

Commercial Clippings

FOR THE NORTHEAST FLORIDA GREEN INDUSTRY
Serving Clay, Duval, and Nassau County

UF IFAS Extension
UNIVERSITY of FLORIDA

April/May 2015

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<http://duval.ifas.ufl.edu>

Armillaria Root Rot is Active By Erin Harlow



Mushrooms produced by Armillaria Photo credit: Dr. Jason Smith, UF, SFRC

plants. This pathogen can also affect small woody shrubs and trees such as laurel oaks and sweet gums.

Plants with this disease may have thin canopies, wilting branches, dieback, and loss of vigor. If you don't see the mushrooms, check the bark by peeling back a layer of the outer cambium. You are looking for white mycelium (photo on the right).

This disease is not treatable with a fungicide. You may have many plants that are affected, but not die right away until they are really stressed normally by environmental factors such as temperature or humidity changes. It is best to remove infected plants and replace them with healthier ones. For more information on Armillaria Root Rot, visit Gardening in a Minute http://gardeningolutions.ifas.ufl.edu/giam/problems/diseases_and_pests/mushroom_root.html to access publications or listen to a radio show about the disease.

Mushroom Root Rot or Armillaria is a disease that affects many woody landscape plants and is active in the spring and fall. Symptoms range from wilting to death. You may notice dieback either in sections or on the entire plant. Symptoms can appear quickly, but often they develop slowly over time. Mushrooms are normally observed in the fall (photo right), but not always. This fungal disease can kill most ornamental plants and is particularly damaging to stressed



White fungal mycelia fan of Armillaria Photo credit: Dr. Ed Barnard, FL DOF/DOACS

Disease Alert Update: Mosaic Disease of St. Augustinegrass Confirmed in Clay County

St. Augustine Mosaic Virus was confirmed last month by UF's plant pathologist, Dr. Phil Harmon. At this time, the disease most greatly affects 'Floritam' St. Augustine, but does infect other cultivars and turf species. The disease causes yellow streaking on the blades, followed by necrotic spots and finally death. To learn more about the disease, follow the UF Plant Diagnostic Center facebook page at <https://www.facebook.com/PlantDiagnosticCenter> or refer to UF's publication, Mosaic Disease of St. Augustinegrass Caused by Sugarcane Mosaic Virus, #PP313, at <http://edis.ifas.ufl.edu/pp313>. If you think you might have a lawn positive for this disease, please contact your Extension Office.

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2015

May 6, 2015
June 3, 2015
July 1, 2015
Wednesday
(Duval)

Pesticide Testing

9:15 am
Please pre-register by either calling 904-255-7450 or if you are taking a restricted-use or limited pesticide test then you can register to take the test via a computer at our office. You have to sign-up for a voucher and test date at <https://pesticideexam.ifas.ufl.edu/>.

April 9, 2015
Thursday
(Duval)

Limited Commercial Landscape Maintenance Workshop

8:15 am - 3:00 pm - Full Day; 8:15 am – 12:00 pm - Half Day
\$30.00 for either full or half day

May 14, 2015
Thursday
(Gainesville)
352-955-2402

6 CEUs Total: 3 CORE & 3 LCLM, 3 LL&O, or 3 L&O
Lunch included, textbooks not included
Optional LCLM or LL&O Exam at 3:00 pm
You must have all required paperwork to take the exam.

June 4, 2015
Thursday
(Lake City)
386-752-5384

To register, download the brochure, or for more information about the exam or books, please visit: <http://duval.ifas.ufl.edu/LCLM2012.shtml>.

August 20, 2015
Thursday
(Clay)
904-284-6355

This class is designed for people who do not have their license yet. If you are re-certifying your LCLM or LL&O you should consider attending a different class that offers those CEUs. There are many to choose from throughout the year.

