



In this Issue

Title	Page(s)
Extension Update	1
What's That?	1
Amaryllis for the Holidays and Beyond.....	2
Growing Persimmons.....	3, 8
Growing in the Vegetable Garden.....	4, 7
Pomegranates make the Holiday Sparkle.....	5, 7
Magic Mulch: Your Landscape's Miracle Worker.....	6, 8
Upcoming Classes	9
What's That Answer.....	9

Extension Update by Larry Figart

"Every gardener knows that under the cloak of winter lies a miracle ... a seed waiting to sprout, a bulb opening to the light, a bud straining to unfurl. And the anticipation nurtures our dream."

- Barbara Winkler, American Author

My apologies that this newsletter is a little late. I wish I could blame it on the time change but we gained an hour. Speaking of the time change, the St. Johns River Water Management Districts landscape watering restrictions state that we should be watering our yards one day (or less) a week this time of year. If your home address has an odd number, or has no address, Saturday is your watering day. If your home has an even numbered address, Sunday is your day to water.

In other news, the U.S. Department of Agriculture recently released its new Plant Hardiness Zone Map. This map is used to help choose plants based on the coldest winter temperatures that can be expected in your location. This recent update is based on the 30-year averages of the lowest winter temperatures at specific locations. The new version even includes a "Tips for Growers" section. You can find the new map at:

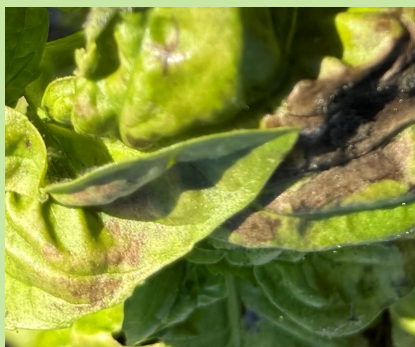
<https://planthardiness.ars.usda.gov/>

What's That (answers on page 9)

Damage on Basil



Close up of damage



Close up of damage on purple basil



All images credit: Beth Marlowe, UF/IFAS



Amaryllis for the Holidays and Beyond

It's about time to start decking those halls! I love using natural materials and plants as holiday décor, and one plant known for merry and bright is the amaryllis. The amaryllis we buy for our homes and landscapes are hybrids and the genus name is *Hippeastrum*. They are in the family Amaryllidaceae, which includes amaryllis, agapanthus, crinum, narcissus, daffodil, clivia, leeks, garlic, and onions.

Amaryllis bulbs can be found at nurseries this time of year ready to bloom in weeks instead of months. This is because they have been through a forced dormancy to prepare them to put on new shoots and flowers just in time for holiday gift-giving. If you are the lucky recipient of an amaryllis bulb, it may come with a kit including a pot and soil. If not, they are very easy to pot up in any container with drainage holes and standard potting soil. Be sure not to bury the bulb too deeply. Leave the top 1/3-1/4 of the bulb sticking up above the soil. Water the soil thoroughly and place in a sunny spot.

Another attractive way to grow the bulb indoors is to force it in water. I use a large clear vase with attractive pebbles or marbles filling the bottom third of the container. Sit the bulb on top of the rock layer. You may have to use a couple rocks to help the bulb stand upright. Then fill the vase with water right up to the top of the rocks/base of the bulb. You don't want the bulb itself underwater. Instead, the water should barely touch the bottom of the bulb. The bulb will soon start to grow nice, white roots all through the rock layer. Blooming will quickly follow.

After the flowers fade, cut the flower stalk off before the seed pod forms, and then either keep inside as a potted plant or plant in the landscape in a slightly shady spot. The ideal time to plant the bulb in Florida is between September and January. Do not remove the foliage until it turns brown. The bulb will store energy from the leaves as they fade to use as fuel for the next season. Amaryllis are spring bloomers in the landscape, but it may take a year off for the bulb to get back in sync and bloom after going through the forced dormancy and winter bloom.

