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

Commercial Clippings

April-May 2017

Protecting Trees and Reducing Invasive Formosan Subterranean Termites in Jacksonville

By Erin Harlow

The Formosan termite, *Coptotermes formosanus*, a native of Asia, has been in Florida since 1980. With changing environments and movement of wood, these invasive termites have spread through the southeastern US threatening historic structures and communities across the southeastern states. Once this termite has infested an area, it has never been successfully eradicated.

Formosan termites are more destructive than the native Eastern subterranean termite because the colony size can include several million individuals. Like our native subterranean termite, they need a constant moisture source. Formosans have the ability to create carton nests, in addition to, mud tubes commonly associated with subterranean termites. These nests are made from termite excrement, soil, and chewed wood and commonly found in walls and trees. The carton nests are believed to help the termites regulate colony temperature and retain moisture to sustain the colony. Damage from Formosan termites can be quite extensive. They have been known to infest living trees and will consume wood, leaving paper-thin pieces behind.

Like other termites, Formosans have three castes: reproductives, workers, and soldiers. When a Formosan termite colony is located, it is fairly easy to identify because it will consist of approximately 10% soldiers, which is a considerably higher percentage than other termite species. The soldiers have a tear-drop shaped head with an opening on the top called a fontanel. They can excrete a milky-white substance that irritates predators. They are fairly aggressive and readily attack predators with their curved mandibles.

Swarmers may be seen flying April-July in the early evening. They are attracted to lights and can be seen "swarming" in huge numbers. Swarmers are identified from other termites by their relatively large size (approximately 0.5 inch) and the hair on their wings. The body will be a yellowish color.

Read more about citywide efforts on page 7

Erin Harlow preserving a Formosan termite carton from Riverside. This carton came from a branch that was 20' in the tree during hurricane Matthew. The carton now resides at the University of Florida Department of Entomology.

Photo: Larry Figart, UF/IFAS

Inside this issue:

http://duval.ifas.ufl.edu

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SUMMER WORKSHOPS

2017

May 3
June 7
July 5
Wednesday
(Duval)

Pesticide Testing - Agricultural, Limited, Certified Pest Operator and Public Health Exams

9:15 am
Pre-register at https://aesecomm.freshfromflorida.com for all exams. For assistance with exam registration please call 904-255-7450 or email Sarah Freeman at sfreeman@coj.net. No walk-ins.

April 26
Wednesday
(Lake City)

May 12
Friday
(Putnam)

May 16
Tuesday
(Duval)

June 13
Tuesday
(Alachua)

July 18
Tuesday
(Clay)

Limited Commercial Landscape Maintenance Exam Preparation Workshop For NEW Applicators

8:15 am - 2:30 pm
$30.00 pre-registered; $40 at the door

Lunch included, textbooks not included
The exam is administered at 3:00 pm. Please register for the exam at https://aesecomm.freshfrlomflorida.com prior to coming to class.

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.

Lake City - (386) 752-5384
Putnam - (386) 329-0318
Duval - http://www.duvalextension.eventbrite.com
Alachua - (352) 955-2402 or https://www.eventbrite.com/e/limited-commercial-landscape-maintenance-lclm-workshop-tickets-30309516580
Clay - (904) 284-6355

April 25
Tuesday
(Duval)

2 CORE (482)
2 LCLM
2 LLO
2 L&O
2 LUF (4/25)

Renewal Course for Urban Landscape Licenses (LCLM, LLO, L&O, LUF (4/25))

8:45 am - 12:30 pm
4/25 - $20; $30 at the door; snacks provided
5/18 - $30; $40 at the door; snacks provided

Approved CEUs: 2 482 CORE, 2 LCLM, 2 LLO, 2LUF (4/25) and 2 L&O
This class meets the renewal requirements for all urban landscape licenses, including fertilizer.

