Your North Florida Yard & Garden

Flagler County Extension Service & UF/IFAS Florida Master Gardeners

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MASTER GARDENER
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Inside this Issue:

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In the News

New Public Television Show Aimed at Southern Gardeners Hit the Air May 9

GAINESVILLE, FL May 6, 2009— Southern gardeners will soon have a new tool to help them in the garden. "Your Southern Garden" with Walter Reeves is an educational television show created to help gardeners of all levels learn new tricks, get fresh ideas and visit interesting sites.

"This show provides the opportunity to really educate Floridians and others in the region about landscaping and outdoor water conservation," said Millie Ferrer, interim extension dean for the University of Florida's Institute of Food and Agricultural Sciences. "Watering in the landscape is such an important issue right now and the faculty at UF and UGA can provide great tips and information to help conserve water."

The show, produced by University of Florida IFAS Extension and the University of Georgia's College of Agricultural and Environmental Sciences, is a one-of-a-kind program specifically for the Southeast.

The 2009 season of "Your Southern Garden" premieres May 9 on public broadcast stations in the Tampa Bay and north central Florida areas. Beginning in April 2010, it will air throughout most of north and central Florida area and the Georgia Public Broadcasting viewing area.

"We anticipate that in this economic climate, more and more homeowners will begin doing their own landscaping and lawn maintenance," said J. Scott Angle, dean of the University of Georgia's College of Agricultural and Environmental Sciences. "Many will take on this work for the first time and need to know where to start. Others will be looking for the latest drought-tolerant plants or water-conservation ideas. We hope this program will offer something for all gardeners in our region."

"Your Southern Garden" is a spin-off of UGA's "Gardening in Georgia," which has aired on Georgia Public Broadcasting for a decade. Host Walter

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The Good...

by Nadia Rosenbaum, UF/IFAS
Florida Master Gardener

Coontie the Cycad

Coontie (*Zamida floridana*) belongs to the family of Cycads and is a native to the state of Florida. Although many Cycads resemble palms in appearance, these two groups of plants are in no way related. In fact, Cycads are more closely related to pine trees than to palms. During the age of the dinosaurs Cycads were once the dominant vegetation on Earth, whereas palms did not show up on Earth for another 150 million years.

Coontie

Coontie plants are one of the oldest surviving plants we see today, an ancient survivor in today's modern world. They were used for thousands of years as primary food source for the Native Americans and then adopted by the early settlers and today makes for a great choice when looking to add native groundcover to your Florida Friendly landscape.

Let's examine how the Cootie fits into the Florida Yards & Neighborhoods (FYN) Program in respect to the nine principles of FYN:

Right Plant, Right Place— Learning the culture requirements and site preferences for each cycad species being considered for a landscape, and then conducting a site evaluation are two very important steps in creating a "Florida Landscape." But a general rule of thumb is that nearly all cycads require well-drained soils and most are sensitive to root rot when over-watered.

Water Efficiently—Cycads require less water than many other landscape plants and most can tolerate dry spells without irrigation. As mentioned above, cycads should always be planted in well-drained soil and should never be over-watered.

Fertilize Appropriately—Since Coonties are native to Florida, they do not require additional fertilizer once established in the landscape.

Maximize Mulch—The benefits of mulch are numerous and include conserving soil moisture, moderating soil temperature, discouraging weeds, and preventing damage to plants from mowers and line trimmers. All cycads will benefit from a 2 - 3 inch layer of organic mulch spread around the base of the plant while avoiding covering the main stalk.

Recycle Yard Waste—Cycads generally do not produce as much leaf debris as palms and do not need to be pruned like many trees or hedges. Therefore, they make good low maintenance landscape plants.

Scale on Coontie spear (leaf)

Manage Pests & Diseases Responsibly—Pest problems include mealy bugs and the various types of scale insects. Florida red scale must be controlled by regular treatments of a horticultural oil spray because they can be fatal to the Coontie. No diseases of major concern.

Reduce Stormwater Runoff—Since Coonties do not require much fertilizer

or water once established, they are a great asset in the landscape to reduce runoff because there won't be any.

Attract Wildlife—The Alata caterpillar feeds only on the Coontie. It devours foliage at a rapid rate for about two weeks and then disappears. Plants look fine after new foliage appears.

Protect the Waterfront—since cycads are not recommended for planting near water, an effective general recommendation for this principle is to construct raised beds or terraces to plant them in. Native aquatic plants and grasses are better suited around the littoral zone of a lake, pond or waterway.

Atala caterpillar and butterfly

Sources:
http://miami-dade.ifas.ufl.edu/old/programs/fyn/publications/cycads-in-the-south-florida-landscape.html
http://gardeningsolutions.ifas.ufl.edu/giam/plants_and_grasses/trees/coontie.html
http://edis.ifas.ufl.edu/FP617

Coontie At a Glance:

Light requirement: plant grows in part shade/part sun
Height: 2 to 4 feet
Spread: 3 to 5 feet
Plant habit: round
Soil tolerances: alkaline; sand; acidic; loam
Drought tolerance: high
Soil salt tolerances: good
Plant spacing: 36 to 60 inches
Origin: native to Florida
Uses: border; mass planting; accent; attracts butterflies; suitable for growing indoors

THE BAD . . . Compiled by: Diane Cortés, UF/IFAS Florida Master Gardener

Bamboo

Bamboo is a large perennial grass that has been used as an ornamental plant for many years. There are several different species of bamboo that range in size from 1 to 70 feet tall (Figure 1), but only one species, known as cane or canebreak bamboo, is native to the U.S. Generally speaking, this native bamboo is not extremely "weedy" and is relatively easy to manage. However, there are scores of imported bamboos that are highly invasive and exceedingly difficult to contain. These invasive varieties have large underground rhizomes that store energy for the plant. In order to control these varieties, the entire rhizome network must be exhausted and killed. This makes management of bamboo intensive and difficult.

