

Date	Time	Event
1 st Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Island Library – 5701 Marina Drive, Holmes Beach. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd & 4 th Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Rocky Bluff Library – 6750 US Highway 301 N., Ellenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – South Manatee Library – 6081 26 th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
Wednesday March 1	10:00 a.m.-Noon	Taking the Mystery out of Micro-Irrigation - This class satisfies the irrigation educational requirement for the Manatee County Outdoor Water Conservation Rebate Program. Learn how to select, install, and operate your own water-saving micro-irrigation system. Register online at http://manatee.ifas.ufl.edu or call Joann (941) 722-4524.
Saturday March 11	9:00-11:00 a.m.	Advanced Beekeeping 102 - This workshop is not for the novice beekeeper. We will discuss pest management of the colony, effective management of the hives, harvesting and grades of honey, and the best plants to feed the honeybees year round. Pat and Rich Yacso, local beekeepers, will teach the advanced portion of pest management and Lisa Hickey, Extension Agent, will introduce and discuss pollinator plants. \$5 for materials, plant seedlings, and native seed packets (cash or check only, payable to Friends of Extension). Register online at http://manatee.ifas.ufl.edu or call the Extension Master Gardeners (941) 722-4524.
Saturday March 11	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour – Emerson Point Preserve - Stroll through Emerson Point Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in tower parking area at 5801 17 th Street West, Palmetto. Call the Master Gardeners at (941) 722-4524 to register.
Saturday March 11	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour - Riverview Pointe Preserve & DeSoto National Memorial - Stroll through Riverview Pointe Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. The hike begins in the parking area of the DeSoto National Memorial Park and enters into the Riverview Preserve at 8250 DeSoto Memorial Highway, Bradenton. To register call the Extension Master Gardeners at (941) 722-4524.
Friday March 17	9:00 a.m.-2:00 p.m.	Project Learning Tree - This workshop is for all individuals working with youth or teaching youth programs. Project Learning Tree introduces the concept of teaching children <i>how</i> to think, not <i>what</i> to think through hands-on activities. \$5 materials fee for the Environmental Awareness teacher's manual containing 96 environmentally related activities for pre-kindergarten to eighth grade. Walk-ins are welcome and will receive the manual after the registered attendees. Register online at http://manatee.ifas.ufl.edu or call the Extension Master Gardeners (941) 722-4524.
Sunday March 19	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour - Robinson Preserve – Stroll through the Robinson Preserve's salt marshes to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in parking area by main entrance at 1704 99 th Street Northwest, Bradenton. To register call the Master Gardeners (941) 722-4524.
Tuesday March 21	10:00 a.m.	Monthly Guided Tours of the Master Gardener Educational Gardens - Join us for a guided tour lasting about one hour. The gardens illustrate a variety of garden styles and techniques, demonstrate Florida-Friendly Landscaping™ principles, educate residents about plants that perform well in Florida landscapes, and inspire garden visitors to follow recommended gardening practices at home. Register by calling the Master Gardener Plant Diagnostic Clinic (941) 722-4524.
Wednesday March 22	10:00 a.m.-Noon	Growing Staghorn Ferns - Have you always loved the look of staghorn ferns but never knew how to care for them? In this workshop, you will learn how to mount a staghorn on wood and take home your own plant. Space Limited! Registration and advance payment of \$20 for plant and mounting materials due by March 14 (cash or check only, payable to Friends of Extension). Register online at http://manatee.ifas.ufl.edu or call the Extension Master Gardeners (941) 722-4524.