

# GreenThumb

Seminole County Quarterly Horticulture Newsletter

Gabrielle Milch Urban Horticulturist Seminole County Extension

407-665-5558 gmilch@seminolecountyfl.gov

# Working for you and with you

-

- Table of Contents: To go directly to a page, scroll over subject line, hold down the Ctrl key and click the mouse or press "Enter."
- To return to THIS PAGE: scroll over Return to "Table of Contents" and click the mouse or press "Enter."
- If a link will not work for you, copy and paste it into your browser.

# Table of Contents

Oriental Fruit Fly 2
The Situation 2
Oriental Fruit Fly Stats 2
What Can We Do? 2
Lawn & Order3
Large Patch/Brown Patch3
Horticultural Services
Strawberries5
Varieties5
General Growing Conditions5
Other Planting Methods5
There's an App for that6
Plants6
Irrigation6

Citrus 6
Tap the FAWN up-to-date weather information 6
Seminole County Master Gardener EXPO7
Community Classes7
Create a Humane Backyard8
Butterfly Puddle
Mini toad pool8
Install a toad abode8

# **PEST ALERT**

The Oriental Fruit Fly found in alarming numbers in the Miami-Dade area

# **Oriental Fruit Fly**

### The Situation

MIAMI, Fla. Sep 15, 2015

Florida Commissioner of Agriculture Adam H. Putnam [today] declared a state of agricultural emergency due to the Oriental Fruit Fly infestation in Miami-Dade County.



The Oriental Fruit Fly is one of the most serious of the world's fruit fly pests due to its potential economic harm. It attacks more than 430 different fruits, vegetables and nuts, including avocado, mango, mamey, loguat, lychee, longon, dragon fruit, guava, papaya, sapodilla, banana and annona.



The fruit flies lay their eggs in host fruits and vegetables. Since the first detection of the Oriental Fruit Fly on Aug. 26, 2015 in Miami-Dade County, a total of 158 flies were detected, specifically in the Redland area (156), Kendall (1) and Miami (1). "The Oriental Fruit Fly ... poses a significant threat to Florida's \$123 billion agriculture industry and the two million jobs it supports. Miami-Dade County's agriculture industry is a \$1.6 billion industry, and we will use every weapon in our arsenal that's necessary to eradicate this pest and protect Florida agriculture and our economy," stated Commissioner of Agriculture Adam H. Putnam.

To eradicate this pest, a 1.5-square-mile area around the fly detections is treated. This treatment consists of attracting male flies to bait which consists of an attractant, an insecticide, and a thickening agent. The flies die when they

#### feed on the bait. The application will continue for one life cycle of the fly, which is approximately 90 days.

http://www.freshfromflorida.com/News-Events/Press-Releases/2015-Press-Releases/Commissioner-Adam-Putnam-Declares-State-of-Agricultural-Emergency-for-Oriental-Fruit-Fly-Infestation

## **Oriental Fruit Fly Stats**

- 1. One female can lay up to 3,000 eggs in her lifetime. She lays those eggs in preferably ripe fruit, but less ripe fruit is also used.
- 2. Development from egg to adult under summer conditions requires about 16 days.

Female laying eggs

- About nine days more are 3. required for attainment of sexual maturity.
- 4. Therefore, left unchecked, every 25 days a new batch of adult flies are "ready to go." Zowie!



5. http://entnemdept.ufl.edu/creatures/fruit/tropical/orie ntal\_fruit\_fly.htm#life

## What Can We Do?

Citizen awareness and willingness to participate in the solution is a vitally important element in detection, range and eradication of these destructive pests.

Scientists and growers are working hard to contain the spread and are asking all Floridians to do their part by not purchasing or receiving fruit, vegetables or plants from any source originating from the Miami-Dade area until further notice. Ignoring this request could spread the infestation to the small farms and home gardens in Seminole County and would be counter-productive.