Wax-dipped amaryllis bulbs have become popular gift items in the last few years. You can find them looking like Christmas tree ornaments with the bulbs completely coated in thick wax in red, gold, green, and many other decorative colors. If you purchase or receive a wax-coated bulb, all you have to do is sit the bulb on the mantle and enjoy. It requires no soil or water to bloom. The bulb has already stored everything it needs to push out leaves and flowers. Amaryllis bulbs are such reliable bloomers that back in Victorian times when window glass was murky and indoor lighting was severely lacking, they could still be found being forced for winter blooms in chilly parlors. Some sites online suggest tossing the waxed bulbs after the flowers fade, but you can carefully peel away the wax and the cellophane underneath to free the bulb. The roots will have all been cut off before getting the wax dip, so I suggest potting up the bulb in a container for a month or more to get new roots growing before planting in the landscape.



Amaryllis
Image Credit: T. Ashworth, UF/IFAS

Happy holidays!

Out on a Limb by Larry Figart

Growing Persimmons

When we think of fall fruit, often we think about apples, pumpkins, and cranberries. This year why not add persimmons to the list. Fall is when their ripening, orange fruits are very noticeable. Not only are they available in the produce section, but it is also a fruit that is very low maintenance and easy to grow in our yards. If you want to grow something in your back yard and are discouraged from trying citrus because of citrus greening, persimmons are a good alternative.

There are two options to choose from when deciding what to grow. There is the native common persimmon and the more productive oriental persimmon. First, let's talk about oriental persimmons.

The first oriental persimmons were grown in Florida in the mid 1800's although they have been cultivated in the orient for hundreds of years. An oriental persimmon needs about the same amount of space as a citrus tree. It can achieve a height of 25-30 feet but that is rare. Typically, they top out at 10-15 feet. Oriental persimmon cultivars are typically grafted onto common persimmon rootstocks. This is because the native persimmon rootstocks are readily adapted to our sandy acidic soil.



Persimmons ready for harvest.
Image Credit: UF/IFAS

Oriental persimmons are grouped into two categories, astringent and non-astringent. The fruit of astringent types must ripen completely, or they will be very tart whereas the fruit from non-astringent types can be eaten sooner when the flesh is firm. Astringent types include: 'Hachiya', 'Saijo', 'Ramopan', 'Tanenashi', and 'Gailey'. Non-astringent types include 'Fuyu', 'Hanafuyu', 'Izu', 'Matsumoto Wase Fuyu', 'O'Gosho', 'Jiro', and 'Motsumoto'. Persimmons will set a heavier crop if a pollinator variety is used. However, they will still produce well even without a pollinator. Both 'Hachiya' and 'Gailey' are pollinator varieties.

Oriental persimmons do well when planted in full sun. Don't plant them in low, or poorly drained areas. They need well drained soil. Most Florida soils are slightly acidic which is what persimmons prefer, so no pH adjustment is usually needed.

Oriental persimmons are very durable. They can withstand short periods of drought. However, to grow the best, they need to be watered regularly especially during the spring drought season. This is done by hand watering, or with a drip irrigation system. Irrigating with sprinklers that wet the tree canopy can promote fruit and foliage diseases.

As stated above persimmons are fairly low maintenance. The only pruning that is needed is nominal to allow even light penetration, and to reduce rubbing and crossing branches. They need minimal fertilization as well. Too much fertilization will promote growth at the expense of fruit. Additionally, don't be alarmed if you notice a lot of fruit dropping in the spring. This is normal as the tree is only keeping the amount of fruit that it can carry through to ripeness. For more information on oriental persimmons go to: <https://edis.ifas.ufl.edu/publication/MG242>

For those who would rather grow a persimmon as a tree, the native common persimmon is a good option. This medium-sized tree can be an appealing tree to grow in the landscape. In addition to producing small astringent persimmons, the common persimmon leaves can be showy in the fall with orange and red color. When the leaves drop in the fall, the thick bark that forms unique blocky squares can provide interest in winter.

There are some drawbacks to native persimmons. First, the male and female trees are separate. If you purchase one from a nursery, make sure it is a female if you want it to produce fruit. Speaking of fruit, native persimmons can produce a lot. Make sure that you put the tree in a location where this is not a problem. People have been known to slip and fall when the fruit drops on decks or sidewalks.

