



Know, Grow, Sow Flagler County

UF/IFAS Flagler County Extension

Lethal Bronzing

**Sol Looker,
Horticulture Agent I**

Lethal bronzing of palms is a relatively new disease to the Southeastern United States affecting several palm species. The pathogen was first discovered in Texas killing Phoenix palms, so it was called Texas Phoenix Palm Decline or TPPD. Because the disease is now widespread and is killing a variety of palm trees including native sabal palms, the name was changed to Lethal Bronzing.

Dr. Brian Bahder, Assistant Professor with the UF/IFAS Fort Lauderdale Research and Education Center is studying the disease and the insect(s) that help spread it. The primary suspect insect responsible for spreading the disease is the native plant hopper *Haplaxius crudus*. The Pathogen is now killing trees in over 31 Florida counties including nearby St. Johns, Duval, and Volusia. Genetic testing is underway to try to determine where the infected insects came from. Dr. Bahder has suspicion that they were blown in from the Yucatan during hurricane Wilma. Humans can also play a role by moving infected palms and plant material harboring plant hoppers.

The immature life stage of the *Haplaxius crudus* feeds on young turfgrass shoots, this means shipments of turf from areas impacted by lethal bronzing could transport phytoplasma carrying insects into new areas.

To date, the disease is primarily affecting *Phoenix* palm species including true date palm, Canary Island

date palm, pygmy date palm, and wild date palm. Also affected are native sabal palms, queen palms, Chinese fan palms, and Bismarck palms. New hosts are being added as the disease spreads into areas with more palm diversity.

The disease starts as bronzing of the lower leaves with an upper layer of fronds that stay green. As the disease progresses the middle spear leaf eventually dies. A ring of green leaves may persist for a number of months.

There is a test to confirm the pathogen by collecting tissue from the trunk. Positive or obviously symptomatic trees should be removed, as the pathogen is most likely spread from insects feeding on the infected spear leaf before it dies. Unfortunately there is currently no cure for this disease.

Dr. Bahder is recommending a preventative treatment that has been used for years to protect palms from another phytoplasma common in South Florida called Lethal Yellowing. The treatment involves injecting the trees preventatively with the antibiotic oxytetracycline. Applications of products should be done by professionals knowledgeable in the International Society of Arboriculture tree injection best management practices.

To search for a ISA Certified Arborist please visit treesaregood.org.

Summer 2019

Inside this Issue

Hiring Someone to Mow & Blow.....2

Crossword Puzzle.....3

Name that Creature.....3

Oakleaf Hydrangea.....4

Home Watering Restrictions.....4

Rue Your Butterfly Habitat.....5

Water Wise Advice For Your Landscape....5

On Going Events.....6



Hiring Someone to Mow & Blow So You Can Go Kathi Wright, Master Gardener Volunteer

Off-loading yard work can be a path to rest and relaxation, but you'll want to choose the right landscape maintenance contractor to avoid problems down the road. Wait. You're just hiring someone to mow and prune. No big deal, right? Not so fast. "Mow and blow" companies can do damage if they aren't properly trained and certified.

Be sure the contractor has adopted the [Green Industry Best Management Practices](#) so you know they follow Florida-Friendly Landscaping™ guidelines. This can help save you time, money, and effort while protecting the health of your family, pets, and the environment. Three aspects are:



Photo: Scalping damage/UFIFAS

Follow proper mowing heights for your particular lawn type. Mowing your lawn too short (scalping) can introduce weeds, pests and disease resulting in long term damage to turf. Bahiagrass should be cut to a length of 3 - 4 inches; St Augustine: 2.5 - 4 inches; and Zoysia: 2 - 2.5 inches.

[\[https://edis.ifas.ufl.edu/pdffiles/LH/LH02800.pdf\]](https://edis.ifas.ufl.edu/pdffiles/LH/LH02800.pdf)



Photo: Over pruned palm tree, UF/IFAS Charlotte County Extension Office

Palm pruning practices that align with UF/IFAS recommendations. Over-pruned palms can become weak, vulnerable to storms and disease, and frankly, ugly.

Disinfection of tools. Fusarium Wilt in palms is primarily caused by contaminated pruning tools. This disease has no cure. Trees, shrubs, and other plants can also get viruses and diseases from contaminated tools.