If you suspect local infestation, immediately notify the Seminole County extension agent: Seminole County Extension Service 250 W. County Home Road, Sanford 407-665-5558

### Large Patch/Brown Patch

Credit: M. L. Elliott and P. F. Harmon<sup>2</sup> G. W. Simone; T. Johnston Source: University of Florida/IFAS:

#### SS-PLP-5/LH044: Large Patch

Other Names: Rhizoctonia blight Pathogen: *Rhizoctonia solani* Turfgrasses Affected: All warm-season turfgrasses, especially St. Augustinegrass and zoysiagrass are susceptible.

**Occurrence:** This disease is most bothersome from **November through May** when temperatures are below 80°F and is triggered by rainfall, excessive irrigation or extended periods of high humidity – any weather condition that caused the leaves to be continuously wet for 48 hours or more.

**Symptoms/Signs:** The fungus infects the leaf area closest to the soil, eventually killing the leaf. A soft, dark rot occurs at the base of the leaf and leaves will easily pull off the stem.



This fungus does not affect the grass roots.

Rotted base of leaf due to brown patch.

This disease usually begins as small patches (about 1

ft. in diameter) that turn yellow and then reddish brown, brown or straw colored as the leaves start to die. Patches can expand to several feet in diameter. It is not uncommon to see rings of yellow or brown turf with apparently healthy turf in the center. Turf at the outer margin of a patch may appear dark and wilted.





Brown patch symptoms on St. Augustinegrass.



Brown patch symptoms on zoysiagrass.

Note that the outer edge is a darker color indicating the fungus is active at this point.

This disease is often confused with herbicide damage on St. Augustine grass. Herbicide damage may cause the same overall symptoms of yellow or brown patches. The leaf may still pull out of the leaf sheath, but the base of the leaf is not dark and rotted. Instead, the leaf base is dry with a tan discoloration and there is no distinct smell of rot.

**Cultural Controls:** Avoid excessive nitrogen application during potential disease development periods. Use slowrelease nitrogen sources as opposed to readily available forms, such as soluble liquids or quick-release nitrogen sources. Apply a balanced fertilizer containing equivalent amounts of potassium and nitrogen, preferably a slow-release potassium form.

Irrigation should only occur when necessary in the early morning (between 2:00 and 8:00 a.m.) <u>when dew is already</u> <u>present</u>. Mow diseased areas last since mowers can spread this disease. Wash the mower of all turf clippings before proceeding to the next site.

If in doubt, take a sample to the Help Desk at the Seminole County Extension Office. *The sample should be from the outer edge of the diseased area, where the disease is still active.* <u>Help</u> <u>Desk contact info</u>

# **Horticultural Services**

## Working for you and with you

#### Soil Testing

The University of Florida recommends that you test your soil every season in order to maintain optimal results.

#### http://edis.ifas.ufl.edu/ss494

The Master Gardener Help Desk will test the pH of your soil in the office: \$2.00 per sample.

Call for instructions or request a copy of the brochure that fully explains the proper way to collect samples: 407-665-5550.

For a more comprehensive soil test, the Help Desk personnel will provide you with the requirements, cost and the packaging to send your sample(s) to the University of Florida.

> 9 am — 12 pm AND 1 pm — 4 pm 407-665-5550

#### Master Gardener Help Desk

An experienced Master Gardener will help solve garden problems through discussion, knowledge and computer research.

Other services include, but are not limited to:

- Plant Problems: bring us a sample of your plant, including the flower and the pest.
- Plant identification and care
- Irrigation questions and solutions
- Bug and treatment identification
- The Help Desk has a wide range of FREE printed copies of University of Florida IFAS publications. Come on in and browse the collection.

#### PLEASE NOTE:

# At this time, we are not equipped to send pictures nor perform house calls.

#### Classes

The Extension Service continually offers specific classes relevant to the season and needs of the community. Class offerings include:

- Vegetable Gardening
- Micro Irrigation
- Rain Barrels
- Hydroponics
- Organic Gardening
- Container Gardening
- Butterfly Gardening
- Vermciluture (Worm Humus) Farming See: Calendar

**School Gardening** 

The Master Gardeners have launched an extensive on-site interactive school gardening program. Currently, the gardeners are concentrating working with the students at several of the counties elementary school. We are partnering with SCPC Dividends Volunteer Program. Other schools planned for 2016.