April 14, 2015
Tuesday
(Duval)

Pest Control Operator CEU Day

CEUs & Technician Training Hours Provided as well.
8:00 am - 9:40 am Lawn & Ornamental (\$5.00) (2 L&O, 2 LUF, 2 LL&O, 2 LCLM, 2 O&T, 2 Pvt)
10:00 am - 11:40 am CORE (\$5.00) (2 CORE 482, 2 CORE 487)
11:40 am - 12:30 pm Lunch from Clara's Tidbits (\$15.00) Optional
12:30 pm - 2:10 pm - General Household Pests (\$5.00) (2 GHP, 2 LS)
2:30 pm - 4:10 pm - Wood Destroying Organisms/Termite (\$5.00) (2 WDO)
2:30 pm - 4:10 pm - Public Health (\$5.00) (2 PH) (concurrent session)

**Including
2 Hours of
Public Health!**

Pre-register for lunch by emailing Erin Harlow at erine@coj.net or paying online at http://duval.ifas.ufl.edu/PCO_CEU_Day.shtml.

Multiple Categories of CEUS & Tech Hours



Find us on:
facebook

[https://www.facebook.com/
DuvalCountyAgriculture](https://www.facebook.com/DuvalCountyAgriculture)

All classes require pre-registration

Unless stated will be held at the
Duval County Extension Office, 1010 N McDuff Ave, Jacksonville, FL 32254
To register visit us at <http://duval.ifas.ufl.edu> and click Commercial Horticulture/Calendar
or call 904-255-7450

**March 30, April 13,
20, 27
(Duval - Monday
Evenings)**

ISA Arborist Exam Preparation

5:00 PM - 9:00 PM
\$50.00

To register visit : <https://www.eventbrite.com/e/certified-arborist-exam-preparation-tickets-15570916029> or make checks payable to DCOHAC and send to:

Larry Figart, 1010 N McDuff Avenue, Jacksonville, FL 32254

This course is designed to review some of the important concepts of the Arborist Certification Study Guide. This course will augment any study program you may be currently doing. **It does not take the place of studying for the exam.** Each participant will receive a notebook with program notes.

**April 28, 2015
Tuesday
(Gainesville)
352-955-2402 to
register**

Best Management Practices for the Protection of Water Resources by the Green Industries (GI-BMPs)

8:30 am – 3:30 pm
\$25.00

4 CEUS: 2 CORE & 2 L&O, 2 LCLM, 2 LL&O, 2 O&T or 2 Pvt, 4 LA CEUs, Technician
Training hours also available.

**May 14, 2015
Thursday
(Duval)**

To register, download the brochure, or for more information about the workshop, please visit: <http://duval.ifas.ufl.edu/GI-BMPs.shtml>.

**June 30, 2015
(Gainesville)
352-955-2402 to
register**

This is the pre-requisite class for the Urban Fertilizer License. Everyone who works with fertilizers for-hire is required to have this license by Jan 1, 2014, even if you are licensed in another category including pest control operators. You will complete your GI-BMP test the day of the class, if you pass, you can then apply to get your Limited Urban Fertilizer License through the State of Florida.

**April 28, 2015
Tuesday
(Duval)**

Pest Management University: Basics of Ornamental Plant Pest Management

8:00 am - 5:00 pm
\$ 50.00
7 CEUs: O&T, L&O, LCLM, LL&O, Pvt
2 CEUs: LUF

This workshop focuses on ornamental plant management for pest control technicians. Topics covered include common ornamental plants, fertilizers, weeds, diseases, and insects.

Speakers include: Dr. Eileen Buss, Dr. Chris Marble, Larry Figart, and Erin Harlow
Lunch and materials are included.

Common Galls on Oak Trees

by Larry Figart , Urban Forestry Extension Agent

Every year it at this time we start getting a lot of phone calls about little round balls falling out of trees. Sometimes they are fuzzy, and sometimes they are smooth. The fuzzy balls falling to the ground are called woolly oak leaf galls. They are usually attached to the lower surface of an oak leaf and fall off of the leaf. The smooth BB like gall is called the live oak pea gall. The galls we will be learning about in this article are all formed by insects, but galls can be formed by insects, fungi and even bacteria.