April 25 Agenda - http://www.duvalextension.eventbrite.com
- Solving Real-world Landscape Problems: Production Selection
- Interpreting fertilizer and herbicide labels
- How to Be Safer on the Job

May 18 Agenda - 904-530-6353
- Advanced IPM Practices - Mapping & Monitoring Tools, Predator ID
- New Diseases in Ornamentals
- Alternative Foundation Plantings

Register for Workshops at http://www.duvalextension.eventbrite.com

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All classes require pre-registration

Unless stated classes will be held at the
Duval County Extension Office, 1010 N McDuff Ave,
Jacksonville, FL 32254

May 12
Friday
(Duval)

June 1
Thursday
(Alachua)

4 LA
4 FNGLA
2 LCLM
2 CORE
2 L&O
2 LL&O
2 Pvt

Green Industries Best Management Practices for the Protection of Water Resources

8:15 am - 3:30 pm, Lunch provided
$25 pre-registration; $35 at the door

This class is the pre-requisite for the State of Florida's Urban Fertilizer License. It is also a great class for people who are entering the industry.

Registration:
Alachua - (352) 955-2402 or https://www.eventbrite.com/e/green-industries-best-management-practices-certification-training-programs-tickets-30176957091?aff=erelexpmlt
Duval - http://www.duvalextension.eventbrite.com

May 1-May 3
(Gainesville)
Fumigation, CORE, L&O, GHP, LS, WDO

Southeast Pest Management Conference

More information on pg 6

May 24
Wednesday
(Orlando)

May 25
Thursday
(Tampa)

L&O
LLO
O&T

Evidence-Based Zoysiagrass Management Workshops

9:00 am - 4:00pm
$60 pre-registration; $75 at the door

http://uf_zoysiagrass_orlando.eventbrite.com
http://uf_zoysiagrass_hillsborough.eventbrite.com

Speakers include Dr. Bryan Unruh, Dr. Travis Shaddox, Dr. Kevin Kenworthy, and Erin Harlow

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April 12
Wednesday
(Duval)
2 L&O
2 LLO
2 O&T
2 ROW
2 CORE (482)
2 LS
2 GHP
2 WDO (Termite)

Pest Control Operator CEU Day

CEUs and Tech Hours
Register at https://pco_ceu2017.eventbrite.com

8:00 am - L&O - Nematodes—New Treatment Options and Diagnosing ($10)
10 am - CORE - Delusory Parasitosis & Getting the Most Out of Your Products ($10)
11:40 am - Lunch ($15)
12:30 pm - GHP - Nuisance Ants of NE Florida ($10)
2:30 pm - WDO - Termites of NE Florida and Local Efforts ($10)

Beneficial Beetles

by Wayne Hobbs, Clay County Extension

As most of you know, insects play an important role in our environment and the landscape. They breakdown waste, pollinate plants, eat pest insects, aerate the soil, and do many other jobs that make them indispensable. When you bring up the idea of insects that you want to see or protect in a garden, most people's lists may be very short and be limited to the butterflies and bees but, one unsung part of our landscape are the beetles.

Beetles are members of the order Coleoptera and are characterized by their outer wings that are hardened into wing-cases and their overall diversity. In fact, beetles make up 40% of all described insect species and 25% of all known animal species. Many fall into the beneficial category by helping the environment but several others are major pests. Many species will move from plant to plant, pollinating flowers, feed on and break down waste, but the ones we will focus on today are those that are predatory to pest insects.

Ladybeetles

Probably the most known beneficial beetle, ladybeetles often feed on aphids and other piercing/sucking insects such as whiteflies, mites, scales, or mealybugs based on their subfamily, while others may also feed on plants. The coloration of each type of beetle can range from the classic red with black dots to variations of orange, black with red dots, or even solid black. The young look quite different than the adults in their larval from, often having flashy colors or soft spines covering their body.