Figure 1. Imported bamboo growing in a landscape.

Control Methods

Mowing is a technique commonly used for control of various weeds. But being a grass, bamboo easily tolerates occasional mowing. Intensive mowing is much more effective. However, a frequency similar to that used on home lawns will be required to deplete the rhizomes and control the population. It will likely take one or two seasons of rigorous mowing before control is achieved.

Considering the perennial nature of bamboo, the *use of herbicide* will often be needed to hasten and improve control. However, there are currently no herbicide labels that list bamboo as a controlled species. But there are herbicides that are relatively effective on this weed. Both glyphosate and imazapyr, used at high rates, will control bamboo with time.

Research has shown that for herbicides to be effective, the bamboo should be mowed or chopped and allowed to regrow to a height of approximately 3 feet, or until the leaves expand (Figure 2). Glyphosate at a 5% solution or imazapyr as a 1% solution can then be applied directly to the leaves.

It has been noted that imazapyr is more effective on bamboo than glyphosate. However, imazapyr has a great deal of foliar and soil activity and will potentially kill hardwood trees, shrubs, and all grasses if their roots extend into the vicinity of the application. Therefore, if the bamboo is growing near any desirable plant species, imazapyr should not be used.

Figure 2. Bamboo that has regrown after mowing and is ready for herbicide application

Glyphosate does not have soil activity and will only kill plants that are contacted with the spray solution. This makes glyphosate a more useful herbicide option for most areas where bamboo grows. It is important to note that one application of glyphosate will not eradicate bamboo. You will likely be required to mow and spray as many as 4 times for complete bamboo control to be achieved. Persistence is key when targeting this weed.

Additionally, glyphosate comes in many different formulations and concentrations. The 5% solution (or 6 fl oz per gallon) refers to glyphosate formulated at a 41% concentration. If the glyphosate product you intend to use does not contain 41% active ingredient, then the application rate should be altered to accommodate this difference.

Note: When using any herbicide, always follow label directions.

Source: http://edis.ifas.ufl.edu/AG266 (EDIS Publication #SS-AGR-75)

Compiled by: Diane Cortés, UF/IFAS Florida Master Gardener

Mosquito Control Devices and Services for Florida Homeowners

Be an Educated Consumer!

There are many devices on the market advertised to control mosquitoes. The advertisements for these devices are aimed at the average homeowner. How do you know if they will work? It is unfortunate that many advertisements take advantage of the concerns we have to protect family members from mosquito-borne disease. This fact-sheet is provided to assist homeowners in smart decision-making when it comes to protecting the health of you and your family.

Mosquito Control vs. Mosquito-borne Disease Prevention

Mosquito control and mosquito-borne disease prevention are not the same. Mosquito control involves reducing populations of mosquitoes, which might possibly lead to a reduction in the number of mosquito bites in a given area. Mosquito-borne disease prevention involves personal protection - wearing mosquito repellent. So, what is the difference between the two? With mosquito control, preventing every mosquito bite is not the goal; with mosquito-borne disease prevention, individuals take responsibility to protect themselves from any mosquito bite.

The devices and services discussed here are not a means of disease prevention; these products are used for mosquito control.

Mosquito Trapping Devices

Many mosquito trapping devices are based on generating carbon dioxide (CO2) to lure the mosquitoes to the device. Once in the vicinity of the fan on the device, the mosquitoes are sucked up into the device and into a collection bag where they will die. These devices retail for $300.00 – $1400.00 for the initial investment.

"Mosquito Magnet"

The CO2 baited traps will catch mosquitoes. However, even an impressively large collection, a "bag full" may be a minute percentage of all the blood-seeking females in the area and this will not likely impact large populations of mosquitoes. There are no peer-reviewed, scientific publications that show the devices to be effective for actually controlling mosquitoes, reducing their populations, or reducing biting rates under the range of conditions likely to be found in different homes. Until such scientific evidence exists, one must be careful to avoid unrealistic expectations for these devices as an effective mosquito control strategy for individual homes.

Some advertisements claim that the trap will decimate a mosquito population in 4 – 6 weeks. The life span of an adult mosquito varies with species and temperature, but populations of many mosquitoes that are the target of these devices will often begin to decline naturally within a few weeks if left alone, particularly if rainfall is intermittent and if professional mosquito control is conducted in the area. There is no evidence at this time that mosquito traps can play a noticeable role in the decline of mosquito populations.

There may be circumstances where the mosquito trapping devices can indeed reduce mosquito-biting activity in a small area for a specific time period. Several factors would have to be optimal for this to be true:

- There should be little wind to disrupt the attractive CO2 cloud.
- The mosquito numbers are low to begin with.
- The attractant plume of CO2 is large enough to outcompete other attractants, i.e. the attraction of groups of people or animals.

As with other such products, "buyer beware" is still good advice. The only available information on how well these devices work are testimonials from those who have purchased them. Such testimonials do not incorporate controlled studies or proper data analysis.