Woolly Oak Leaf Gall



Whitney Cranshaw, Colorado State University, Bugwood.org

The most prolific insect that causes galls is called a gall wasp. Most gall wasps are in the Cynipidae family and are called cynipid wasps. These wasps are very small and all but a few species are less than 1/4 inch in length. Color varies greatly. Some species are black, others are red, yellow, or amber. The larvae are legless and both larvae and pupae are white in color. The gall wasp eggs are usually laid in actively growing plant tissue. The irritated plant tissue quickly surrounds the egg or immature insect, and protects and provides food for the gall-maker until it matures. The confusing (or interesting) thing about cynipid wasps is that they have two different life cycles that skip a generation and look completely different from each other. For instance, one generation of bullet gall wasps are all female and they lay eggs that create small galls on leaves. The adults from these galls can be male or female when they emerge from the leaf gall. Then the male and females deposit eggs on twigs that become twig galls. Each generation can last from a month to three years. The image to the left is a rough bullet gall wasp ovipositing into an oak bud.

Most oak wasp galls are harmless to the tree and people. In some cases, the galls can cause cosmetic damage and occasionally they can cause significant dieback in heavy infestations. Chemical control is difficult at best. However, if populations are a problem, target the adult gall-makers before they lay eggs (often at bud break) with a contact insecticide. Correct timing is important. Monitor adult activity by placing sticky traps near the galls and dissect several galls a week to track insect development.

For more information on Insect Galls See: <http://edis.ifas.ufl.edu/pdffiles/MG/MG32500.pdf>



[HTTP://DUVAL.IFAS.UFL.EDU](http://duval.ifas.ufl.edu)

Come check out what else is going on at the Extension Office!

Caterpillars Everywhere

By Larry Figart

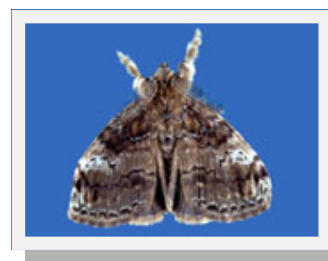
It is bad enough that spring in NE Florida brings us tons of irritating pollen, shedding live oaks, and very little rain; we also have to deal with calls about pesky caterpillars. While this is not unusual, the Tussock Moth has been seen this spring in droves climbing trees and the sides of houses. The tussock moth *Orgyia detrita* is the most common tussock moth that we see. It can be identified by its red head, two black "hair pencils" projecting forward like antennae, four dense tufts of hair its back, and a single hair pencil projecting to the rear like a tail. They will also have orange-colored spots along the back and sides.

Tussock moths can be found around oak trees, their primary food. They rarely cause any problem on the trees though. What makes them a pest is the fact that the hairs on their body can be an irritant to many folks. Touching the caterpillars, for people that are sensitive, can bring about localized swelling, itching, burning and redness. Special concerns tend to surround daycares where the caterpillars may drop from the trees on small children and playground equipment. The best advice is to suspend outdoor time for a few weeks until the caterpillars pupate. When the caterpillars are ready to pupate, the larvae will leave the tree and spin their cocoons on outdoor furniture, stored boats and the walls and soffits of our houses. The cocoons are fuzzy, tan, football-shaped masses about an inch long.

Removing the cocoons may be a preferred form of control. The female moths that emerge are wingless and will mate soon after emergence, lay eggs on the surface of the cocoon and die. Removing the cocoons will reduce the next population by removing larvae and eggs if the female moths have already emerged. When removing cocoons, where long sleeve shirts and gloves because the cocoons also contain the irritating hairs. Use a stick or some other scraping object to reduce exposure to the cocoons. If the caterpillars are still feeding chemical control options are available. Products containing *Bacillus thuringiensis* (Bt) can be safe and effective.



Three types of Tussock Moth Caterpillars found in Florida. UF



Adult Male. UF

Rainbird Irrigation Academy coming to Jacksonville!

April 20, 2015 - Introduction to Irrigation & Installation
 April 21 & 22, 2015 - Irrigation Technician Course—2 Day
 April 23, 2015 - Landscape Irrigation Design Process
 April 24, 2015 - Efficient Irrigation Scheduling



To register or for more information visit http://www.prereg.net/rainbird3/list_events.cfm?id=931&code=&emp= or call

This is not a University of Florida event, although the class will be held at the Duval County Extension Office.

