



# Commercial Clippings

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

April/May 2012

Issue 19, Page 1



## Bed Bugs and Book Bags Debuts at the 7th International IPM Symposium

By Erin Harlow

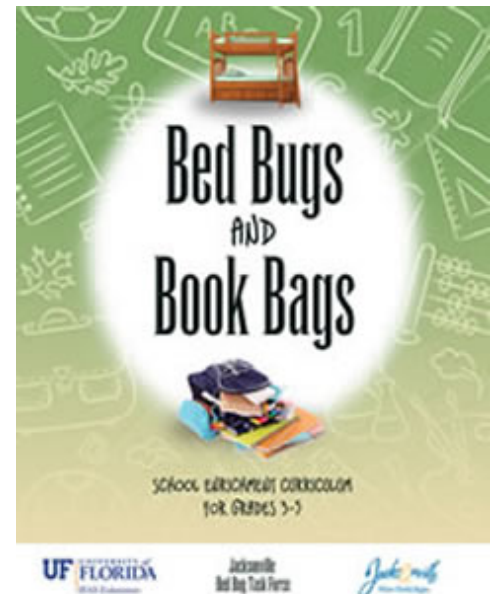
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The Jacksonville Bed Bug Task Force has diligently been working on completing *Bed Bugs and Book Bags* a youth enrichment curriculum for third through fifth grade students for the past year. We are happy to announce that it is finally ready for release. Anyone can use the curriculum even though it is designed for health teachers. It works well with all classrooms, 4-H members, day cares, camps, seniors, and service-oriented groups. There is a 30 minute training and quiz that we ask everyone to complete online before accessing the curriculum. A passing score of 80% provides you a link to the downloadable curriculum. A printable certificate with the test-takers name and score is also provided.

The curriculum was presented at the 7th International IPM (Integrated Pest Management) Symposium at the end of March. The remarks were very positive and we have seen a huge increase in people taking the training across the US and Canada in the last week. Please feel free to pass the link to the curriculum along to anyone you feel might benefit from training and/or the curriculum. The online training covers basic bed bug biology and prevention techniques and can be found at [http://duval.ifas.ufl.edu/Bed\\_Bugs.shtml](http://duval.ifas.ufl.edu/Bed_Bugs.shtml).

We are also happy to report that the Florida Association for County Agriculture Agents recognized this curriculum with a first place communication award in the category of learning modules for the State of Florida. Wish us luck as we compete regionally and bring more great publicity to the Jacksonville area.



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

**All Classes Require Pre-Registration** and will be held at the Duval County Extension Office, 1010 N McDuff Ave, Jacksonville, FL 32254 unless otherwise stated. To register visit us at <http://duval.ifas.ufl.edu> and click Commercial Horticulture/Training or call Becky Davidson at 904-255-7450. You can now pay online with a credit card.

**April 18, 2012  
Wednesday  
(Daytona Beach)**

**Aquatic, Right-of-Way, and Natural Areas Continuing Education Opportunities & Exams at the Florida Vegetation Management Association Conference**

\$40.00 for CEU/exam session  
Begins at 7:30 am

What a great conference schedule, to register and to check out the other classes visit <http://www.cvent.com/events/2012-fvma-annual-conference/event-summary-beec92b51f6e49bd9c17454e0472d90c.aspx>.

**April 25, 2012  
Wednesday  
(St. Augustine)**

**Dr. Ed Gilman - Restoration Pruning Workshop**

8:00 am - 4:15 pm  
\$25.00 per person, includes lunch, DVD, & handouts  
Call (904) 209-0430 to register.

Class is located at St. Johns County Extension Center, 3125 Agricultural Center Dr, St. Augustine, FL 32092.

ISA CEUs available

**April 27, 2012  
Friday (Hastings)**

**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

**April 30, 2012  
Monday (Duval)**

To register for Hastings call (386) 329-0318  
This is the pre-requisite class for the Urban Fertilizer License. Everyone who works with fertilizers is required to have this license by Jan 1, 2014, even if you are licensed in another category.

**May 7-9, 2012  
Monday-Wednesday  
(Gainesville)**

**Southeast Pest Management Conference**

\$140.00 for entire conference or \$60.00 per day  
Monday - Household Pests, Tuesday - Termites, Wednesday - Lawns & Ornamentals  
To register visit [http://entomology.ifas.ufl.edu/sepmc/SEPMC/Main\\_Page.html](http://entomology.ifas.ufl.edu/sepmc/SEPMC/Main_Page.html)

**May 17, 2012  
Thursday  
(Duval)**

**Pest Management University (PMU): Basics of Turfgrass Pest Management: Chinch Bug Edition**

Video conference + hands-on activities  
Details still to come. Expect 8:00 am - 5:00 pm; \$30.00 per person

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**May 18, 2012**  
**Friday**  
**(Duval)**

**Certified Pest Control Operators of Florida Last Chance CEU Series**  
 7:30 am - 5:00 pm  
 Free for active members or \$20 per technician; \$30.00 per category for non-members

2 hours of each; CORE, Lawn & Ornamental, General Household Pest, Wood Destroying Organisms, and Fumigation  
 To register call (407) 217-5655.