Mosquito Control Timed Spray Systems

A timed spray system is a service that can be purchased by homeowners for killing mosquitoes. The systems include insecticide spray nozzles connected by tubing that is installed around fence lines and the perimeter of the house. The tubing is connected to a reservoir of insecticide (30 - 255 gallons); release of the insecticide is regulated by a timer.

In order to reduce the number of biting mosquitoes of any given species, one must monitor several variables and respond with appropriate control measures that are specific for the intended pest species. This is the science (and the art) of mosquito surveillance. Surveillance should include:

- Proper identification of the pest species
- Considerations of the behavior of various species
- Population density monitoring; landing rates, trap counts, larval development
- Weather monitoring

Why is surveillance and precise identification of target species important?

- Effective and efficient mosquito control programs respond to mosquito density. It is inappropriate to apply an insecticide to kill adult mosquitoes if there are no adult mosquitoes present at the time of the application.
- Proper timing of application is critical. It can be very difficult to time a mosquito adulticide application that specifically targets resting or flying mosquitoes.
- Any application that relies on time-released spraying without surveillance and decision making by humans, leads to inappropriate applications. Inappropriate applications can contribute to insecticide tolerance and resistance in insects and may contribute to environmental problems.

Mosquito control misting systems, or any other system that simply releases insecticides on a timer, whether it is a barrier application or to kill flying mosquitoes, lack the human element that is critical for effective and environmentally proper mosquito control. It is against good mosquito control practices to advocate automatic release of pesticides simply based on a timer.

Ultrasonic Devices

Ultrasonic devices include products that are designed to be worn around the neck or wrist, or attached to a belt, to repel mosquitoes. The devices create sounds that mimic male mosquitoes or dragonflies and theoretically will "frighten" the female mosquitoes. These claims are unsubstantiated. Female mosquitoes in search of a blood meal do not fly away from male mosquitoes; and neither males nor females retreat from areas where dragonflies are present.

In August 2002, the Federal Trade Commission (FTC) charged a Florida company with making false and unsubstantiated claims in advertising for the Mosquito Control products.* These products are battery-operated, cost from $10 - $20, and include a bracelet, a key chain, and a tabletop model. According to the FTC, there is no competent or reliable evidence to support the claims made for the products, and that the claims are false.

There are other manufacturers of ultrasonic devices and there are several versions available in stores. These devices do not kill mosquitoes, repel biting mosquitoes, or protect humans or animals from any mosquito-borne disease.

*Docket No. 9303, In the Matter of Lentek International, Inc., Jospeh Durek and Lou Lentine. FTC File No. 012-3117.

Bug Zappers

Bug zappers use ultraviolet light to lure mosquitoes into a trap that will electrocute them. These devices attract many types of insects such as moths and beetles. Studies have shown that these devices do not reduce the number of biting mosquitoes, and they kill other types of insects more often than they kill mosquitoes.

Bats and Purple Martins

Bats and purple martins eat mosquitoes; however, just like most organisms, they have a varied diet. Species that rely on one source of food can quickly be eliminated if there is a shortage or complete halt to their food supply.

Purple Martin

Mosquitoes make up only a very small portion of the diet of bats and birds. There is no evidence that any bird or bat can effectively control mosquitoes when they are at or near peak abundance.
It is not prudent, especially during times of high risk of exposure to any mosquito-borne disease, to rely on birds or bats to control mosquitoes. There is no doubt that they will consume them, but not in sufficient numbers to demonstrate an appreciable reduction of biting mosquitoes.

Additional Considerations

"Natural" is a word that recently has been used to promote "safe" products. Unfortunately, the wording can be misleading for the uninformed individual. Products made of, or derived from, something "natural" does not necessarily mean it is safe or non-toxic. Remember that salt is "natural", but not necessarily "safe."

Additionally, "safe" or "natural" products may not be effective. There are trade-offs that buyer must consider.

Advertisements for mosquito control devices that claim to "reduce West Nile" or any other mosquito-borne disease are inappropriate and misleading. There are no devices that have been shown to have an impact on reducing mosquito-borne disease transmission.

Reducing breeding sites around the house is one component of good home mosquito control. For more information on mosquito control around the home, see "Mosquitoes In and Around the Home," Factsheet ENY-2004.

Repellents containing DEET are the most effective for personal protection from mosquito bites. To learn more about how to protect yourself from mosquito bites, see "Mosquito Repellents," Factsheet ENY-671.

Source: http://edis.ifas.ufl.edu/IN171

Lavender - *Lavandula Spp.*

Lavender is an evergreen, perennial shrub with woody stems, gray foliage and bright lavender flower spikes. The name lavender comes from the Latin, *Lavare* - to wash. Lavender is native to the western Mediterranean and is one of the most well-known of the traditional herbs.

How often have you tried to grow lavender here in Florida? It should grow through zone 10, but it isn't easy. I once had a good start on a lavender bush. Thinking it would do even better in a larger pot, I transplanted it...in the middle of a hot Florida summer afternoon. The next morning, it was dead.

Lavender is such a beautiful plan that I just had to try again. Unfortunately, the lovely English varieties which grew in abundance all around me as a child growing up in England don't like the Florida heat. However, I discovered that the French lavender, *L. dentate*, fares better here. It has delicate, deeply cut leaves and soft blue flowers.