For more information: G. Milch: 407-665-5558.

## MASTER GARDENER EXPO Saturday, March 6, 2016

#### 9:30 a.m. -3:30 p.m.

This yearly event features local expert speakers, plants and supplies, vendors and gardening advice. Lots of fun! If you are interested in a booth or other display, contact:

#### Master Gardener Plant Sale

This is an event that residents look forward to each year! This event offers beautiful locally grown plants and generous donations from local nurseries. Traditionally held in the spring at the Seminole County Extension Service Complex.

#### Seminole County Garden Walk

This is a neat opportunity to visit extraordinary private gardens throughout the county. Residents open their gardens to the public for a day. A printed guidebook includes a map of the location of each garden. You choose which gardens you want to see. A Master Gardener stationed at each garden will answer any questions you may have.

If you would like your garden considered, call G. Milch, 407-665-5558.

#### **Theme & Demonstration Gardens**

- **Micro Irrigation**: The Florida Friendly Landscaping Florida Native Plant garden and the vegetable garden at the Seminole County Extension.
- **Butterfly Garden** at the Seminole County Extension complex: This garden includes a pond demonstrating natural filtration and ground bee houses.

#### "Ask a Master Gardener" booth at special events

You will often find this service at local municipal events such as May Day; Arbor Day; Plant Sales; Expos/community celebrations, etc. If your community or business would like to have an "Ask a Master Gardener" booth at your event, contact Gabbie Milch: 407-665-5558.

## **Strawberries**

OCTOBER



**Strawberries:** Prepare beds and set strawberry plants this month. Strawberries also make a colorful and tasty container planting.

Single-crown (stem) strawberry plants are planted in Florida during the fall, from late September to early November. Flowering and fruit production generally begins in November and continues into April or May. Understand that strawberries take consistent monitoring and knowledgeable pest control for a successful crop.

#### Varieties

There are four varieties from which to choose for the Central Florida garden: 'Camarosa', 'Sweet Charlie', 'Festival and Radiance". These produce attractive, flavorful berries suitable for eating fresh or for freezing. They produce more fruit during the early part of the season and have been the most productive varieties in Central Florida.

'Radiance' is a newer variety that produces more fruits earlier and throughout the season in Central Florida. However, the plant is not as strong as the other varieties listed and may require careful handling and attention during establishment. These varieties are capable of producing 1 to 2 pints of fruit per plant over the season.

#### **General Growing Conditions**

Temperatures between 50 and 80°F (10 and 27°C) and day lengths 14 hours or less are required for the development of flowers and fruit on most strawberry varieties. All strawberry plants are susceptible to freezes.

Strawberries grow best in a location receiving at least 8 hours of direct sunlight per day. If a full sun location is not available, choose a spot that is sunny during the morning and early afternoon. The soil should be well drained and slightly acidic (pH  $_{5.5}$ - $_{6.5}$ ).

For large gardens, most commercial growers use raised, double rowed beds. This method creates a well-drained soil environment in which roots have sufficient oxygen for survival during periods of heavy rain. This is also the best choice for the home gardener. Raised beds also make hand harvesting easier.

Fertilizer with micronutrients is very important. Incorporate into the soil before planting.

Drip or tubing irrigation placed under the sheeting is the standard watering method. It provides direct watering without heavily wetting the leaves. Place poly sheeting on top of the soil for excellent weed control that keeps the fruit cleaner.

#### **Other Planting Methods**

There are many clever ways home gardeners are growing strawberries: hanging pots, strawberry pots, used rain gutters, old tires, or wine bottles – the list goes on and on.



