

WHAT'S HAPPENING

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A New Exotic Soft Scale Insect on Croton Found in Florida

By Darrell Hensley



The Florida Division of Plant Industry inspector Lynn Howerton collected an exotic soft scale on April 9, 2008 at a nursery in Marathon (Monroe County), Florida. The host plant was croton (*Codiaeum variegatum* (L.) Blume). Specimens submitted to the Division of Plant Industry were determined to be an unknown, but exotic soft scale insect (Hemiptera: Coccidae). Subsequent collections of this exotic soft scale on croton have been made from Broward, Miami-Dade and Palm Beach counties.

The field specimens appear very similar to individuals of the genus *Philephedra*, but differ in that the new specimen that does not produce an ovisac. Specimens were sent to various specialists and there was a preliminary identification of this scale as being *Philephedra* sp. nr. *crescentiae* (Cockerell). However, there was some disagreement over the placement of this exotic scale into the genus *Philephedra* and specimens were shared with Dr. Chris Hodgson (National Museum of Wales, England) for confirmation/determination. Dr. Hodgson indicated that this new exotic scale insect did not fit into *Philephedra* and is most likely an undescribed species in an undescribed genus of unknown origin. Currently, efforts are being made to describe this new scale insect.

The adult females and late instars of this new exotic soft scale have a greenish yellow appearance with dark striations and are approximately 3.5 mm long by 2.0 mm wide. Immature male covers are smaller than the female scales and have a glassy appearance. Adult males are small orange bodied gnat-like insects with white wax tail filaments. This scale superficially resembles a common South Florida scale, *Philephedra tuberculosa* Nakahara & Gill, but does not produce an ovisac. Other scales that might be confused with this new exotic scale are young females of *Pulvinaria psidii* (green shield scale) and *Pulvinaria urbicola* (urbicola scale) before they produce ovisacs.

The economic importance of this new soft scale is unknown at this time. It appears that this scale does build up high density populations on croton and may be a pest for this host. No natural enemies have been found in samples submitted to the Division of Plant Industry. Currently this pest has only been reported in Broward, Miami-Dade, Monroe and Palm Beach counties of Florida.

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Compendium of Rose Diseases and Pests

By Darrell Hensley

The American Phytopathological Society (APS) has recently revised, updated, and expanded from its 24-year old first edition, COMPENDIUM OF ROSE DISEASES AND PESTS, to a newer second edition, which follows a new format and offers color photos (over 150) throughout its 96 pages. Authors R.K. Horst and R. Cloyd designed this modernized version primarily as an information source for plant pathologists and others involved with diagnosing rose disorders, though it also serves as a practical reference for anyone anywhere involved with almost any aspect of rose production. Parts I and II address diseases (infectious and noninfectious) while part III focuses on insect and mite pests. An additional 19 black/white illustrations complement the 2007 edition, is in readable format, and is printed on high grade coated paper stock. It is available from APS Press, 3340 Pilot Knob Rd., St. Paul, MN 55121, USA. <http://www.shopapspress.org>.

Newer Safety Measures for Rodenticides

By Darrell Hensley

New safety measures were announced on May 29, 2008 by the U.S. Environmental Protection Agency (EPA) that should help protect children from accidental exposure to rodent-control products. These measures will also reduce the risk of accidental poisonings of pets and wildlife. The EPA is requiring that ten rodenticides used in bait products marketed to consumers be enclosed in bait stations, making the pesticide inaccessible to children and pets, and is also prohibiting the sale of loose bait, such as pellets, for use in homes.

The new restrictions will better protect our children, pets and wildlife from thousands of accidental exposures that occur every year. These practical and low cost measures provide protection while ensuring rodent control products will continue to be effective and affordable for all consumers. Rodenticide products containing brodifacoum, bromadiolone, difethialone and difenacoum are known to pose the greatest risk to wildlife and will no longer be allowed to be sold or distributed in the consumer market. Bait stations will be required for all outdoor, above-ground uses for products containing these ingredients. The EPA believes that these steps will significantly reduce the amount of product in the environment, providing additional protection for wildlife from poisonings by these more toxic and persistent products.