How to Grow:
Use a clay pot and fill to within 2" of the top with good soilless planting mix. Add a slow release fertilizer. If your plant is small, start with a small pot and as the plant grows, move it to a larger one. Lavenders like to be pot-bound, since rain water will drain out more quickly.

When the soil comes in contact with the foliage, the plant is likely to get a fungus disease, so mulch around the plant with mini-pine park or gravel. Do not use a saucer under the container. Place the plant in the shade in the summer, but move to full sun in the winter.

Uses: Ornamental, aromatic, culinary

Sources:
The Illustrated Encyclopedia of Herbs
Dorset Press, New York
Bunney, Sarah, edit.

Herbs and Spices for Florida Garden
B.B. Mackey Books, Wayne, Pa.
Brandies, Monica Moran.

Of Making Gardens

In England they have no sunlight or heat of a natural sunny sort, as indeed their gardeners are forever complaining. They make do - their gardens are the loveliest in the world today, largely because of the almost insurmountable challenge of the gray climate. There is nothing impossibility for getting a gardener's energies up. Knowing that by nature they cannot (an do not) have anything, they have set themselves with zeal to the task of making gardens in the very face of the devil and the North Sea. - Henry Mitchell

Recipes

ALMOND LAVENDER CAKE

2 cups sugar, divided
½ cup slivered almonds
1 Tbs. plus 1 tsp. dried lavender flowers, divided
1 cup butter, softened
4 eggs
2 tsp. vanilla extract
1 cup (8oz.) sour cream
¼ cup half and half cream
2-½ cups all-purpose flour
½ tsp. baking soda
½ tsp salt
4 tsp. boiling water
¾ cup confectioners' sugar
Additional dried lavender flowers, optional

Grease a 10 inch fluted tube pan and sprinkle with sugar; set the pan aside. Place ½ cup sugar, the almonds and 1 Tbs. lavender in a food processor; cover and process until finely ground. In a large mixing bowl, cream butter and remaining sugar until light and fluffy; beat in the almond mixture until combined. Add eggs, one at a time, beating well after each addition. Beat in vanilla.

In a small bowl, combine sour cream and half and half. Combine flour, baking soda and salt; add to creamed mixture alternately with sour cream mixture, beating well after each addition.

In a small bowl, combine the water and remaining lavender. Cover and steep for 5 minutes. Strain, discarding lavender. In another small bowl, combine the confectioners' sugar and enough infused water to achieve desired consistency; drizzle over cake. Garnish with additional lavender if desired.. Make sure your lavender is of culinary quality. No pesticide sprays.

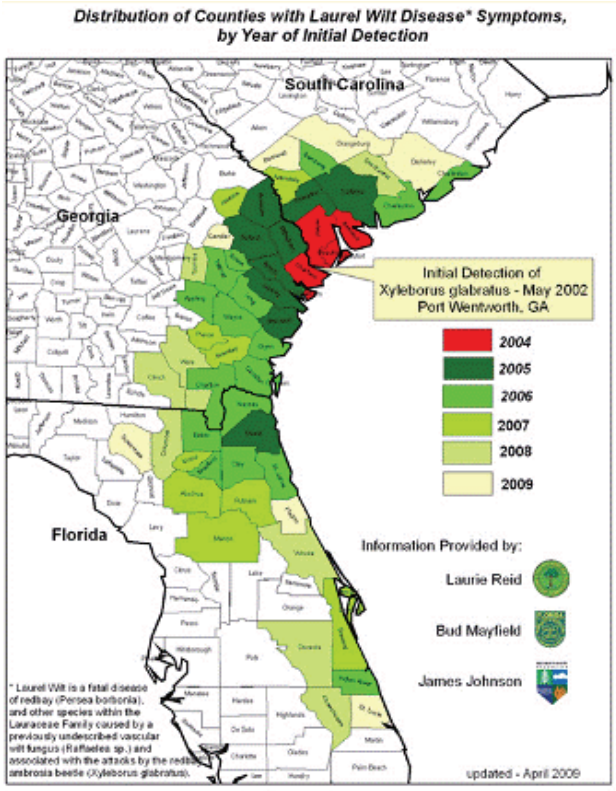
2009 Taste of Home Annual Recipes

In the Landscape

Compiled by: Barbara Kipnis,
UF/IFAS Florida Master Gardener

Laurel Wilt

Laurel wilt, a destructive disease of redbay and other trees in the laurel family (Lauraceae), reached Flagler County this year. The disease is caused by a fungus (*Raffaelea* sp.) that infects the sapwood of host trees, restricting the flow of water and causing the leaves to wilt. The fungus is carried into trees by a non-native insect, the redbay ambrosia beetle that was first detected in the United States near Savannah, Georgia, in 2002. The beetle is believed to have been introduced in wooden crating material imported through the shipment of goods from its native range in southeast Asia. Laurel wilt has caused high levels of redbay mortality in South Carolina, Georgia, and Florida and has affected several other hosts including sassafras and avocado.



Redbay trees with laurel wilt initially exhibit drooping foliage with a reddish or purplish discoloration. These symptoms may be limited to part of the crown at first, but eventually the entire crown wilts and turns brown.

Wilted leaves may remain on redbay trees for up to a year or more. Removal of bark reveals a black discoloration in the outer sapwood. Wilted trees may also exhibit small dowels or 'toothpicks' of sawdust protruding from the stem, produced by ambrosia beetles as they bore into the wood. Redbay ambrosia beetles are extremely small (~2 mm long), black-to-brown beetles that spend most of their life cycle within the tree.