“Die Hard”: Soil Compaction vs Plants By Amy Morie

There are some sites where it seems no plant is destined to grow well. This is especially true for sites suffering from compacted soils. Soil compaction is a common problem in urban areas, where repeated traffic occurs. It's also common on newer construction sites from heavy equipment. If you've got an area where plants consistently under-perform, or a spot with repeated replacements of plants or turf, then it's time to dig down to investigate other potential causes to the problem.

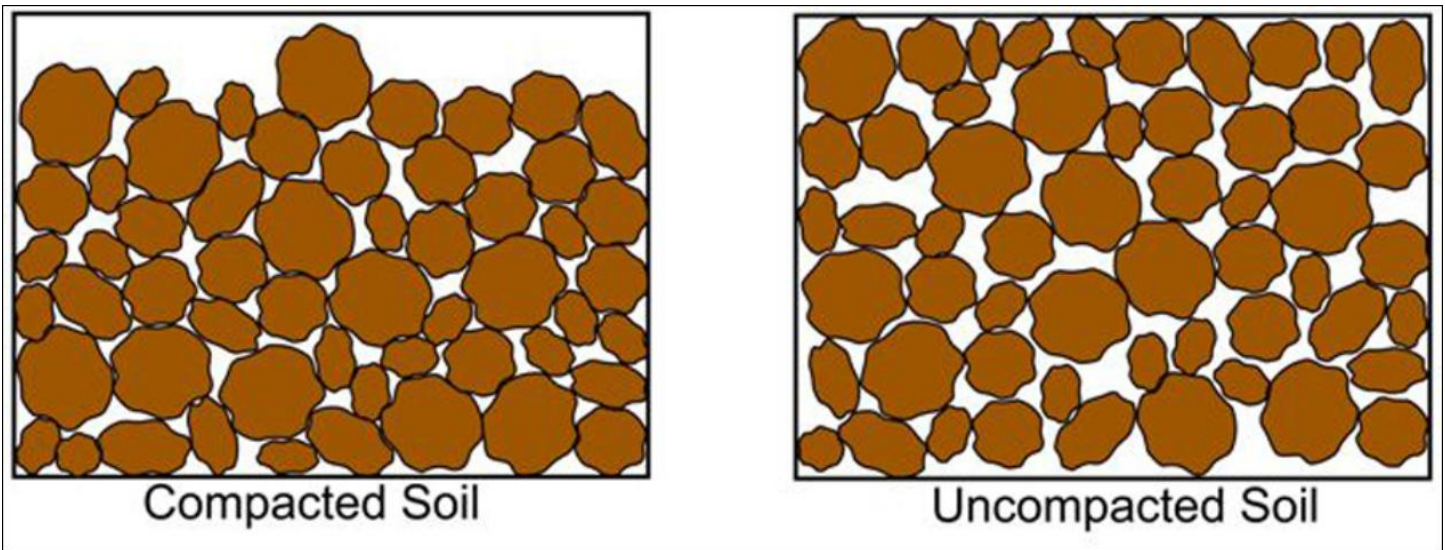
Basically speaking, soil compaction is compression of the soil particles that decreases the pore space between particles. Compaction harms plants in several ways:

There is less room for oxygen to reach the roots

Roots have a harder time penetrating soil, leading to poor growth

Drainage is impeded, leading to wet roots and related diseases

Drainage problems can lead to soil loss from increased erosion and runoff at the surface



New sites will have to be checked for compaction well before planting. Once the plants are on site they will not want to wait and wilt if corrective measures are needed, and neither will your crew. Plants growing in compacted soils may exhibit stunting or generally poor growth. Decline and death can result from growing in compacted conditions. Compacted soils in wet areas may show as root rots and similar issues associated with poor drainage. An initial rudimentary test for compaction can be done with a trowel or shovel to estimate the top 6" or so. If you can penetrate this easily, use a wooden stake and mallet to test to about 18" deep (WARNING – first call 811 to determine where utilities exist underground and do a visual inspection for irrigation lines, etc. that the client may have added)

To fix compaction may be more extensive than the planting is worth. If you find compaction and related plant problems, then discuss the alternatives with your client:

- Shallow till: decrease compaction to a depth of about 6". Useful for shallow rooted plants (herbs, succulents, some annuals, new turf) but not for larger root system plants. Cannot be done around tree roots or over existing turf.