...continued on pg. 8

Growing in the Vegetable Garden by Beth Marlowe

What to Plant in December

EDIBLES TO PLANT IN <i>December</i>		
North	Central	South
 EASY TO TRANSPLANT Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Kale, Kohlrabi, Sugarcane, Swiss Chard	Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Endive, Kale, Kohlrabi, Lettuce, Sugarcane, Swiss Chard	Arugula, Beets, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Chinese Cabbage, Collards, Eggplant, Endive, Kale, Kohlrabi, Lettuce, Peppers, Sugarcane, Swiss Chard, Tomatillo, Tomatoes, Tropical Spinaches
 TRANSPLANT WITH CARE Celery, Mustard, Spinach	Celery, Mustard, Pineapple, Potatoes, Spinach	Amaranth, Calabaza, Celery, Long Squashes, Luffa, Mustard, Pineapple, Potatoes, Seminole Pumpkin, Spinach, Sweet Potatoes
 USE SEEDS Carrots, Onions (bunching), Radish, Turnips	Carrots, Onions (bunching), Peas (English), Radish, Turnips	Beans (bush, lima, pole), Cantaloupes, Carrots, Corn, Cucumbers, Onions (bunching), Peas (English, southern), Radish, Squashes, Turnips, Watermelon

By November and December our cool temperatures have finally become more consistent, and the humidity is lower. This is when our greens really begin to thrive. Leafy greens like chard, kale, mustard, collards and turnips are ready for their first harvest of lower outer leaves. We harvest only a few at a time from each plant so we can cut-and-come-again, allowing the plant to keep producing leaves all winter. The first crop of radishes is already harvested, and their space has been filled with Brussels sprouts. Our lettuce is finally thriving. Broccoli, cauliflower, and cabbage are growing well, but not yet near forming heads or florets. Carrots and beets are thriving too.

If you haven't had time to plant a fall vegetable garden yet, don't fret! There is still plenty of time to grow your cool season favorites before the weather warms up in March and April. If you're not sure what to plant, refer to the UF IFAS Edibles Infographics for easy to understand information about which crops to start from seed or transplant each month in North Florida. **See the December example above.**

Along with our healthy leafy crops come caterpillar pests that like to eat those greens as much as we do. Fortunately, they are relatively easy to keep at bay if we are paying attention. The first key to combatting pests is being present in our gardens and scouting frequently—every day if possible. Look for large holes in leaves; turn leaves over and look for tiny new caterpillars. Check the soil around the base of your plants for caterpillars that are hiding during the day. If you find only a few you can hand pick them off. Decide if there is enough damage that you need to treat the problem. If you see many caterpillars on multiple

plants or in multiple beds, it's probably time to treat.

We have an effective and safe biological control for caterpillars, so don't jump straight to chemical insecticides. It's called Bt., or *Bacillus thuringiensis*. Bt. is a naturally occurring bacterium, commonly found in soils, that can infect and kill larvae of certain insects. When sprayed on crops and eaten by susceptible larvae, Bt reacts with the cells of the gut lining causing paralysis to the digestive system. Infected insects do not die immediately, but they do stop eating immediately, which is what we really care about. Resist the urge to spray something stronger. Bt. is working! And it has several advantages over other chemicals:

- Bt products are nontoxic to people, pets, wildlife, and other organisms not closely related to the target pest.
- There are different strains of Bt., and each strain can affect only a specific group or species of insects, such as caterpillars. Therefore, most products do not directly affect beneficial insects (i.e. pollinators) in treated areas.
- Because of the high level of safety, most common Bt. formulations can be used on food crops and do not require a waiting period between application and harvest.

Be aware that sunlight causes Bt. to degrade, and most formulations persist on treated leaves less than one week. This means that repeat applications may be necessary. To be effective, Bt. must be eaten by the target caterpillar, so application coverage must be thorough. Young larvae are more susceptible than older ones, so treat before they get big. Bt. products tend to have a shorter shelf life than other insecticides, having reduced effectiveness after two to three years of storage.



Cabbage Looper
Image by: John Capinera, UF/IFAS

...continued on pg. 7

Pomegranates Make the Holidays Sparkle

by Beth Marlowe

In early November I look forward to the peak of pomegranate season. Every time I open one and see those jewel-like arils, I marvel at their beauty. I wonder at how all those arils are packed together, and I anticipate their sweet-tart, juicy crunch. I see the remnants of the flower on the outside of the fruit, along with the calyx, and I think, 'I need to learn more about pomegranates!'