Most native ambrosia beetles attack only dead and dying trees. The redbay ambrosia beetle, however, will initiate attacks on healthy redbays. Initial attacks are difficult to detect, and probably do not result in successful colonization of the tree by the beetle. However, these initial attacks introduce spores of the *Raffaelea* fungus into the water-conducting sapwood, allowing the fungus to move quickly through the vascular system of the tree. After becoming infected, redbays wilt in a matter of weeks to a few months. The dying tree is then colonized by numerous redbay ambrosia beetles (as well as other ambrosia beetle species) that create galleries in the wood, in which they reproduce and cultivate their associated fungi for food. New female redbay ambrosia beetles emerge from infested trees and fly in search of new hosts, whereas males are flightless. In the southeast, there appear to be multiple overlapping generations of redbay ambrosia beetles per year.

Redbay ambrosia beetles (Xyleborus glabratus): a) comparison of beetle to a penny; b) top view and c) side view of a single adult.

Laurel wilt is devastating to redbay and can kill nearly all mature redbay trees in a stand within 3-5 years. At one site in Florida, mortality of monitored redbay trees over 1 inch in diameter increased from 10% to 92% in just 15 months. Although research is needed to determine the impact, laurel wilt could negatively affect populations of the Palamedes swallowtail butterfly, the larvae of which feed only on redbay and closely related *Persea* species. Laurel wilt is of serious concern to the commercial avocado industry. Two other confirmed hosts, pondberry and pondspice, are listed as threatened or endangered at the federal and state level, respectively.

Small strings of compacted sawdust protrude from the small bore holes along the trunk of a tree.

The following strategies may help reduce the spread and impact of laurel wilt:

- Avoid the movement of firewood, tree trimmings, or mulch from redbays and other laurel family hosts out of counties in which laurel wilt is known to occur. Avoid long distance transport of firewood in general.
- Whenever possible, leave wood from dead and dying redbays and other laurel family hosts on site instead of transporting it. If the wood is to be transported, dispose of it as locally as possible.
- Burying, covering, burning, or chipping host tree material at its original site or a disposal site is preferable to leaving it intact in the open environment. Chipping wood from an infested tree might not destroy all of the ambrosia beetles due to their extremely small size, but should reduce the suitability of the wood as breeding material.
- Although the pathogen has not yet been documented to spread by this means, consider cleaning/sterilizing saws and pruning blades after cutting an infected tree and before using them on uninfected host tree species.
- Preliminary research suggests that root-flare injections with the systemic fungicide propiconazole may help prevent development of laurel wilt in redbay trees. Recommendations based on this research may be available in the near future. Such treatments are likely to be expensive, require periodic reapplication, and should be considered only for very high-value trees.

References and Other Resources

University of Florida IFAS extension HS1137. Albert E. Mayfield III, Jonathan H. Crane, Jason A. Smith

Laurel Wilt Website Hosted by the USDA Forest Service, Forest Health Protection: http://www.fs.fed.us/r8/foresthealth/laurelwilt/

Fraedrich, S.W., Harrington, T.C., Rabaglia, R.J., Ulyshen, M.D., Mayfield A.E. III, Hanula, J.L, Eickwort, J.M. and Miller, D.R. 2008.

July

General:
- If it does not rain, water twice a week, putting down 1/2-3/4 inch of water each time.

Lawn:
- If sedgegrass weeds are a problem, spray with Image* or Basagran* for control.
- If mole crickets are damaging the lawn, begin applying mole cricket bait (i.e. Over -N- Out*) to control them.

Food Garden:
- Pumpkins can still be planted.


Sunny Knock-Out™ Rose

Fruit:
- Guava should be checked for ripeness this month.
- Fertilize citrus trees with a fertilizer specifically made for citrus.

Landscape:
- Spray roses weekly with a fungicide labeled for black spot fungus.
- Fertilize roses with a slow release rose fertilizer.
- Check mulch in all flower beds. If dry and stuck together, break apart with a rake. If mulch is less than two inches thick, add more. Do not mulch more than three inches. Be sure mulch is pulled back at least 1-2 inches from shrub and tree trunks to protect against moisture-related diseases.
- Remove seed heads and old flowers from crape myrtles. Deadheading spent flowers will encourage more blooming.
- Plants that have become too leggy due to summer rains should be cut back. Trim no more than one third of the plant.
- Cool season annuals should be removed and composted (dianthus, pansies, snap dragons, and petunias).
- Pinch back chrysanthemums and poinsettias to create more branch tips for greater blooming and bushier plants.
- Fertilize poinsettias with a slow release fertilizer.
- Watch pyracantha and junipers for spider mite damage. Spray with a horticultural oil spray every 10 days for at least 3-4 weeks to get rid of them.
- Annuals to plant this month include: celosia, coleus, crossandra, exacum, impatiens, kalanchoe, nicotiana, ornamental peppers, moss rose, torenia, salvia, periwinkles, creeping zinnias, globe amaranth, purslane, and wax begonia.
- Check trees for weak limbs and have them trimmed or removed. Hurricane season started in June. Be prepared. Remember the summer of 2004.

August

General:

- If it does not rain, water twice a week putting down 1/2-3/4 inch of water each time.

- Hand pull weeds rather than cultivating with a rake to protect the roots of your plants.

Lawn:

- Mow weekly, but be sure to follow mowing height guidelines for your grass. Use tallest height of guidelines to protect lawn during summer heat..