Growing Strawberries in the Florida Home Garden Publication# HS1154 (http://ufdc.ufl.edu/IR00002666/00001)

Strawberry Production in Florida (commercial grower) Publication #HS736 <u>https://edis.ifas.ufl.edu/cv134</u>

# Florida-Friendly

#### Taryn Sudol FFL Extension Agent UF-IFAS Extension at Seminole County 407-665-5575 tsudol@seminolecountyfl.gov www.seminolecountyfl.gov/fyn

#### 1. Right Plant, Right Place

- 2. Water Efficiently
- 3. Fertilize Appropriately
- 4. Mulch
- 5. Attract Wildlife
- 6. Manage Yard Pests Responsibly
- 7. Recycle
- 8. Reduce Stormwater Runoff
- 9. Protect the Waterfront

# There's an App for that

#### Plants



Wouldn't it be great to have a very affordable mobile web application that works on any device with a web-enabled browser that gives you all the information you need to choose the Right Plant and put it in the Right Place without extensive searches that gobble up your time?

It's here! Developed by the University of Florida and released in July 2013, this app offers unbiased, science-based guidance about plants, according to the UF Environmental Horticulture Department's Bart Schutzman, who conducted the groundwork for the underlying database that drives the application.

"The great thing about this mobile web app is that all the information has been scientifically vetted, so we're not trying to sell anyone on a particular plant," said Esen Momol, director of the Florida-Friendly Landscaping program. "And since it is mobile you can have the information with you just about anywhere you go."

How great is that? You can go to the app to view the design and see if it will work for you, then sign up and get started. There's no learning curve. The mobile web application has an annual cost of \$1.99 and is available at https://ffl.ifas.ufl.edu/plants

#### Irrigation

UF/IFAS offers an urban lawn app that estimates how long you'll need to water your lawn to meet current plant water demand. It uses a simplified approach for automated irrigation systems. This urban lawn model uses meteorological data to compute a simple, real-time weekly water balance, said Kati Migliaccio, UF/IFAS associate professor in agricultural and biological engineering and lead designer of the app. <u>http://smartirrigationapps.org/urbanlawn-app-development/</u>

#### Citrus

http://smartirrigationapps.org/citrus-app-development/

The citrus Smartphone app for irrigation scheduling will use estimated soil water balances in multiple soil areas and layers under a mature citrus tree using tree spacing and irrigation system information provided by the user (Beck et al. 2006; Morgan et al. 2006b).



This app will provide users with an irrigation schedule based on a water balance and real-time weather and forecasted data intended to conserve water while also minimizing nutrient leaching from the root zone.

Other apps for growing cotton, citrus, avocado, strawberries and vegetable crops are also available. <u>http://smartirrigationapps.org/</u>

#### Tap the FAWN up-to-date weather information

Initiated in 1997 with a legislative appropriation, UF/IFAS launched the Florida Automated Weather Network (FAWN). Originally, sixteen sites were established and integrated into an existing county Cooperative Extension Service database. There are now a total of 35 sites. FAWN's database is housed in the University of Florida Computer Center with 24-hour support. <u>http://fawn.ifas.ufl.edu/</u>

# Seminole County Master Gardener EXPO





An opportunity for residents and local vendors to meet and greet

Locally grown plants; local crafts; children's corner; food trucks; gardening information; expert speakers and more!

This will be the 7<sup>th</sup> successful year! Lots of people, neighbors meeting neighbors and fun – great times!

Location: "Right around the Corner": Seminole County Extension Service parking lot and surrounding grounds

(near Seminole State College, County Home Road; next to Hwy. 17-92 and across from Flea World.

VENDORS: A limited number of spaces are available in each category. Reserve now for the best location and best price: *Fee: now thru November 30:* \$25 single width; \$50 doublewide. December 1: \$50 single width; \$100 doublewide Contact: Melody Gaston at: <u>melodygaston.mastergardner@gmail.com</u>