For additional information, visit: <http://www.epa.gov/pesticides/reregistration/rodenticides/finalriskdecision.htm>

New On-line Woody Ornamental and Shrub Diagnostic Tool

By Darrell Hensley

The New York State IPM Program located at Cornell University has just released a new on-line diagnostic tool. The tool is an online "Interactive Plant Manager." It was developed to aid diagnosis of insect pests and diseases attacking woody ornamental trees and shrubs. The free program is available at <http://tinyurl.com/42wLaj> or http://www.nysipm.cornell.edu/aes_ornamental.asp and it focuses on the most common insects of New York and the northeastern U.S. Information for more insect species and diseases is expected to be added in the future.

New Pest Directory Published

By Darrell Hensley

The International Society of Pest Information (ISPI), has recently published the latest (2008) version of the unique worldwide "Pest Directory" CD. The CD lists over 20,000 pest and natural enemy species, and presents a huge database of (mostly) recent pest-related publications (most with abstracts). The newest edition has added some 12,000 literature references and 15,000 direct links to full texts of articles. The Directory also provides a massive global listing of nearly 9,000 research specialists and others active in some capacity related to pest management, their institutions, the literature they have authored, and their programs, information designed to facilitate linkages and communication. The 2008 Directory includes more details on crop-specific pests, links to external databases, as well as country-specific literature references. ISPI, at <http://www.pestinfo.org> and available in French, Spanish, and German as well as English, was established in early 2001 as a not-for-profit organization that aims "to contribute to the development of pest management methods which are effective and safe for humans and the environment." For more information contact: B. Zelazny, Executive Officer, ISPI, Eulerweg 3, D-64347 Griesheim, GERMANY. Mailto: ispi@pestinfo.org. Phone: 49-615-576-0309.

Stored Grain Workshop

By Russ Patrick



The emailed version of the 8th issue of What's Happening incorrectly stated the workshop location. The Stored Grain Workshop will be held in Woodbury, TN. Extension personnel can find more information listed with in the SUPER System under the heading "Training". Any agent is welcome to attend and attendees will receive a booklet I prepared for the workshop. The workshop will be a hands-on and will provide updates concerning stored grain insects and methods for identification. Please sign up in SUPER, so you will receive credit on your annual evaluation. You may **not** sign up on the day before the meeting.

Corn: Growing by Leaps and Bounds

By Russ Patrick



You may find some minor damage by European Corn Borer but they will not cause any real damage to corn. One good thing to remember is, if you plant early use a Bt resistant variety to for European Corn Borer control; if you plant late use a Bt resistant variety to control South Western Corn Borer . It appears that we have much lower pest populations according to trap data than last year. It may still be early for outbreaks to appear. We will have to wait and see.



Sugar Cane Beetle

By Russ Patrick

It seems that we are getting away with no damage or reports of damage from the sugar cane beetle (SCB). No reports from Lauderdale County so far. If you encounter any problems with the SCB let me know as soon as possible. This is a difficult pest to control in corn. The adult beetle is the damaging stage of the SCB. It can chew a hole into the corn at the base of the plant. I have seen it attack corn over a foot in height. Just be aware of its potential.



One Type of GAS you don't want!

By Beth Long



GAS is an amusing acronym for yet another potentially serious threat to American agriculture, ecosystems and human health. Giant African Snails (GAS) or, alternately, Giant African Land Snails (GALS) are several huge species in the genus *Achatina*. One, *Achatina fulica*, can have an eight-inch long shell and weigh up to two pounds. Because of their large size, ease of care and attractive shell patterns, these snails are tempting subjects for classroom study and the ever-expanding exotic pet trade. However, they are illegal in the United States.