- Yellowish or brown patches in the turf along sidewalks and driveways and other water stressed areas where the grass is in full sun may be caused by chinch bugs. Check for chinch bugs by filling an open ended can that has been pressed into the turf with water. After five minutes check for small bugs floating in the water. If in doubt, bring a sample of the complete plant to the Extension Service. Treat for chinch bugs with products containing carbaryl, permethrin, bifenthrin, cyfluthrin, lamba-cyhalothrin or neem oil. Rotate the type of insecticide to prevent chinch bugs from developing an immunity to one insecticide.

- For mole crickets apply a chemical control containing bifenthrin, cyfluthrin, fipronil, imidachloprid, lamba-cyhalothrin or permethrin. Follow the label instructions for application rates and frequency. For more information on controlling mole crickets, please contact the Extension Office and ask for publication # ENY-324 - "Pest Mole Cricket Management."

- Apply Image* or Basagran* to control sedge weeds and dollarweed.

Food Garden:

- Crops that can be planted: pole beans, sweet corn, eggplant, okra, southern peas, peppers, pumpkin, summer squash, winter squash, watermelon, broccoli, celery, collards, onions, tomatoes, and cucumbers.

Fruit:

- Pineapple should be checked for ripeness this month.

Landscape:

- Fertilize palm trees with a palm fertilizer containing three to four percent magnesium sulfate.

- Fertilize poinsettias and roses with a slow release fertilizer.

- This is the last month to "shape" poinsettias by cutting back. Do not pinch or prune after August.

- Spray roses weekly with a fungicide labeled for black spot fungus.

- If needed, apply iron (Ironite* or Liquid Iron*) to lawn and landscape plants for greening without excessive summer growth.

- Annuals to plant this month include: coleus, marigolds, salvia, verbena, ornamental peppers, nicotiana, and sunflowers.

- If you cut back summer annuals, you will get new growth, bushier plants, and more flowers. Wax begonias, coleus, and impatiens especially react well to being cut back.

- Yes it's hot! It's a good month to sit back and enjoy your earlier efforts from the pool!

September

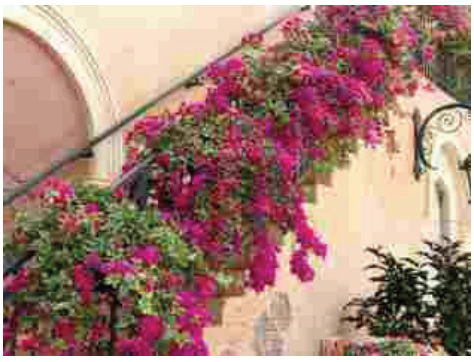
General:
- If it does not rain, water twice per week putting down 1/2-3/4 inch of water each time.

Lawn:
- Fertilize with a 16-4-8 or 15-0-15 slow release fertilizer.
- Check for webworms and armyworms. Look for chewed margins on the grass blades. Apply Thuricide* or Dipel* as needed.
- Fill in dead areas with plugs or sod. Hand water them for two weeks after planting.

Food Garden:
- Thanks to our Florida weather, this is a great month to plant a fall garden.
- Crops that can be planted: tomatoes, beans, cucumbers, squash, broccoli, cabbage, carrots, cauliflower, collards, lettuce, mustard, peppers, eggplant, endive, beets, onions, radishes, turnips, and strawberries.

Fruit:
- Check peach trees for scale. Spray with a summer oil spray or Sevin* as needed. Repeat in two weeks. Only spray the leaves and branches, not the fruit.
- Fertilize pears, grapes, and figs with a complete slow release fertilizer.
- Fertilize citrus with a citrus fertilizer containing at least two percent magnesium.
- Grape vines that are long and lacking leaves can be pruned back.

Landscape:
- Fertilize azaleas and bougainvilleas with a 12-4-8 slow release type fertilizer.
- Fertilize poinsettias and roses with a slow release fertilizer.
- Fertilize palm trees with a special palm tree fertilizer or citrus fertilizer.
- Spray roses weekly with a fungicide labeled for black spot fungus.
- A nice fall planting is digitalis. You can also plant wax begonias, shasta daisy, snapdragons, marigolds, and verbena.



Bougainvilleas in hanging baskets

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A Guest in the Garden by Ginny Stibolt, Guest Writer

A Plant by Any Common Name…

Most folks who work with plants have sometimes been frustrated with common names. Yes, they are easy to remember and pronounce, but there are no hard and fast rules governing them. One plant might be known by several common names depending upon regional traditions and personal favorites. For instance, when I wrote about beggarticks last year, a reader insisted that they were Spanish needles, not beggarticks. I could choose which common name to use because I liked the play on words, "No Need to Beg for Beggarticks." They are also known as, shepherd's needles, butterfly needles, hairy beggarticks, beggar's-ticks, stick-tights, and more. Of course there are completely different plants that are referred to using these same names or ones that are confusingly close such as tickseed that normally refers to a coreopsis. Fortunately, the reader, no matter what region or country she lived in, could figure out which plant I was talking about because I also identified it as, *Bidens alba*.

Classification of Plants

Modern plant taxonomy started in 1753, when Carl Linnaeus published *Species Plantarum*. He devised a system where the first word in the "scientific" name is capitalized and refers to the genus. The second word refers to the species and is not usually capitalized, even if the name refers to a proper noun like *Woodwardia virginica*, Virginia chain fern.

