

“WHAT’S HAPPENING?”
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IMPORTED FIRE ANT QUARANTINE EXPANDS TO ALL OR PARTS OF 52 COUNTIES

by Karen Vail, Pat Parkman and Beth Long

The Tennessee IFA quarantine has been expanded this year to all or parts of 52 counties including three counties (Crockett, Morgan and Warren) new to the regulated area and 15 other counties (Anderson, Bedford, Benton, Bledsoe, Blount, Carroll, Coffee, Cumberland, Grundy, Haywood, Hickman, Knox, Rutherford, Van Buren and Williamson) with larger regulated areas. Thirty-seven ENTIRE counties (Bedford, Benton, Bledsoe, Blount, Bradley, Carroll, Chester, Decatur, Fayette, Franklin, Giles, Grundy, Hamilton, Hardeman, Hardin, Henderson, Hickman, Lawrence, Lewis, Lincoln, Loudon, Madison, Marion, McMinn, McNairy, Meigs, Monroe, Moore, Perry, Polk, Rhea, Roane, Rutherford, Sequatchie, Shelby, Van Buren and Wayne) are now quarantined. The new regulated area will soon be listed under *Updates, Quarantine and Maps* on the left scroll bar of the UT Extension’s Imported Fire Ants in Tennessee Web site (<http://fireants.utk.edu>), but county Extension agents should be receiving the list by e-mail. IFA quarantine enforcement to the new 2007 regulated areas will commence September 1.

AMMONIUM NITRATE ACT APPROVED

by Darrell Hensley

The U.S. Senate has just approved the "Secure Handling of Ammonium Nitrate Act of 2007." The bill was included as an amendment to the Department of Homeland Security (DHS) appropriations bill, which was approved by the Senate in July of 2007. The ammonium nitrate legislation was sponsored by Senate Homeland Security Committee State, Local and Private Sector Preparedness and Integration Subcommittee Chairman Sen. Mark Pryor (D-Ark). With this legislation in place, ammonium nitrate will be preserved for its intended purpose by America's farmers. The bill would require DHS to create a regulatory system to help keep ammonium nitrate out of the hands of those with criminal intent.

SPINETORAM INSECTICIDE RECEIVES FIRST GLOBAL REGISTRATION

by Darrell Hensley

Dow AgroSciences has received the first global registration of spinetoram, a new spinosyn insecticide compound. The compound, which will be sold under the brand name Delegate™ WG in the pome fruit market segment, has achieved registration in New Zealand. The molecule was accepted for expedited review under the U.S. EPA Reduced-Risk Pesticide Program in 2006, with registration of products

containing this new active ingredient anticipated in the third quarter of 2007 in the United States and Canada. Delegate WG should allow growers to protect key high value crops with a standard of performance and excellent environmental characteristics, such as lower use rates and reduced environmental persistence. In earlier research trials, Delegate WG has shown excellent broad spectrum control of significant pests for the tree fruit and tree nut market segments, particularly codling moth. In addition, the product provides pome fruit growers with another mode of action to be used in control of codling moth and other internal feeding lepidoptera.

VELVET ANTS - LARGE, FUZZY, RED/ORANGE AND BLACK WASPS

by Karen M. Vail

We've been receiving calls about large, fuzzy "ants" for a few weeks now. Often folks are concerned that these are fire ants and are amazed when I explain that velvet ants are wingless wasps. Most are also amazed that they are found in Tennessee because they have not seen them in the 30 or more years they have resided here. I've been told that this confusion with fire ants usually occurs when fire ants are just becoming established in an area and that these mistaken identities will decline as we become more familiar with fire ants.

Useful questions and answers that will help identify the mystery "ant" as a velvet ant are listed below:

1. Q: Does it resemble an ant? A: Yes.
2. Q: Is the insect hairy or velvety? A: Yes.
3. Q: Does the insect have a bump on the waist? A: No.
4. Q: Is it orange or red with black stripes on the abdomen? A: Yes.
5. Q: Is it difficult to crush? A: Yes.
6. Q: Does it produce a rasping sound when stepped on? A: Yes.
7. Q: Are there many of these ants in a trail? A: No.

The velvet ant's common name is a misnomer. They are actually more closely related to wasps than ants and are often called wingless wasps. The wingless females resemble an ant, but lack a node or bump on the waist. Males, on the other hand, do have wings and actively fly. These ants are orange or red and often have black stripes toward the back of the abdomen. A dense coating of velvety hair covers this insect. An image of Tennessee velvet ants can be found at <http://eppftpserver.ag.utk.edu/profiles/insects/velvetant.htm>.

Biology. Velvet ants are solitary wasps. Larvae, the immature feeding stage, feed externally on the prepupal or pupal stages of ground-nesting bees, other wasps and some flies and beetles. Females actively search for hosts on which to deposit eggs. The host is attacked after the cocoon has been spun or the fly puparium formed. Upon locating a host, the female uses its long ovipositor (which can also function as the stinger) to penetrate the cocoon or puparium and deposits one or two eggs. Eggs hatch and larvae feed on the host, devouring it. After feeding, the larval velvet ant spins its own cocoon inside that of its host. Overwintering occurs as the prepupal stage inside the host's cocoon.