(Continued on Page 7)



'20/20 PERFECT VISION'

The University of Florida's
20th Annual Southeast Pest Management Conference

MAY 3 – 6, 2015

Awesome Topics! Awesome Speakers!

Lunch provided each day with registration by the following sponsors: Syngenta and Dow (May 4th), B&G Equipment (May 5th), and Ewing Irrigation (May 6th)

May 4th - General Household Pests

May 5th - Termites or Fumigation

May 6th - Lawn and Ornamentals & Canine Detection Symposium

May 6th & 7th - ACE Training & Exam (Associate Certified Entomologist)

Speakers include: Dr. Dini Miller (Virg Tech), Dr. Nancy Hinkle (UGA), Bob Rosenburg (NPMA), Clay Scherer (Syngenta), Dr. George Hochmuth (UF), and others

To register or more information visit http://entnemdept.ifas.ufl.edu/sepmc/Main_Page.html

“Die Hard”: Soil Compaction vs Plants *(Continued from Page 6)*

- Air tilling: works with air pressure to move soil from root systems. This can be used around existing trees; consult an arborist for information.
- Deep till / subsoiling: this remediation approach breaks up the existing soil between 24” – 36” deep. Clay soils may require removing some existing soil to add materials that improve drainage such as organic material and coarse sand. Equipment space requirements may make some sites unsuitable for this option.
- In extreme cases, soil replacement may be required. Costs for this option will vary with the extent of remediation required; to get an idea of the extent, contact your Extension office for recommendations on root space requirements for the plants in question. This option may not be feasible on some sites due to extent of remediation required or site characteristics such as plantings too close to a building or in too narrow an area for remediation work to be performed.
- Alternative planting: seek an alternative planting scheme that can either work with site conditions or reduce drainage improvements to manageable levels – for example, converting some shrub areas to shallow-rooted groundcovers to decrease the scope of remediation.

Remember, if you suspect compaction is the problem, do a little careful digging. Your client will thank you for getting to the bottom of the problem and providing options to address the situation.

Reference:

“Soil Compaction: Causes, Concerns, and Cures.” University of Wisconsin Extension: <http://www.soils.wisc.edu/extension/pubs/A3367.pdf>

“Soil Compaction: Causes, Effects and Control.” University of Minnesota Extension: <http://www.extension.umn.edu/agriculture/tillage/soil-compaction/>

“Soil Compaction in the Urban Landscape.” UF/IFAS Extension: <http://edis.ifas.ufl.edu/ss529>

Image credit: Geoff Denny

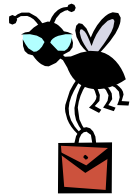
Duval County Extension
1010 N. McDuff Avenue
Jacksonville, FL 32254
(904) 255-7450
Fax: (904) 387-8902
Website: <http://duval.ifas.ufl.edu>

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Local EXTENSION Offices



Duval County
1010 N. McDuff Avenue
Jacksonville FL 32254
(904) 255-7450 Phone
(904) 387-8902 Fax
<http://duval.ifas.ufl.edu>

Erin Harlow - Commercial Horticulture/Urban IPM
erine@coj.net

Larry Figart - Urban and Community Forestry
lfigart@coj.net

Rebecca Jordi - Co. Extension Director
Nassau County
543350 US Highway 1
Callahan, FL 32011-6486
(904) 530-6353 or 1-855-212-1244
<http://nassau.ifas.ufl.edu/>
rljordi@ufl.edu

Amy Morie - Horticulture
Clay County
2463 SR 16 West
Green Cove Springs, FL 32043
(904) 284-6355
<http://clay.ifas.ufl.edu/>
amorie@ufl.edu

For individuals requiring special accommodations, please contact our office (904/255-7450) within a minimum of 5 working days of the program. For persons with hearing or speech impairments, when contacting our office, please use the Florida Relay Service at 1-800-955-8771 (TDD). Your comments and input are necessary for this to be a useful tool for all of us.

Extension Programs are open to all regardless of race, creed, color, sex, sexual orientation, marital status, age, disability, religion, national origin, political opinions or affiliations.