The scientific naming of cultivars can use two names after the genus name or use an "x" between the genus and the hybrid name. It may be a natural hybrid between two species or it might have been bred for some special characteristics. For instance, the Egyptian walking onion is known as *Allium cepa proliferum* or *Allium x proliferum*. The walking onions are prolific as their varietal name indicates. There are also horticultural names such as *Magnolia grandiflora* "Little Gem." Some plant breeders have trade marked names through the patent office. I won't go into more detail here on the naming of hybrids, cultivars, varieties as it gets complex and not everyone agrees.

While the idea of using Latin or Latinized binomials was not new, Linnaeus was the first to systematically apply them to every plant he saw. He made several plant collecting trips throughout Europe, and he had students and many other botanists (including William Bartram who tromped through our local habitat) collecting plants from far-flung sections of the globe.

Most of Linnaeus's work was accomplished using one or two dried specimens. He would then mark which specimen he used and that is considered the "type" specimen, but it did not have to be a typical or average representative of that species.

Sometimes Linnaeus named plants after people. The genus *Tradescantia*, was named after the three Tradescant brothers. Two of the brothers were productive botanists who collected many plant specimens from the Americas for Linnaeus, while the third brother died at a young age. The three petals of this new world genus usually have two showy petals and one smaller petal, symbolizing the two productive brothers and the other one who was not. Other times, if he didn't like someone, he might use his name for a noxious weed.

Whenever you see "L." following the Latin binomial, Linnaeus was the first to name it. If there are other letters following his initial, then other botanists have renamed or reclassified the plant, but even today there are thousands of plants that still carry the names originally devised by Linnaeus.

His methods were quite controversial in his day because his classification groups were based on the sexual parts of the flowers. Linnaeus was aware that this was an artificial classification method, but it allowed botanists to easily determine which plant was which. Linnaeus never developed the concept of families, but later botanists created

family groupings for plants to show relationships outside of the genus. For the most part this method of grouping flowering plants has been held up through all these years, even though this method of classification produces some unlikely-looking relatives such as placing Spanish moss (*Tillandsia usneoides*) in the pineapple family. If you think about Spanish moss being an epiphyte (air plant) as are most of the bromeliads, then you might see the vegetative similarities, though. Today's botanists may also study plants' DNA and other chemistry to look for similarities in the genetics to better group related plants.

Some Onions as Examples
At first glance it may be difficult to see the family relationship between chives (*Allium schoenoprasum*) with its spherical head of lavender flowers and meadow garlic (*A. canadensis*) with its bunch of bulblets and a few white flowers on long stalks. The leaves are different: chives leaves are round and hollow, while the garlic has flat, strap-like leaves. So how can you conclude, other than their odor and/or taste, that they might be related?

Using the Linnaean system, the vegetative parts don't matter–it's all in the flowers. Comparing the individual flowers: they both have six tepals (The term "tepal" is used in this case when the three inner petals look the same as the three outer sepals.), six stamens (the male parts) on long stalks, and an ovary (the female part) divided into thirds. Onions were assigned to their own family, Alliaceae, in the late 1700s. Later taxonomists grouped the onions into the lily family, Liliaceae, because all the members also have six tepals, etc., but most of today's taxonomists place onions in their own family again. Even though the parts of the flowers are similar to lilies, members of the onion family have true bulbs and most produce odorous fumes when cut. True lilies don't have the odors or bulbs–they usually have corms or tubers.

Onions and garlic have been under cultivation for so long, (approximately 5,000 years) that the typical onion (*A. cepa*) and the typical garlic (*A. sativum*) are not known in the wild. I purchased some Egyptian walking onion sets two years ago and we've been enjoying these perennial onions both as greens and small bulbs. In two years, I have not seen any flowers, but only the heads with bulblets. If a flower is ever produced though, I know it will have 6 tepals, 6 stamens, and a 3-parted ovary.

Why are they called Egyptian walking onions? Most botanists agree that onions came under cultivation in Egypt. And for this particular cultivar, as the bulblets expand in the flower head shown in this photo, the stem on which they are borne falls over, the new bulbs take root, and the onion then begins to "walk" across the garden. Common names also have interesting stories. I've planted these perennial onions at the edge of a bed, so as I work through the crop rotations each season, the walking onion area remains undisturbed.

Common vs. Scientific Names
The scientific names are important to gardeners because they identify a plant, even if it's a cultivar. So the next time you see a Latinized binomial associated with a plant, take note of it and write it down for future reference. Otherwise how will you know what works, and what doesn't, in your gardens and how will you make decisions about future plantings? We should cheer Linnaeus for his industriousness, thoroughness, and his methodology–he's made gardening easier for us, even though we might protest some of those long, unpronounceable names.

Resources:
· For more details on Linnaeus: **www.ucmp.berkeley.edu/history/linnaeus.html**.
· For information on accepted family names for Allium: **www.plantsystematics.org/reveal/PBIO/usda/usdaa.html**
· For more details on plant names: **http://www.floridata.com/tracks/misc/plant_names.cfm**
· I've written about our onions before in **The Skinny on Onions** where I discussed long-day and short day onions and our experiences with them here in Florida.