One of the best ways to attract ladybeetles to the garden as a form of pest control is to have plants that have their food source present. A novel approach to this is to have a banker plant, such as a Crapemyrtle that is susceptible to feeding by aphids on site which should attract predatory ladybugs. The pest will not harm any plant other than the single Crapemyrtle because they are host specific.

Blister Beetles

Lesser known that the lady beetle and another group that has both predatory and pest species are the blister beetles. Named for the chemical within their body that can cause skin blisters in humans and other mammals, the adults normally feed on flower parts of host plants, but some will also eat leaf material. The beneficial forms of some species are normally larvae that feed on grasshoppers, bees, or other blister beetles.

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Continued from pg 4

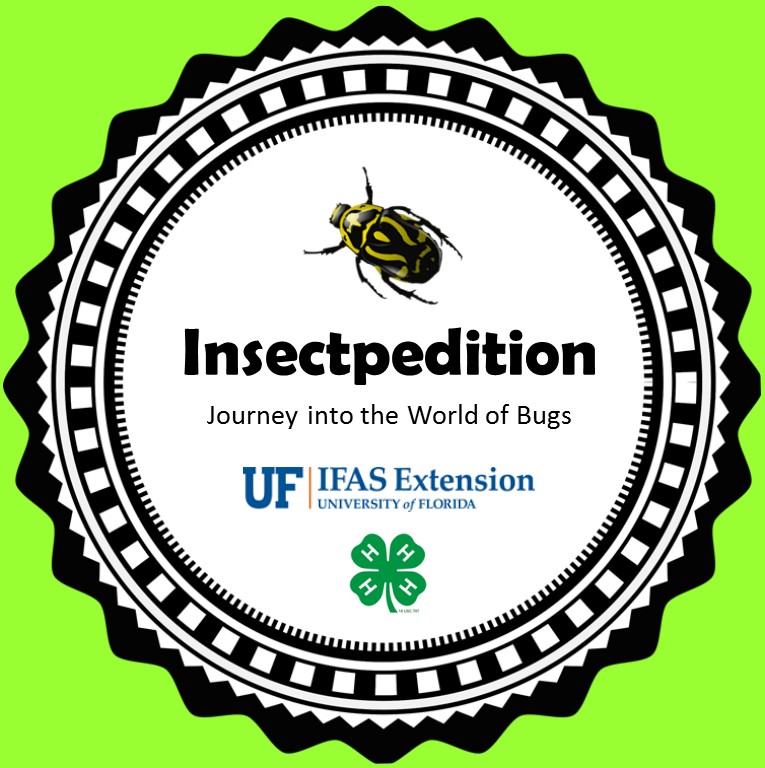
Tiger Beetles

Tiger beetles are another group that can be beneficial within the landscape. These are some of the most beautiful and showy beetles that can move very quickly and eat a variety of insects as adults. Their larvae also live within burrows in the soil and will capture insects to pull into their tunnels.

Protecting Beneficial Beetles

One of the best methods to keep beneficial beetles, and other beneficial insects on your properties is by utilizing Integrated Pest Management (IPM) principles. With IPM, you first actively and routinely look (scout) for insects, identify what you may find, decide if treatment is necessary based on the insect species, population number, and damage levels, and then use the treatment that would have the least impact on the environment and other insect life.

For example, if a pest problem is found and is not extensive, consider removing affected plant parts or the insects themselves and then drop them in soapy water or isopropyl alcohol to kill them. If the issue is too extensive to treat this way, start by using horticultural oils, botanical sprays such as Neem or pyrethrum, or microbials such as spinosad or Bt. As always, make sure the product is labeled for your purpose, pest, and application type. Chemical applications of selective insecticides may also be called for, but reserve the use of broad spectrum insecticides for last-resort cases as they will kill many beneficial creatures.



Insectpedition a 4-H Bug Camp

For Youth Ages 14-18
Dates: July 24-27, 2017
Cost: $75
Time: 8:45-4:30 pm; drop-off 8-8:45; pick-up 4-5
Location: Meet at the Extension Office with daily field trips

Students will receive insect collecting equipment, learn how to collect, preserve, and create their own collections.

