

Integrated Pest Management Newsletter

September 2014 | Vol. I Dr. Ashfaq Sial Ahmad, IPM Coordinator

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FUNDING OPPORTUNITIES

• ENVIRONMENTAL SOLUTIONS FOR COMMUNITIES BY WELLS FARGO AND NATIONAL FISH AND WILDLIFE FOUNDATION

In 2012, Wells Fargo and NFWF launched the Environmental Solutions for Communities initiative, designed to support projects that link economic development and community well-being to the stewardship and health of the environment. This five-year initiative is supported through a \$15 million contribution from Wells Fargo that will be used to leverage other public and private investments with an expected total impact of over \$37.5 million.

Funding priorities for this program include:

- Supporting sustainable agricultural practices and private lands stewardship
- Conserving critical land and water resources and improving local water quality
- Restoring and managing natural habitat, species and ecosystems that are important to community livelihoods
- Facilitating investments in green infrastructure, renewable energy and energy efficiency
- Encouraging broad-based citizen participation in project implementation.

Grants will be offered once a year to support priority projects in states and communities where Wells Fargo operates. Additional priorities and funding guidelines may be found within the program's RFP. In addition, funding available under this new partnership will also be used to leverage resources associated with other NFWF funding opportunities.

For further information and link to RFP, please visit:

http://www.nfwf.org/environmentalsolutions/Pages/home.aspx#.VDGwoWddX95

Full Proposal Due Date: Wednesday December 10, 2014 by 11:59 PM Eastern Time

FROM THE FIELD

Armyworms: Did they hitchhike in, or decide they like the well-watered grass?

Drs. Will Hudson and Clint Waltz
Turfgrass Entomologist and Agronomist
University of Georgia

This has been a problematic year for caterpillars in general and armyworms have been a particular problem in turfgrass. Considering the record prices for turfgrass this year, consumers have been sensitive to sod quality and overall turfgrass health. After installation, if quality and health of newly laid sod (i.e. this growing season) becomes compromised, especially from armyworms, the questions become "did the worms come from the sod farm?" and "should the grass be replaced or will it recover?" Knowing a bit about the life cycle of the armyworm moth can help answer these questions.

The fall armyworm is the caterpillar of a moth that arrives in Georgia almost every year. Even in relatively mild years the moths, or adults, do not survive our winters. Instead, moths move north form Florida each spring and summer on weather fronts, spreading from south to north until the entire state is reinfested. This process takes several generations of moths, which is why the worms usually appear in late summer and early fall in northern parts of the state. An armyworm moth can lay eggs in batches of a few dozen to several hundred eggs, allowing populations to grow rapidly throughout the summer. These eggs hatch after a few days and the caterpillars feed and grow for 2-3 weeks before pupating. A week or so later the new adult moth emerges to start the cycle again. In the warm weather of summer, the cycle takes about 4 weeks to complete with 14-17 days spent as caterpillars feeding on the grass. This means that for armyworm infested grass that has been established for 4 to 5 weeks, or more, it is unlikely the worms would have come from eggs laid at the production field. However, if infested sod has been in place for less than 2 weeks the worms probably came from the farm. Armyworm moths are ubiquitous and indiscriminant between rural, where most sod farms are located, and urban areas. This simply means armyworms are likely to occur anywhere in Georgia and are not concentrated to turfgrass production fields. This makes identifying origin of infestation difficult when worms are noticed 2 to 3 weeks after establishment. Then, the size of the worms is important. If "big" worms are observed within 3 weeks after planting, they likely came with the sod. However, if "small" worms are feeding on the grass it is more likely eggs were laid by adults after the grass arrived onsite.

Sod producers have a couple of options to prevent armyworms from being shipped with the grass. First and foremost, crewmembers should know what armyworms look like and be

aware as they are mowing, harvesting or handling sod. It is especially important to check the field before harvest to be sure there are no armyworms. If the grass has ragged leaves or areas with stripped stems the sod should be tested to confirm the presence of armyworms. Simply pour soapy water on the spot to bring the worms to the surface. Birds spending time in some areas of the field and not others maybe an indicator of armyworm activity. Large armyworms are fairly easy to find. In addition to their size, they are more active during the day and their droppings, called frass, are usually obvious where they have been feeding. Small worms tend to stay down in the canopy during the day, and their feeding is less damaging and harder to see. Typically growers do not ship sod with large worms. However, the smaller worms may not be noticed in handling and can make it into a shipment.

Insecticidal control of caterpillars in turf and sod is not complicated. There are a number of effective products that are relatively inexpensive, others are more expensive but offer better control of larger worms, and a few that give long-term protection although at a premium price. All are more effective on small worms than on the large, mature "snakes" that are nearly ready to pupate. The pyrethroid insecticides (those active ingredients that end in *-thrin*) are contact insecticides that also kill by ingestion if caterpillars feed on treated grass. They are off patent – hence the many brands for what used to be sold as Talstar, Scimitar, etc. – and inexpensive, and effective for controlling small to medium size worms. Residual activity fades after a few days in the typical summer environment and following mowing of a sod field or home lawn.