GAS and other exotic snails may unknowingly be used at schools as part of science projects even though this is not allowed under any conditions. Some of the schools may have received the snails as donations and are unaware of the potential threat to human health and plants. School teachers need to be aware of the dangers associated with this pest and at the end of the school year not empty aquariums in a way that release exotic plants or snails into our native habitat.

GAS eat a wide variety of more than 500 plant species, including many agricultural fruits and vegetables. They have great reproductive potential, laying several hundred eggs at a time, and producing three or four times per year. The snails are hermaphrodites, having both male and female organs, so any two can mate and both could produce eggs. They can also live up to nine years. Three snails smuggled into Florida in 1966 and released into a home yard, grew to a population of almost 18,000 in 10 years and were finally eradicated at a cost of \$1 Million.

Achatina fulica is originally from East Africa and has established itself throughout the Indo-Pacific Basin, including the Hawaiian Islands. This exotic snail has also been introduced into the Caribbean islands of Martinique and Guadeloupe with recent detections in Saint Lucia and Barbados.

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GAS also present a public health concern since, like other snails and slugs, they can carry parasites such as *Angiostrongylus cantonensis*, a tiny rat lungworm. This parasite, which could be transmitted to humans, can produce a rare form of meningitis in those who improperly cook or handle the snails although, according to the Centers for Disease Control, the illness is not usually serious. Humans can also be infected by handling live GAS if the snails' secretions contact mucous membranes of the eyes, nose or mouth. DO NOT pick this snail up with bare hands due to the potential health hazard.

If you have or encounter these land snails, please do not discard, release, or handle them. Call USDA at 1-615-907-3357 or the Tennessee Department of Agriculture at 1-615-832-5313 for instruction and assistance. More information is on the web at: <http://www.invasivespeciesinfo.gov/animals/africansnail.shtml> or at http://www.aphis.usda.gov/plant_health/plant_pest_info/gas/index.shtml

Tobacco Blue Mold Present in Georgia

By Darrell Hensley

Paul Bertrand, Extension Plant Pathologist from the University of Georgia reported tobacco blue mold was present in Pierce and Lowndes Counties in Georgia. The infected field is approximately 30 acres in Pierce County (near Blackshear, GA) and 100 acres in Lowndes County (near Lake Park, GA). Infection ranged from 5 to 10% and Paul estimated that initial infection occurred 10 to 14 days prior to his observation on 6-4-08. For information on control of tobacco blue mold please visit <http://eppserver.ag.utk.edu/redbook/pdf/tobaccodisease.pdf>

Tobacco Scouting Reports

By Gene Burgess

Clint Crisp, a tobacco intern in McMinn County, scouted a field of burley tobacco. He reported finding some common ragweed, other broadleaf weeds and grass. He found a few flea beetles in the border rows. A few isolated aphids were found on a few plants. They were not at economic threshold levels. Some brown spot was reported. Several plants were affected with weather fleck.

Law Revision

By Gene Burgess

In the federal and state laws, it states that a person may apply a restricted-use pesticide if they are certified or working under the direct supervision of a certified applicator. In Tennessee, "**under direct supervision**" means the following:

"Any application or sale of a pesticide by a competent person acting under the instructions and control of a private applicator, commercial applicator or commercial pest control operator who is available if and when needed, if such applicator or operator is **physically present within a one hundred twenty (120) mile radius** at the time and place the pesticide is applied, sold or bought..."

The Tennessee law has been amended for commercial applicators. Pesticides must be **applied by a certified applicator or in the presence of an applicator certified** in the category in which services are being provided. This revision does not apply to private applicators.

Plant & Pest Diagnostic Highlights

By Bruce Kauffman

We received 90 samples from May 17 to May 30, 2008 including 55 samples via the UT Diagnostic Web Site.

FIELD CROPS :

Gramoxone herbicide damage to corn.