Scholarships are available. Students need to submit an essay on "why insects are important in their lives" (up to 500 words) to Erin Harlow at eeeck@ufl.edu by June 1st for consideration. Scholarship recipients will be asked to attend a meeting of the donors choosing with UF faculty to present their collections.

Want to Provide a $75 Scholarship?
Contact Erin Harlow at eeeck@ufl.edu

http://entnem.ifas.ufl.edu/sepmc/

May 1 – General Household Pests

May 2 – Termites

May 3 – Lawn & Ornamental

Extension Office Sponsorship Opportunities & Wish List:

- Scholarships for the 4-H youth at Insectpedition (Bug Camp). Your $75 contribution will pay for their equipment and camp fees and hopefully inspire the next generation of entomologist or landscaper.
- Monetary donation to the Jacksonville Formosan Termite Project. We need funds to continue the education and outreach portion of the project and to build more traps.
- Volunteer your time in May and June to help collect termite sticky cards or help identify insects.
- Changing vehicles in your fleet? Consider donating one to the Commercial Horticulture Program to help us get around town to programs and on-site consultations. (Note: Company logos would have to be removed).

All donations are tax deductible. Please make checks payable to the University of Florida Foundation with a letter stating that this is a gift to the University of Florida to be used for (the program or area of your choosing) at the Duval County Extension Office.

Termites, continued from page 1

Jacksonville Citywide Efforts

The Jacksonville Formosan Termite Task Force was formed in 2016 for education and outreach. We are gearing up to assist the Mayor's Office in determining where Formosan termites are in Jacksonville. The goals of this part of the program are to:

- Educate Jacksonville residents about Formosan termites, the damage they cause and how to protect their homes.
- Help protect the urban tree canopy from this invasive pest through monitoring, mapping and eventually a treatment program.

Starting the last week of April, you may see termite alate stations around Jacksonville. JFRD and JEA are partnering with the task force to put stations at several of their locations throughout Jacksonville. Local pest control companies, neighborhood associations, and Councilman Jim Love all donated seed money to help build the first set of traps. We want to thank the generous companies and volunteers who have either donated monetarily or given their time to the project. This is truly a grassroots effort and without community support we would not be able to continue this program.

If you want to participate in the program, we are looking for companies to either put a station at their facility, encourage customers to participate or you can donate time or money to the project. Please contact Erin Harlow at eeeck@ufl.edu with questions.

A citizen-science program has also been created to encourage residents to participate in the program. More information about the program, how to build DIY traps, and the data from the entire project will be accessible at https://duval.ifas.ufl.edu/termitetracker.

Keep a Lookout for **Take-All Root Rot** in Turf

By Erin Harlow

It's that time of year and turf diseases will continue to be a problem as the turf comes out of the little dormancy it might have been in this winter. You first notice Take-All Root Rot (TARR) when yellowing areas in the turf appear. Pull-up some grass and look for white roots. If the roots are black, then they are not functioning. You should see nice, healthy, white roots. TARR will have little to no roots and as a result the blades die. This disease can be confused with spring root sloughing, where the plants regenerate new roots in spring, Pythium root rot, or when you put fertilizer down early and the plant is trying to grow, but the soil temperatures are not warm enough yet and the plant exhibits nutrient deficiency. To learn more on how to diagnose TARR and treatment strategies check out our fact sheet at http://duval.ifas.ufl.edu/documents/Take-AllRootRot.pdf.

For a list of turf fungicides recommendations by disease, check out our fact sheet at http://duval.ifas.ufl.edu/documents/ProfessionalTurfFungicideList.pdf.

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

Wayne Hobbs - Horticulture
Clay County
2463 SR 16 West
Green Cove Springs, FL 32043
(904) 284-6355
http://clay.ifas.ufl.edu/
whhobbs@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.

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