The pomegranate (*Punica granatum*) is one of two members of the Punica-ceae family. It has been cultivated for centuries in Central Asia where it originated. Despite this, there is relatively little research on cultivars and growing practices. The plants are naturally bushy in habit, but they can be trained to a single trunked tree if desired. They may grow to 10-12 feet high and are deciduous. They need a long hot (and ideally dry) summer to produce fruit, but they can be grown here in Florida, where summers are typically not very dry. They are adaptable to many soils, but they don't like wet feet. Many varieties are very cold tolerant and can be grown as far north as USDA Hardiness Zone 7.



Left: Male pomegranate flower. Right: Perfect flower that produces fruit.
Photo courtesy of UGA Extension.

If you look closely at a flowering pomegranate from April to June, you'll see there are two types of flowers: male flowers and bisexual, or perfect, flowers. Males are more trumpet shaped and do not produce fruit. Perfect flowers are more bell-shaped and produce fruit. They are self-fertile, but bees and hummingbirds assist in pollination.

The fruits take 5-8 months to mature and are six-chambered, though it can be hard to see. The fruit rind varies in color from light yellow to dark

purple or red. The aril is the fleshy, juicy part that surrounds the seed and is an outgrowth of the seed coat. The seed itself is the whitish part inside that can be hard or soft.

Pomegranates were widely grown all around the Mediterranean region and were brought to the Americas by the 1500's. The Spanish brought pomegranates to their colonies, and the British brought them to theirs. They have been grown in what became the southern U.S. states ever since, especially in California. So even though many of us are unfamiliar with growing pomegranates, they have been in Florida for a long time.

If you'd like to try growing pomegranates in your yard, choose an area with full sun, well-drained soil and good air circulation. All this will help minimize impacts from humidity and excess water. Planting in early spring (February-March) after last frost is a good time to help the new plant get established. The variety 'Wonderful' is most commonly grown in California, but it is a late-producing variety. Early varieties that mature in July-August may be better for us in Florida to avoid heavy late summer and fall tropical system rains. Varieties to consider are 'Larkin', 'Salavatski', and 'Christina.'

Pomegranates do better if pruned. Fruit develops primarily on spurs that are 2-3 years old. Light annual pruning encourages the growth of these spurs. Any major pruning should be done in winter when plants are dormant. The goal of this pruning is to maintain an open, vase shape with enough lateral branches to support the tree (including the weight of those heavy fruits!), and to remove dead or damaged wood. Suckers should be removed during the summer.

Plants can be impacted by fungal and bacterial diseases, as well as typical garden insects, so remember to scout. Young trees may flower in the first year, but more typically they flower in their second to third years. So you may have to



Closeup of seeds surrounded by the fleshy, juicy arils. Photo: UF/IFAS



Pomegranates on tree.
Photo: UF/IFAS Extension

...continued on pg. 7

Friendly Landscapes by Stephanie Means

Magic Mulch: Your Landscape's Miracle Worker

Utilizing mulch in your yard is a cost-effective tool that is so often overlooked. It's surprising to see how many landscapes lack the benefits of mulch. Proper mulching is crucial for any Florida-Friendly landscape. By adding mulch, you can save water, suppress weeds, enrich soil, and enhance the overall appearance of your yard. Don't miss out on the magic of mulch!

Adding organic, sustainably sourced mulch like pine bark nuggets or pine straw to your landscape is a game-changer. Not only does it enhance the beauty of your surroundings, but it also works tirelessly to make your landscape effortlessly low maintenance. A 2"-3" layer of mulch will:

- **Retain soil moisture at the roots of the plants**
- **Add nutrients to the soil as it breaks down**
- **Suppress weeds**
- **Provide an environment for beneficial soil bacteria**
- **Increase soil organic matter and water holding capacity**
- **Help protect plant roots from extreme hot & cold temperatures**
- **Reduce erosion**
- **Protect plants from some soil borne diseases**



Detail of garden path with stone slabs and bark mulch.
By Brebca on Adobe Stock Images

I trust that you are now contemplating the addition of mulch to your yard. However, you may be curious about the types available, quantity required and the associated expenses.