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Ginny Stibolt is a naturalist and a gardener with a master's degree in plant taxonomy. She's written a book, "**Sustainable Gardening for Florida**" for University Press of Florida--it will be available in Sept. 2009. She'd like to hear from readers who have suggestions and questions. After all, there are more than a few transplanted gardeners here in northeast Florida trying to figure out what works and what doesn't in planting zone 8/9. You may contact her or read more of her articles posted on her website: **www.transplantedgardener.com**.
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Kidz Korner

By: Kathy Fisher
Family Nutrition Program Assistant

Nutrition Gardens Bring Many Benefits

Nutrition research supports the role of increased fruit and vegetable consumption for prevention of cancer, heart disease, and obesity. Thus, youth gardens could emerge as an important tool for nutrition and wellness in public health interventions. Recent research has documented that involving children in gardening is a promising strategy for increasing fruit and vegetable consumption. School gardens may positively impact children's food choices by improving their preferences for vegetables and increasing their nutrition knowledge. Gardening is a wonderful means of increasing physical activity. Furthermore, children can take their newly acquired gardening skills home and build family gardens which are valuable for all these reasons and have an added benefit of lowering food costs.

From this...

Nutrition gardens have been a part of Bunnell Elementary School campus for seven years. The "I Can Grow a Garden" Project was developed through the University of Florida Family Nutrition Program, which is part of the Flagler County Extension Service. This year , the project has expanded to include many more locations. Bunnell Elementary School remains the biggest project, consisting of approximately 43 raised boxes full of tomatoes, lettuce, squash, green beans, watermelon, corn and many other seasonal crops. The school recently built a greenhouse so food production can continue throughout the entire school year. There are also nutrition gardens at Pathways High School, Cornerstone Charter School, RCMA Headstart Pre-school and Step-up Industries, a human resources service for adults with disabilities.

To this!!

The students perform all the garden tasks which include filling the garden boxes and planting the seeds. They tend to the routine chores that include watering, fertilizing, weeding and harvesting. Then comes the best part - eating the food! Many children sample different vegetables for the first time. Due to this season's bountiful zucchini harvest, students have enjoyed homemade zucchini bread. Additionally, it is undeniable that there is something irresistible about picking a green bean right off the vine and eating it.

"Eat your vegetables!"

While some rain is a good thing in the garden, the drenching storms that occurred last month took a toll on the crops. Due to the use of a raised-bed growing method, crops faired better than expected and harvesting continues.

It is important to note that, without the support of the community and local businesses, the Nutrition Garden Project could not survive and thrive. Jungle Growth Potting Soil Company continues to be a big program supporter. Last year, Lowe's Home Improvement store generously helped by donating many start-up supplies. This year, Lowe's has awarded the "I Can Grow a Garden" project a $3,800 Toolbox for Education Grant. We are also strongly supported by the Flagler County Schools and the 21st Century After-school Program coordinators. Many thanks to all who make the gardens possible.

The "coveted" Mickey Award

<u>By the way:</u>

The Bunnell Elementary School Garden was also this years first place winner for the statewide School Garden Competition sponsored by Walt Disney World EPCOT and University of Florida. They received $500.00 and the Mickey Award for Best School Garden for the Entire School category! How awesome is that?! Congratulations!!!

continued from page 1

Reeves, a retired UGA cooperative extension agent and gardening expert, brings the same down-home flavor to this new project.
Reeves shows viewers how to put the universities' expertise to work in their yards.

"Land-grant universities are loaded with cutting-edge, yet practical, information that gardeners need," Reeves said. "Whether you are a beginner, a piddler or a Master Gardener, there's something here for you."

Each week's show will include a blend of how-to projects, visits to local sites and tips.

"Our faculty have the expertise to really know what works in our growing zones. 'Your Southern Garden' will showcase plants, maintenance tips and conservation techniques that really work in this region. Our goal is to practically show people how to be more sustainable in their yards," Ferrer said.

The show will be aired in areas with similar growing zones, Reeves said.

"We don't want to be like the national gardening shows that tell you how to make fabulous landscape designs out of plants that just won't grow in the South," he said. "Our aim is to show you only what will work here, now."

Check your local public broadcasting station's programming listings for days and times "Your Southern Garden" airs in your area. Visit http://yoursoutherngarden.com for more information about the show.

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WWW.FLAGLERCOUNTY.ORG
OR
WWW.SOLUTIONSFORYOURLIFE.COM

Upcoming Events:

Washington Oaks State Gardens 2nd Saturday plant sale—2nd Saturday each month at the Park Sponsored by the Friends of Washington Oaks.

Master Gardener Volunteer Training Program– Fall class 2009 applications will be mailed out at the end of July. If interested in becoming a Master Gardener Volunteer, please contact Ruth Micieli at the Extension office to be added to the mailing list. Deadline for mailing list is July 24, 2009.

County Government offices closed July 3rd

July 4th Independence Day – Happy Birthday America!!

It's an E-World After All

The Flagler County Extension Service and the Flagler County Master Gardeners have always done their best to be good stewards of our environment and to be a source of quality university-backed information for everyone in our community.

In keeping with this purpose, "Your North Florida Yard and Garden" newsletter will be switching to an all electronic format by the end of 2009. We will be sending all newsletters via email and will have copies of past issues available on the Flagler County website http://www.flaglercounty.org We will no longer send paper copies via the U.S. Postal Service after the end of this year.

When you provide your email address to us, in addition to receiving the newsletter electronically, you will receive notifications of our latest class offerings, plant sales, open houses and other special events.

If you have not already signed up, please do so by sending your request, including your email address, to the Flagler County Master Gardeners at mgardner@flaglercounty.org .

Thank you for helping us continue to keep you informed while being good stewards of our community!