**May 25, 2012**  
**Friday**  
**(Duval)**

**ID Cardholder Training**  
 12:00 pm - 3:45 pm  
 \$10.00, 2 or 4 hours of CORE training

This is appropriate for technicians, operators, license holders, and individuals needing to take the CORE exam.

**May 31, 2012**  
**Thursday**  
**(Yulee - FSCJ Campus)**

**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

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.

For more information about the exam, books or to register, please visit:

<http://duval.ifas.ufl.edu/LCLM2012.shtml>.

The next Duval County LCLM class is 09-20-12. Other trainings are available in the area and can be found on our website or by calling the office. 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 try another class that has LCLM CEUs.

**May 31, 2012**  
**Thursday**  
**(Duval)**

**Florida Pest Management Association Last Chance CEUs**

Visit their website at <http://www.flpma.org/> for more information.

**June 14, 21, 28 and**  
**July 5, 2012**  
**Thursdays**  
**(Must attend all 4 sessions)**

**Arborist Certification Education (ACE)**

5:00 pm - 9:00 pm

\$50 per person, dinner on your own, light snacks and drinks provided

Deadline for registration is June 8, 2012. Contact Larry Figart at (904) 255-7450 to register or visit our website.

This course is a review course for the arborist exam and does not take the place of studying for the exam.

## Pyrethroid Label Changes By Erin Harlow



On March 16th, the Department of Agriculture and Consumer Services (DACS) issued Memo 877 in regards to label changes to pyrethroids. In this memo it states,

“EPA has revised the “Environmental Hazard Statements” and general “Directions for Use” for pyrethroid pesticide products used in non-agricultural outdoor settings in an effort to reduce ecological exposure from residential uses of these compounds. Pyrethroid products containing newly revised language should begin to appear this month.

It is anticipated that these label statements will lead to reduced potential for runoff and drift that can result from applications of pyrethroid end-use products by both professional pesticide control operators and residential consumers in residential, commercial, institutional, and industrial areas.

These new requirements will result in changing use patterns for the prevention and control of general household pests, lawn and ornamental pests, as well, as termites and other wood-destroying organisms. New language will be found on pyrethroid products formulated as liquid concentrates, broadcast granules, dusts, and ready-to-use liquid mixtures.”

More information from EPA on these changes by can be found at <http://www.epa.gov/oppsrrd1/reevaluation/environmental-hazard-statement.html>.

To access Memo 877 from DACS visit [http://www.flaes.org/pdf/Memo\\_877.pdf](http://www.flaes.org/pdf/Memo_877.pdf).

If you do not have access to a computer, please contact our office or DACS to be mailed a hard copy.

## Do you know what this is?

### Another article on how Spanish moss is killing trees?

NO – but before moving on, let’s comment that contrary to what your clients might think, Spanish moss derives nothing from a tree so it is not considered a pathogen (i.e. tree killer). It does, however, weigh down branches when it is wet. If those branches are weak it can cause them to break, so its removal is sometimes considered beneficial to the tree, but not something that is necessitated because it is killing the tree. Removal is best accomplished by pulling it from the tree with a long pole rather than trying to kill it with a chemical spray.

Now back to the picture. If it is not Spanish moss, what is it and is it something that is killing the plant it is on? Some people think so, but find out the real truth in the June/July issue of Commercial Clippings. **RZ.**





## FLORIDA FRIENDLY PREDATOR – Blister Beetles

by Raymond Zerba, Retired

Actually, calling this insect a “friendly predator” might be “painting it too positive!” The insect we are highlighting this month is both a pest and a friendly sort - the Blister Beetle. Since there are many types of blister beetles, there are several things that could be said about the adults and how pestiferous or benign they actually are. Some feed on vegetable leaves (see picture on right), but most feed only on the flowers of various plants. On the other hand, their larvae are considered beneficial predators on different kinds of insects depending on what species of Blister Beetle they will turn into when mature.



The larvae of most genera feed on ground nesting baby bee grubs (not so beneficial). Others prey on grasshopper eggs (a good thing for us). A few adults are nocturnal, but most are diurnal. Adults often cluster in groups and because they are usually highly colored are easily seen. At night you may see them clustered around night lights and they may fly into a home if the door is opened.