Products containing spinosad are more costly but are effective and provide longer control. However, they do not move in the plant, so they do not protect new growth. The "gold standard" is chlorotraniliprole, sold as Acelepryn and is also in some combination products. This material is systemic in the plant and provides a dose-dependent residual activity. The more you apply, the longer it lasts. And, of course, the more it costs.

The insect growth regulators (IGR) Confirm and Dimilin are also available. They provide a different approach to insect control. In the case of Confirm, it is active only on caterpillars. Dimilin is a broad-spectrum IGR that stops development of immature insects so they cannot grow and turn into adults. It is absorbed into the grass, and remains active but does not move into new growth. Some sod producers have begun treating sod with Dimilin before harvest as a preventative, to keep any small worms from developing. It is safe for non-arthropod animals, including sod harvesters, landscape installers, and customers.

Keep the life cycle of the fall armyworm in mind when handling complaints. Sod that has been established for months before becoming infected with armyworms is not the responsibility of the sod producer or installer. Armyworm moths are continuously flying and are attracted to young succulent grass, so infestations of newly sodded lawns are common for 30 to 60 days after establishment. The practices associated with establishment, like irrigation and nitrogen fertility, promote growth which is characterized by succulent leaves. Worms that appear within a couple of weeks after harvest may have come with the grass. If armyworms are

identified and controlled early, turfgrass recovery can be expected without needing to replace the sod. Caterpillars that show up at the 3-4 week time frame are of uncertain origin, and may require some compromise to maintain customer satisfaction. As fall approaches, the armyworm life cycle typically lengthens, changing developmental timing. Similarly, shorter days and cooler temperatures slow turfgrass growth.

Bullet Points:

- 1. Understand the armyworm life cycle.
- 2. Armyworm moths are ubiquitous and constantly flying throughout Georgia.
- 3. Armyworm infestations on newly installed grass may not have come from the sod farm.
- 4. Typical establishment practices promote favorable conditions for armyworm moths
- 5. Small caterpillars are typically less than 2 weeks old.
- 6. Control is relatively easy and inexpensive.
- 7. Small caterpillars are easier to control than larger worms.
- 8. If identified and controlled early, armyworm infected grass generally does not need to be replaced.

REGULATORY UPDATES

TRANSFORM WG INSECTICIDE SECTION 18 EMERGENCY USE EXCEPTION FOR SORGHUM HAS BEEN APPROVED FOR THE STATE OF GEORGIA

G. David Buntin, Ph.D. Grain Crop Entomologist, Department of Entomology, University of Georgia

A Section 18 Emergency Use Exception for Transform WG insecticide on sorghum has been approved for the state of Georgia as of September, 11, 2014. Transform WG may be applied to grain and forage sorghum for control of sugarcane aphid from now until November 30, 2014. Additional details of the product use are as follows:

Foliar applications may be made by ground or air at a rate of EITHER 0.75-1.5 oz of product (0.023-0.047 lb a.i.) per acre with a maximum of 2 applications per acre per year (OR) 1.0 oz of product (0.03 lb a.i.) per acre with a maximum of 3 applications per acre per year; resulting in a seasonal maximum application rate of 3.0 oz of product (0.09 lb a.i.) per acre per year.

The minimum application retreatment interval of 14 days and a restricted entry interval (REI) of 24 hours must be observed.

A 7-day pre-harvest interval (PHI) for forage and a 14-day PHI for grain or stover must be observed.

A maximum of 50,000 acres of sorghum fields (grain and forage) may be treated in Georgia.

This product is highly toxic to bees exposed through contact during spraying and while spray droplets are still wet. This product may be toxic to bees exposed to treated foliage for up to 3 hours following application. Toxicity is reduced when spray droplets are dry. Risk to managed bees and native pollinators from contact with pesticide spray or residues can be minimized when applications are made before 7:00 am or after 7:00 pm local time or when the temperature is below 55 degrees F at the site of application.

The registered product, TransformTM WG (EPA Reg. No. 62719-625; 50% sulfoxaflor), manufactured by Dow AgroSciences, may be applied. All applicable directions, restrictions, and precautions on the EPA-registered Section 3 label, as well as those outlined in the Section 18 use directions, except as modified by this authorization, must be followed.

For further information, Transform[®] WG Section 18 Emergency Exemption label for control of sugarcane aphid in sorghum is available at http://www.cdms.net/LDat/ldAM5011.pdf Please contact me (gbuntin@uga.edu) if you have questions.

EPA COMMENT PERIOD FOR FLUPYRADIFURONE (AI in Sivanto)

The Food Quality Protection Act of 1996 mandated a registration review program for all pesticides registered, distributed, or sold in the United States. The Registration Review of flupyradifurone, the active ingredient in Sivanto by Bayer CropScience, was initiated by EPA and will be open through October 25, 2014.