FRUIT & VEGETABLES :

Bacterial leaf spot of peach; coccomyces leaf spot of cherry; scab disease of cucumber vegetables; lichen on fruit tree; 2,4-D and Quilt herbicide damage, sclerotinia stem rot disease, rhizoctonia stem disease, loss of apical bud causing horizontal growth and pythium root rot of tomato plants; fasciation growth abnormality of strawberry fruit due to planting of northern variety not adapted to Tennessee; dicamba herbicide damage to squash and tomatoes; black knot on branches of plum; cedar apple rust leaf disease, fire blight, and scab leaf disease of apple; eutypa canker dieback disease of grape.

INSECTS, CRUSTACEANS & MITES :

Wool sower wasp gall of white oak; pot worms (annelid worms) and springtails in earthworm beds; blackheaded ash sawfly on ash leaves; cutworm damage to turfgrass; fall cankerworm and spring cankerworm leaf feeding and mite pouch gall on silver maple; darkling beetle in hay; catfacing by stinkbugs and/or tarnished plant bug of peach fruit; sawflies feeding on rose leaves; thrips on rose flowers; mites causing erineum (excessive plant hairs) on the undersides of pin oak; cottony camellia scale on holly; borers on iris; dark-winged fungus gnat larvae on caladium roots; two-spotted spider mites on 'Little Gem' magnolia; armyworms feeding on wheat.

Insects and other pests around the home :

Acrobat ant; springtails; unidentified soil larvae killed by lightning; black fly larvae; termite reproductives; ant lions; leaf-cutting bees; black field ants.

ORNAMENTALS & TREES :

Seiridium canker and drought stress of Leyland cypress; dieback of branches due of last year's drought on hemlock; downy mildew of unidentified tree leaves; bacterial leaf spot of English laurel; leaf blister disease of black oak; unidentified leaf spots of red dogwood; fire blight of Bradford pear; phytophthora root rot of Leyland cypress and 'Emerald' arborvitae; unidentified algal growth on driveway; leaf and/or twig dieback of holly and hemlock due to overly wet soil; fall coloration of leaves due to root stress (girdling roots and/or planted too deeply), herbicide-caused dieback of Bradford pear; cedar apple galls on Andorra juniper; botryosphaeria canker and/or a root problem of flowering crabapple; leaf fungus gall of azalea; stegonosporium and botryosphaeria twig blight caused by last year's drought stress, anthracnose leaf spot of sugar maple; anthracnose leaf spot of red maple; fusarium basal rot of iris; leaf curl due to possible weed and feed fertilizer (phenoxy herbicide) application taken up by ginkgo roots and cleyera roots; twig dieback due to possible drought-caused root dieback of southern magnolia; decline of an older spirea caused by phomopsis canker of branches and root decay.

TURF & FORAGE :

Head smut disease of bermudagrass; take-all root and lower stem disease (*Gaeumannomyces graminis* var. *tritici*) and possible barley yellow dwarf virus of wheat; tall fescue sod infected with drechslera leaf spot and roots dried out before or after placement in lawn; bipolaris leaf spot and possible nutrient imbalance.

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OTHER UT NEWSLETTERS WITH PEST MANAGEMENT INFORMATION

Fruit Pest News

<http://web.utk.edu/~extepp/fpn/fpn.htm>

Tennessee Crop and Pest Management Newsletter

http://www.utextension.utk.edu/fieldCrops/cotton/cotton_insects/ipmnewsletters.htm

Ornamental Pest and Disease Update

<http://soilplantandpest.utk.edu/publications/ornamentalnwsltr.html>

Tennessee Soybean Rust Hotline - 877-875-2326

USDA Soybean Rust Web Site

<http://www.sbrusa.net>

This and other "What's Happening" issues can be found at

<http://eppserver.ag.utk.edu/Whats/whatshap.htm>

Entomology and Plant Pathology Web Site

<http://eppserver.ag.utk.edu>

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.

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