The real item of interest about this beetle, which might otherwise go on with little notice, is the fact that it derives its name (Blister Beetle) from being able to produce a chemical (Cantharidin) that can blister human skin. Cantharides (dried, pulverized bodies of adult beetles) was once employed extensively in human and veterinary medicine for various uses and is still an active ingredient in some wart remover products. Taken internally, cantharidin is highly toxic to mammals. In years past, there have been cases of horses in Northeast Florida dying from ingestion of blister beetles trapped in baled alfalfa hay to the point that some horse owners are reluctant to buy this type hay for feed. It is widely assumed that cantharidin is there to protect these beetles from predators, but that has not been proven. Females will incorporate the material in a coating applied to their eggs.

Your concerns – you’ll probably not ingest one of these beetles so dying from them is not very likely, but it is possible that one could land on your shirt collar and rub itself against your neck or you could pick one up and then rub an eye, nose or ear with your fingers. If you do, the result will not be pleasant – and that’s why they are called blister beetles. Unless extensive, treatment beyond first aid for blistering is probably not necessary. The blistering on the individual shown was uncomfortable, but not painful. The blisters soon diminished with little first aid.

**Closing note:** Not much to say about this insect from the standpoint of control. We highlight it more than anything to simply make you aware it’s out there! Study the pictures at the UF-IFAS website on Blister Beetles and avoid beetles that look like this.

My information comes courtesy of the Featured Creatures website at the University of Florida and an article I found there written by R.B. Selander and T.R. Fasulo: <http://edis.ifas.ufl.edu/in323>.



## Are Your Client's Trees Under Environmental Stress?

By Larry Figart, Urban Forester

This spring has not been so good for trees. The hotter and dryer than normal weather has caused many trees to become stressed. This is the case especially for trees that recently sprouted new water demanding foliage. If the dry spring continues it may spell serious trouble for our trees come summertime. If your clients have dead or declining trees this year, there are three factors you may need to consider. They are drought, heat, and root disease.

### Drought

In Northeast Florida, we typically have a dry spell in March and April. This year it seemed a little worse than normal. From the beginning of 2012 to date, we are almost eight inches below normal rainfall according to data from the National Oceanic and Atmospheric Administration. Add the almost seven inch deficit from last year and you can see why our landscapes are dry. Trees need water to perform many of their basic functions. For example, trees use carbon dioxide and water in combination with sunlight in photosynthesis. In other words, they use water to make their own food. If there is a shortage of water the tree produces less food for itself.



### Heat

If you have lived in N.E. Florida very long you know that our summers are hot. In a typical summer we have at least ten days where the temperature exceeds 95 degrees. In plants, and our trees as well, hot temperatures can increase water loss through the leaves. The process by which water is evaporated through leaves is called transpiration. Transpiration is what helps trees naturally cool the area underneath them. A large tree has been estimated to transpire 120 gallons of water a day during the summer. Trees are impacted when temperatures stay hot for long periods of time and the trees have trouble replacing the water lost during transpiration. If more water is lost than the tree can pick-up through its roots, it is stressed. Periods of persistent stress cause rapid decline in trees.

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## Are Your Client's Trees Under Environmental Stress?

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### Root Disease

Root disease is the factor that ties all of this together. Root diseases are caused by fungi. Common root fungi are Armillaria, and Ganoderma. Armillaria and Ganoderma are naturally occurring fungi that cause decay in wood. They are found in the soil and enter trees through root wounds. Frequently the root is wounded during some sort of activity of man. This can include lawnmower damage, roots cut during construction, or roots severed through utility installation. These root fungi can colonize the root system and persist in the tree unrecognized for years or decades in some cases. Bit by bit, year after year, the root fungi compromise the trees' ability to take up water. At some point in time, the tree root system is compromised where it cannot supply adequate moisture to the crown of the tree and the tree dies. This death can appear "sudden" during periods of high heat and drought. However, in most cases, trees colonized by root decay fungi often take months or years to die. Their foliage progressively becomes thinner and thinner with an increasing amount of branch dieback until it is obvious that the tree must be removed.

Root disease is often diagnosed only by the decline symptoms mentioned above. The root disease fungi are in the roots and do not always produce mushrooms. In the case where a mushroom or spore producing structure is spotted, diagnosis can be made based solely on the appearance of the mushroom. Armillaria can be identified by conspicuous clusters of small mushrooms appearing at the base of trees appearing in the late summer or fall. They are tan to brown, fleshy with gills beneath the cap. Ganoderma can be identified by a spore producing structure that typically protrudes near the base of diseased trees (photo to right). It can have a stalk or be attached to the tree. It has a reddish brown upper surface that looks varnished while the lower surface is soft and very white. Immature spore producing structures appear as white to yellow knobs.



Unfortunately, there is no control for tree root diseases. The best way to keep your trees from having a root disease problem is to keep root injuries to a minimum. If planting a new tree, make sure that it has plenty of rooting space. During construction activities, protect as much of the root system as possible, do not place fill soil over the roots of trees, and put down a thick layer of wood chips when heavy equipment may compact the soil. In the case of root diseases prevention is the best solution.

For more information on tree health, visit <http://hort.ifas.ufl.edu/woody/index.shtml>.

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