Firstly, you should know that not all mulch is created equal. Mulch is commercially available in two forms; organic and inorganic. Sustainable organic mulch is sourced as a by-product from the lumber-milling industry, land clearing and tree trimming, invasive control programs, municipal waste collection, and controlled, renewable planting on plantations. On the other hand, inorganic mulches can be made from natural materials such as pebbles or rocks, but they are also sometimes made of manufactured materials, like ground rubber tires. While these inorganic mulches can be suitable for pathways or under the eaves of a house, they should not be used as a replacement for organic mulches in planting beds. This is because they do not contribute to wildlife habitat or soil health, and they can cause the roots beneath the mulch to become excessively hot.

When it comes to cypress mulch, caution should be exercised. While it is sometimes made from waste wood generated in the lumber trade, it can also be produced from whole trees cut from wetlands. Due to the difficulty in determining its origins, the use of cypress mulch is not recommended. It's important to be vigilant when purchasing bagged dyed mulches, as many of them may contain cypress. Therefore, it is advisable to read the label closely before making a purchase.

As for how much you'll need, UF research indicates that the optimal depth of mulch, after settling, is 2"-3". Additionally, it is recommended to keep the mulch at a distance of 12-18" from the base of all trees. It is crucial to avoid piling it excessively against the trunk, as this practice, known as "volcano mulching," can lead to detrimental consequences such as rot and insect infestations.

...continued on pg. 8

Growing in the Vegetable Garden by Beth Marlowe

(continued from page 4)

Liquid formulations are more perishable than dry formulations but shelf life for both is greatest when storage conditions are cool, dry and out of direct sunlight.

Always read the label of any pesticide you are considering to be sure it is intended for use on the crop you are trying to protect. Bt. will likely be listed as the active ingredient. Pesticide brand and trade names vary. To keep your leafy greens healthy, look for any Bt. product containing the Kurosaki

strain. Examples of product names include Dipel®, Javelin®, Thuricide®, Worm Attack®, Caterpillar Killer®, Bactospeine®, SOK-Bt®. [Product names are not endorsed by UF/IFAS they are provided solely for educational purposes. It is not a guarantee or warranty and does not signify they are approved to the exclusion of other similar products.] Whichever you choose, Bt. will help you safely enjoy your cool season greens!



Granulate Cutworm
Image by: John Capinera, UF/IFAS



Fall Armyworm
Image by: James Castner UF/IFAS

Pomegranates... by Beth Marlowe (continued from page 5)

be patient, but after several years you will have your own source of beautiful fruits for holiday dinners!

Finding pomegranate plants to purchase can sometimes be a challenge. Local garden centers may have some. If not, there are retail online-order nurseries in Florida that have multiple varieties: [Just Fruits and Exotics](#) in Crawfordville, [Tallahassee Nurseries](#), and [Florida Hill Nursery](#) in Debary. For more information on cultivars, pomegranate culture, harvesting and eating, see the [UF/IFAS Citrus Research and Education Center website](#).

Sweet Potatoes with Coconut, Pomegranate, and Lime

4 sweet potatoes
½ cup light coconut milk
¼ toasted unsweetened coconut flakes

2 tablespoons chopped cilantro
1 cup pomegranate seeds
Lime wedges

Heat oven to 400°F. Arrange sweet potatoes, pricked with a fork, on baking sheet and roast until tender, about 45 minutes. Slice tops and mash sweet potatoes with a fork. Divide coconut milk, coconut flakes, cilantro, and pomegranate seeds among sweet potatoes. Serve with lime wedges. Recipe from www.marthastewart.com.

Friendly Landscapes by Stephanie Means *(continued from page 6)*

If you only need a little, buying it by the bag is convenient but can be more costly. Bulk mulch is sold at nurseries and landscape suppliers by the cubic yard, and if you need a large amount it can be delivered to you. There are also some free options! Contact your local tree trimming or utility company and ask if they will dump a load of wood chips for you after their next job. There are also online options that coordinate free drops on your behalf. The crews won't drop partial loads, so be ready to accept a huge pile up to 20 cubic yards! Fallen leaves can be raked up for free in your landscape and spread along pathways and at the base of trees and plants. One thing to keep in mind: weed barrier fabric may seem like a good idea, but it can actually inhibit the mulch from breaking down into the soil and create unfavorable conditions below the fabric. So, skip the weed barrier and let the mulch work its magic on its own.