Here are a couple of other resources from UF/IFAS, especially if you're also planning on having a contractor apply fertilizers, insecticides or herbicides:

[Guidelines for Community Associations](#) provides helpful information for individual homeowners too. [\[https://ffl.ifas.ufl.edu/pdf/EP34700.pdf\]](https://ffl.ifas.ufl.edu/pdf/EP34700.pdf)

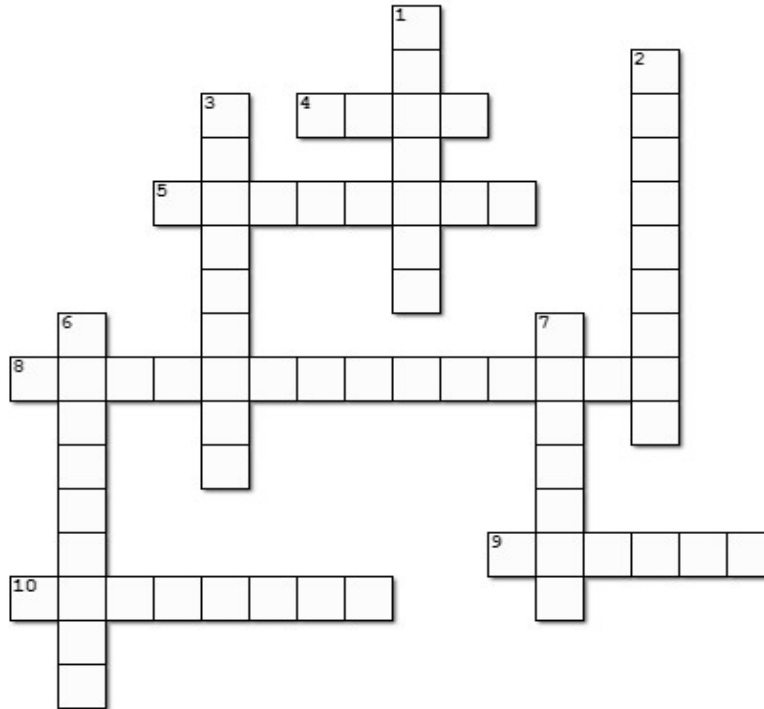
The Florida Yards & Neighborhoods Handbook is loaded with terrific information. [\[https://ffl.ifas.ufl.edu/materials/FYN_Handbook_2015_web.pdf\]](https://ffl.ifas.ufl.edu/materials/FYN_Handbook_2015_web.pdf)



Photo: Fusarium wilt, H. Mayer/UF/IFAS

Crossword Puzzle

Kathi Wright, Master Gardener Volunteer



Across

4. Number of Florida Friendly Landscaping principles
5. Anniversary celebrated in 2019 by Florida Master Gardener Program
8. Florida State Park with formal gardens
9. Snowy Florida native tree with pink and white flowers
10. Florida native butterfly attracter

Down

1. Flagler County seat
2. Flagler County's most populated city
3. Group that includes Air plants and pineapple
6. Famous oak tree of Bulow Creek Ruins State Park
7. Category 5 visitor October 2016

[Solution can be found on page 6.]

Name That Creature.

First correct answer earns \$5 credit towards admission to Horticulture classes held at the Flagler UF/IFAS Extension. Contact Sol Looker by email at lookers@ufl.edu with your answer.





**Oakleaf Hydrangea
(*Hydrangea quercifolia*)
Donna Frangipane,
Master Gardener Volunteer**

The warm humid days of summer are upon us and as gardeners we will be hoping to spend and enjoy more time in the shady portions of our yard. The Oakleaf hydrangea is a native plant that thrives in a partial shady to shady environment and requires very little maintenance.



Photo: UF/IFAS

It produces a conical cluster of creamy white flowers that turn pink to purple as they age. The leaves on the plant are quite large and their shape resembles the leaf of an oak tree thus, the reason for the plants common name. The leaves turn to bronze and red during the fall and the stems have an exfoliating bark giving the shrub year-round interest.

The Oakleaf can grow to be a fairly large shrub and at maturity be four to eight feet in height and four to eight feet or more.

This native is excellent as a specimen shrub or can be utilized as a background plant in the shade garden. Oakleaf requires a well-drained location with moist but not too wet soil. As with most natives once it is established it is fairly drought-tolerant. It is a fast growing plant with no serious pests or diseases. Propagation is by cuttings, layering or suckers from the mother plant.

the garden. Fortunately, local nurseries are now carrying more native plants due to their low maintenance, drought tolerant appeal that it the cornerstone of the “Right Plant, Right Place” principle of the Florida-Friendly Landscape Program. For more information regarding the Oakleaf Hydrangea go to: <https://edis.ifas.ufl.edu/pdffiles/FP/FP25900.pdf>

Home Watering Restrictions

The St. Johns River Water Management District’s watering restrictions are designed to ensure the efficient use of water for landscape irrigation. The restrictions allow enough water to maintain healthy landscapes year-round. The mandatory restrictions specify the time when watering may occur, the amount of water that may be applied, and the days when watering may occur for residential and nonresidential locations. These days depend on whether the address ends in an odd or even number, and on the time of year.

- Water only when needed and not between 10

Time of Year	Addresses ending in ODD numbers	Addresses ending in EVEN numbers
Daylight Savings Time	Wednesday and Saturday	Thursday and Sunday

a.m. and 4 p.m.

- Water for no more than one hour per zone
- Restrictions apply to private wells and pumps, ground or surface water and water from public and private utilities.
- Some exceptions apply. Visit: www.sjrwmd.com/wateringrestrictions or call 800-232-0904 for more information.