## **Community Classes**

October 15	For the Birds
6:30 pm – 8:30 pm	Seminole County Extension Auditorium
Free	250 W. County Home Road, Sanford
	REGISTRATION on line: http://www.eventbrite.com/event/18052057189
October 20	Landscape Design
6:30 pm – 8:30 pm	Seminole County Extension Auditorium
Free	250 W. County Home Road, Sanford
	REGISTRATION on line: <u>http://www.eventbrite.com/event/18052099315</u>
November 5	Turf Alternatives
6:30 pm – 8:30 pm	Seminole County Extension Auditorium
Free	250 W. County Home Road, Sanford
	REGISTRATION on line: http://www.eventbrite.com/event/18052242744
December 7	Composting & Mulching
6:30 pm – 8:30 pm	Seminole County Extension Auditorium
Free	250 W. County Home Road, Sanford
	REGISTRATION on line: <u>http://www.eventbrite.com/event/18052307939</u>
	Contact: Gabbie Milch, Master Gardener Coordinator, Seminole County, Florida: 407-665-5558

# Create a Humane Backyard

A place that offers food, shelter, water, refuge from toxic sprays, and safety from mowers—it's what every creature wants, right? They want a Humane Backyard. By making simple changes, you can create that haven of comfort and security for local wildlife. And you can do it anywhere: in the city, suburbs, or country.

## **Butterfly Puddle**

Butterflies drink by "puddling". They sip at shallow puddles of water in mud or sand instead of landing in large open water areas. Where nectar provides the proteins, the mud and sand provide the



necessary nutrients such as salts and amino acids that play various roles in their physiology, ethology and ecology.

Males seem to benefit from the sodium uptake through mud-puddling behavior with an increase in reproductive success. The collected sodium and amino acids transfer to the female with the spermatophore during mating as a nuptial gift. This nutrition also enhances the survival rate of the eggs. <u>https://en.wikipedia.org/wiki/Mud-puddling</u>

Use unadulterated sandy soil from an area of your own yard to create a local dish puddle or purchased play sand.

Puddles can be elevated or an impression in the soil. The puddle should be at least 18" wide and about 3" deep. Place it in the middle of a garden in the shade or near a larger plant.

Cover at least 3/4 of the dish with the sand/soil mixture. Add water to moisten but do not overfill, butterflies cannot land in open water. NOTE: really dry Florida soil often resists water but if you just keep stirring, it will mix in.

Instead of water, you can use butterfly nectar or stale beer mixed with rotting banana or just the banana which will ferment, drawing in the butterflies. You will have to replace this on a regular basis. Add several stones and/or sticks throughout the sand for butterflies to rest; and you are done.

In hot weather, check every day to make sure the puddle is moist. You want to create a reliable source so the butterflies return and bring friends. You can elevate the need for *changing* the water by using a terra cotta dish. The dish will naturally drain after a day or two.

## Fill up the (bird) tub

#### http://www.humanesociety.org/animals/resources/tips/wa ter\_wildlife.html

Birds will surely use a backyard birdbath to have a drink and cool off. Look for a bath with a non-slip surface, wide edges, and gently sloping sides that come to a center no deeper than three inches. Choose one made of non-toxic materials that won't rust or leach chemicals.

Place it near a bush or tree birds can fly to for cover, but not near low vegetation in which a predator might hide.

Refill and give a quick scrubbing every couple days, and clean it weekly with a solution of one part chlorine bleach to nine parts water. (Rinse well before refilling!)

Add sound effects with a dripper feature: suspend a jug over the bath with a hook or wire, fill with water, and punch a hole  $\frac{1}{2}$ " from the bottom. Water will drip from the hole, splashing in the water.

### Mini toad pool

Cooling stations for amphibians can be win-wins: you'll help them beat the heat and help limit those gardendwellers you may like seeing less of (mosquitoes, earwigs, flies, slugs, and snails). Install this quick and easy pool for toads (and maybe frogs and salamanders, too).

Place a shallow flowerpot saucer or trashcan lid (10-inch diameter or larger) in the ground with the lip at ground level and fill with water. Plant grasses, sedges, or ferns around the edge, and add stones or branches for easy entry and exit. Keep the water as clean and fresh as you would with a birdbath.

## Install a toad abode

nearby to offer shady relief from the heat. This is a picture of a commercially produced toad abode -'bet you can craft one yourself. They seem to find the most innovative places from which to startle the casual gardener.