Mulching garden with tree bark mulch.
By ronstik on Adobe Stock Images

Overall, adding mulch to your landscape can work miracles in creating a healthy, low-maintenance and visually appealing yard. Give mulch a try and see the miracles it can work for you! For more information about the Florida-Friendly Landscaping Program™, visit www.floridafriendlylandscaping.com or call (904)-255-7450.

Out on a Limb by Larry Figart *(continued from page 3)*



Persimmons ready for eating.
Image credit: UF/IFAS

Not only are persimmons tasty, but they are also good for you as well. According to the University of Florida, persimmons are high in soluble fiber, which reduces the risk of heart disease. They are high in vitamins A and C and supply vitamin B6, manganese, and potassium. Persimmon fruit can be eaten when fully ripe right off the tree. In cooking they can be pureed, dried, and used in preserves, chutneys, quick breads, puddings, pies, and sweet and savory dishes.

If you need a little color in your landscape, consider trying a persimmon. For more information on persimmons from the University of Florida go to <https://edis.ifas.ufl.edu/topics/persimmon>

What to Plant in Nov & Dec

Annuals: Ayssum, Clendula, Delphinium, Dianthus, Foxglove (digitalis), Hollyhock, Larkspur, Lobelia, Pansy, Petunia, Shasta daisy, Snapdragon, Verbena and Violas.

Bulbs: African lily (Agapanthus), Amaryllis, Anemone, Aztec lily, Calla, Daylily, Freesia, Hurricane lily, Hyacinth, Iris spp., Ixia, Kaffir lily, Moraea (African lily), Narcissus, Pineapple lily, Shell ginger

Herbs: Chervil, Chives, Cilantro, Dill, Fennel, Garlic, Lavender, Marjoram, Oregano, Parsley, Rosemary, Sage

Vegetables: Arugula, Beets, Broccoli, Brussel Sprouts, Cabbage, Carrots, Cauliflower, Celery, Chinese Cabbage, Collards, Kale, Kohlrabi, Mustard, Onions, Radish, Spinach, Sugarcane, Swiss Chard, Turnips

Upcoming Classes

Scan Code
for current list of
ALL Duval Extension Classes



Date, Time, Cost	Event & Registration	Location
November 30 2:00 - 3:30 pm \$10.00	<u>November Backyard Hen Training</u> This informational course is on caring for backyard hens and is a prerequisite to receive a Backyard Hen Permit from Duval County.	Extension Office 1010 N McDuff Ave.
December 9 9:00 - 11:00 am \$5.00	<u>Urban Demonstration Garden Holiday Open House and Seed Swap</u> Come see what edibles we are growing in December and participate in our Seed Swap!	Urban Demonstration Garden 1032 Superior Street
February 1 6:00 - 7:00 pm \$75.00	<u>Make and Take Rain Barrel Workshop</u> Save some \$\$\$ on your water bill. Learn about Florida-Friendly Landscaping™ and save the rain to water your garden!	Extension Office 1010 N McDuff Ave.
Nov/Dec Various times & locations Free	<u>Jacksonville public libraries "Life Lit"</u> Life Lit Programs Life are free workshops offered by trained professionals and volunteers that focus on improving your day to day life. These programs cover a wide range of workshops from gardening to small business needs.	<u>Nov. 27 - Falling into Winter</u> (Argyle Branch) <u>Dec. 5 - Wintering Wildlife</u> (Maxville Branch) <u>Dec. 11 - Gardening for Pollinators and Birds</u> (Regency Branch)

What's That? Answer!

Downy mildew diseases can be a problem for basil grown in Florida. It can be almost impossible to prevent as the spores of this fungus are easily dispersed long distances by wind. Cultural practices that minimize leaf wetness and reduce humidity can discourage fungal growth. Planting basil in an area where it receives lots of sunlight and has good air circulation can help, as can using drip irrigation that keeps leaves drier.

If downy mildew diseases are a persistent problem, consider growing a variety of basil less susceptible to the disease.

For more information go to: <https://edis.ifas.ufl.edu/publication/pp271>



Image credit: Beth Marlowe, UF/IFAS