Rue Your Butterfly Habitat Connie Balliet, Master Gardener Volunteer

When planning your butterfly garden, variety can be the spice of butterfly life. The Black Swallowtail has a heavy appetite and eats a variety of garden plants such as dill, fennel, parsley and celery. They also enjoy the “Herb of Grace” known as Rue (*Ruta graveolens* L.).

Rue, a native of the Mediterranean region, is a round mounded blue-green perennial that grows about 2 feet tall and wide. Clusters of small yellow flowers, a magnet for butterflies, appear in midsummer of the plant’s second year. The plants 3 to 5-inch leaves have pear shaped segments and a strong, pungent scent when touched. Rue should not be planted near walkways where people can easily come in contact because some people have developed poison ivy-like blisters from touching fresh Rue.



Photo: Connie Balliet

The Rue plant is a powerful herb that should not be handled by pregnant women. Historically people have believed that Rue has magical powers and because of its strong smell it was placed in doorways to ward off evil spirits. It is a natural insect repellent. Rue grows best in full sun, is drought tolerant and thrives in hot, dry sandy soils. Rue can be propagated from cuttings and seeds germinate in about 14 days. For more information visit:

<http://blogs.ifas.ufl.edu/nassauco/2017/06/09/fact-sheet-rue/>

<http://blogs.ifas.ufl.edu/washingtonco/2013/11/08/4-h-alert-fall-herbs-are-a-black-swallowtails-delight/>

<http://edis.ifas.ufl.edu/vh020>

Water Wise Advice for Your Landscape

Lori Powell, Master Gardener Volunteer

Water for irrigation is the largest use of water from municipal water supplies in Florida. Water is a limited resource and should be used wisely. Overwatering depletes the water supply and can make landscapes more susceptible to diseases and pests. Here are some things you can do:

- Follow water restrictions (see page 4 for more information on water restrictions).
- Get a rain gauge to determine how much water your lawn needs.
- Calibrate your irrigation system. The ideal amount of water for lawns is ½ -¾ inch per week. Visit https://clce.ifas.ufl.edu/media/trenholm_calibration.html or <http://gardeningolutions.ifas.ufl.edu/care/irrigation/calibrating-your-irrigation-system.html> for instructions.
- Check your shut off device. Shut off devices need to have parts replaced occasionally. If it’s raining and your sprinkler system is running, then your shut off device needs to be replaced. Replacements can be found at your local hardware store.
- Don’t water your landscape if it has rained in the past 24 hours.
- Water early in the morning. Less water will be lost to evaporation during this time of the day. Watering in the evening can leave blades wet making them more susceptible to fungus.
- Check to make sure your sprinkler heads are not blocked by large shrubs or other obstacles and that prevent water from getting on your landscape. Ensure that sprinkler heads are properly adjusted to water your lawn and not the street or sidewalk. Check to make sure sprinkler heads are not broken.



UF/IFAS Flagler County Extension Master Gardener

150 Sawgrass Rd
Bunnell, FL 32110
Phone: 386-437-7464
Fax: 386-586-2102
E-mail: mgardener@flaglercounty.org

Our Mission

To assist Extension Agents in providing research-based horticultural education to Florida residents.

Our Vision

To be the most trusted resource for horticultural education in Florida.

Answers to Crossword Puzzle on page 3.

Across

- 4. nine
- 5. fortieth
- 8. Washingtonoaks
- 9. redbud
- 10. milkweed

Down

- 1. Bunnell
- 2. PalmCoast
- 3. bromeliad
- 6. fairchild
- 7. Matthew

On-Going Events

Flagler County Public Library, Palm Coast

Master Gardener Volunteers will be available to respond to lawn, landscape and pest management questions with research-based solutions from the University of Florida from 9 a.m. to 11 a.m. on the last Saturday of every month.

Washington Oaks State Park

Master Gardener Volunteers are at the Washington Oaks State Park Plant Sale on the second Saturday of every month from 10 a.m. to 12 p.m. to answer questions and provide advice.

Speaker's Bureau

We are available to non-profits, homeowners associations, clubs, etc. Contact us if you would like an Agent or Master Gardener to present information to your group on horticultural topics. Contact: Sol Looker 386-437-7464 or lookers@ufl.edu.

Stay Connected!

Flagler County Extension: <http://sfyl.ifas.ufl.edu/flagler/>

University of Florida Solutions for Your Life: <http://solutionsforyourlife.ufl.edu/>

Florida-Friendly Landscaping™: <http://ffl.ifas.ufl.edu>

University of Florida Gardening Solutions: <http://gardeningsolutions.ifas.ufl.edu/>

University of Florida Master Gardener: <http://gardeningsolutions.ifas.ufl.edu/mastergardener>

If you are interested in joining the Flagler County Master Gardener Program, please contact the Extension Office at 386-437-7464.