Upon emerging as adults, winged males search for mates. The male is attracted by a specific sound produced by a rasping structure located between their second and third abdominal segments of the female. The rasping sound also occurs when the wasp is pressed or attempted to be crushed. Mating usually lasts just a few seconds. Males may also be seen visiting flowers in search of nectar.

Importance. Females spend much time in sandy areas searching for hosts and may be encountered by adults and children. The females can sting repeatedly. The stinger is long and produces quite a painful sting --perhaps the reason that the large common species is called the "cow killer". People are most often stung by velvet ants while walking in infested areas without proper footwear. The intensity of pain and allergic reaction to the sting will vary according to the immune response of the person stung. These are solitary creatures and the possibility of being stung by a number of these insects at one time is unlikely. Ground-dwelling bees, which may be important pollinators of some crops, are known to be hosts for velvet ants. Other species are reportedly pests of white grub parasites, a condition known as hyperparasitism. Therefore, velvet ants can be considered either beneficial or pestiferous depending upon the host species attacked.

Control Measures. Chemical control of velvet ants is rarely needed. The best methods for dealing with velvet ants are: 1) to inform people, especially children, not to handle these insects and 2) to wear shoes in infested areas to avoid accidental encounters. On occasion, the numbers of velvet ants in an area such as gardens or underneath houses, trailers or other raised structures may be high enough to warrant control. In these cases, the best control tactic would be to eliminate ground-nesting wasps or bees on which immature velvet ants feed. Although the exoskeleton seems uncrushable, individual velvet ants can be killed by crushing. Household aerosol formulations labeled for wasp control can also be directed at the velvet ant.

If you are still unsure of the "ant's" identification, more information on ant, including fire ant, identification and management, can be found at our UT's "Imported Fire Ants in Tennessee" Web site, <http://fireants.utk.edu> or the eXtension Web site at <http://www.extension.org>.

Modified from: Drees, B. 1988. VELVET ANTS. UC-001 Texas Agricultural Extension Service.

IMPORTED FIRE ANT (IFA) INSPECTION OF HAY AT 2007 FAIRS

by Karen Vail, Pat Parkman, and Beth Long

We wanted to remind the county Extension agents that hay is a regulated item in the imported fire ant quarantine. If you are bringing hay to a county or other fair, and the hay is from a quarantined county, it must be inspected, determined to be free of IFA and accompanied by a permit, prior to movement. Hay must have been stored off the ground to be shipped. If hay was stacked, as long as it was not the bottom tier of hay, it would be considered as stacked off the ground. Gray Haun, TDA Plant Certification Section Administrator, is making an exception to the inspection process with regards to the hay to accompany animals at county fairs. He is allowing county Extension agents to inspect this, and only this, hay and sign the permit. The permit, copy of this letter and the newly regulated areas of the fire ant quarantine will be sent to you via e-mail. Gray suggests that you use the date and add one number starting with 1 for the permit number. For example, I would use 90807-1 for the first permit I was to sign on September 8th, the second permit number assigned that day would be 90807-2, etc. After your fair season is completed, Gray would like you to send him the number of permits that you completed. Gray

Haun can be reached at Walker.Haun@state.tn.us, by phone at (615)-837-5338, or by fax at (615)-837-5246.

More information on regulations pertaining to imported fire ants can be found at Tennessee Department of Agriculture's Imported Fire Ants Web site (<http://www.state.tn.us/agriculture/regulate/plants/ifa.html>):

- Tennessee Imported Fire Ant Quarantine Rule Tennessee Chapter 0080-6-19 (<http://www.state.tn.us/sos/rules/0080/0080-06/0080-06-19.pdf>)
- Materials Regulated By The Imported Fire Ant Quarantine
- Requirements For Growers Concerning The Imported Fire Ant Quarantine
- Transportation Of Regulated Items From Quarantined To Non-quarantined Areas
- IFA Hay Advisory (<http://www.state.tn.us/agriculture/regulate/plants/ifa99.pdf>) (Note the list of quarantined counties is outdated.)
- Consequences Of Breaking The Imported Fire Ant Quarantine
- What Can I Do If I Buy Products Infested With Imported Fire Ants?

FIELD CROP UPDATE

by Russ Patrick

SOYBEANS:

There are two insects that should be present in soybeans at this time. They are the three-cornered alfalfa hopper and the soybean stem borer *Dectes texanus*. Both can cause considerable damage unless checked for and treated. The alfalfa hopper feeds with its piercing, sucking mouthparts around the girth of the stem causing it to break or fall over. This damage cuts off the flow of nutrients to the plant and the stems dry up and die. The larva of the stem borer feeds within the pith of the stems, eventually girdling the plant. There is only one generation of the stem borer which over winters in the larval stage. To check for stem borers look for broken stems prior to the over wintering stage. Of course, it is too late to do anything about the pest at this time. I use a Sweep Net when I look for adults. This can give you a head start before the adult deposits eggs in the stems. Use the same method to check for alfalfa hopper.



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

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>

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.

Visit the UT Extension Web site at <http://www.utextension.utk.edu>

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