As part of the registration review process, EPA is inviting the public to comment on EPA's preliminary registration work plan and rationale. Comments on Sivanto may be submitted by the public to EPA through the mail, in person, or electronically on or

before October 25, 2014.

To comment online:

- 1. Go to http://www.regulations.gov
- 2. Search **EPA-HQ-OPP-2013-0226-0007**You will see a document titled "Public Participation Memorandum for New Active Ingredient Flupyradifurone"
- 3. Click on "Comment Now!"
- 4. Then follow the online instructions for submitting comments. Only fill in applicable submitter information.

Comments submitted by mail must refer to **the docket control number EPA-HQ-OPP-2013-0226-0007** in the subject line on the first page of your submission.

By mail, send your comments to:

Office of Pesticide Program (OPP)

Regulatory Public Docket (7502P)

Environmental Protection Agency

1200 Pennsylvania Avenue NW

Washington DC 20460-0001

iBOOKS

Dear Extension Agents and Specialists,

The book <u>IPM for Shrubs in Southeastern US Nursery Production Vol 1</u> is now available via iBooks for viewing on an iPad at the link below and as pdf files for viewing on a laptop, desktop, and most mobile devices at the link below that.

IPM Select Shrubs: Vol. I

http://wiki.bugwood.org/IPM Shrub Book

Also, our previous book, <u>IPM for Select Deciduous Trees in Southeastern US Nursery Production</u>, is also available in iBooks for viewing on an iPad at the link below and as pdf files for viewing on a laptop, desktop, and most mobile devices at the link below that.

IPM Select Trees

http://wiki.bugwood.org/IPM book

Just as a FYI – We will be publishing 4 more volumes of the shrub book over the next few years, with each book covering 4-7 genera of woody ornamentals.

Thank you!

Matthew

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UPCOMING EVENTS

Oct 14-16 SUNBELT AG EXPO

The **Sunbelt Ag Expo** is an agricultural-based trade show held at Spence Field in Moultrie, GA. Known as "North America's Premier Farm Show" the annual event has more than 1200 exhibitors showcasing the latest in farming technology. Whether you are large acreage production farmer or a weekend lifestyle farmer the Expo is an event you don't want to miss.

MISSION STATEMENT

"Our mission is to produce the premier farm show in the world; one that is conducive to trade and emphasizes information, education and implementation of the latest agricultural technology, research and equipment."

Further information about the Expo and schedule is available at http://sunbeltexpo.com/about-expo/

Nov 16-19 ANNUAL MEETING OF ENTOMOLOGICAL SOCIETY OF AMERICA

The Entomological Society of America's 62nd Annual Meeting is taking place November 16-19, 2014 in Portland, OR.

If the entomological sciences are your passion, plan to join more than **3,200** researchers, professors, graduate and undergraduate students, extension service personnel, administrators, research technicians, consultants, and others from around the globe for **four days of science, networking and fun.** This is the most important annual conference anywhere in the world for the science of entomology.

Further information about the ESA Meeting is available at http://www.entsoc.org/entomology2014

COORDINATOR'S CORNER

2014 SOUTHER IPM CENTER – ADVISORY COUNCIL MEETING

2014 Southern IPM Center (SIPMC) – Advisory Council Meeting has been scheduled to be held October 30-31 in Atlanta GA. The meeting agenda includes discussions on the obligations and role of IPM Center, IPM eAcademy, IPM Roundtable, Technology support for IPM projects – Cotton Decision Support App, Regulatory Information Network, IPM Enhancement Grants Program, Working Groups – Pollinator Protection Working Group, Friends of IPM Awards, and SIPMC Communication Plan. Please let me know if you have comments/questions/concerns about any of these topics and I'll bring those up in the discussions.

UPDATING REGIONAL IPM PRIORITIES

Southern Region IPM Coordinators are currently working on updating IPM Priorities for the region. Our goal is to post the updated list of priorities on Southern IPM Center website before the release of FY15 RFPs in December 2014. I believe if the problem you are investigating is included in the Regional Priorities and you cite that in the proposal, it will significantly increase ranking of your proposals in the competitive review process at the regional and national level. As a result, the probability of your proposals being selected for funding would be much higher.

I would therefore really appreciate if you could send me (ashsial@uga.edu) a list of all the problems you are working on and believe that those should be included in the regional list of IPM priorities (or planning to submit a proposal for funding through a regional or national grants program).

Dear Readers:

UGA Integrated Pest Management Newsletter is a monthly journal for Researchers, Extension agents, Extension specialists, and others interested in pest management. It provides most updated information on legislation, regulations, and other issues concerning pest management in Georgia.

Do not regard the information in this newsletter as pest management recommendations. Consult the Georgia Pest Management Handbook and other Extension publications, or appropriate specialists for additional information.

Your input in this newsletter is encouraged. If you wish to be added to the mailing list, just call us at 706-542-1320. Or write us:

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