

Look What's Out There in Integrated Pest Management

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<http://www.wvu.edu/~agexten/>

New Least Toxic Bed Bug Product On the Market

Bed bugs have made a comeback of epic proportions in the United States and around the world lately, and in cities around the country are reported to be major nuisances. Reports of growing resistance to pesticides and evidence of toxicity of conventional bed bug products has led to the production of new least toxic bed bug products.

For example, the company K4 Products, L.L.C., has released a new least-toxic product called EcoBugFree for Bed Bugs claiming to kill bed bugs on contact. EcoBugFree for Bed Bugs qualifies as an EPA exempt minimum risk pesticide, and therefore is considered a low-risk product.

Bedbugs are tiny reddish-brown insects, about 1/5 inch, which live in the cracks and crevices in bed frames and adjacent walls or in mattress seams. They usually become active at night, while their host is sleeping, in order to feed. Human reactions to bedbug bites can be anywhere from swelling and pain to nothing at all. Bed bugs can easily be transported from one host to another by riding on clothing to buses and trains, movie theaters and other public places where another person could pick them up. They can also be introduced to a home on a used mattress, or can travel between apartments and hotel rooms.

While bedbugs were not much of a problem in the last several decades, they have recently been making a comeback. The Washington Post reports that in the past five years, bedbugs have been reported in 27 states.

EcoBugFree for Bed Bugs is currently being used by hotels and shelters to manage their bed bug issues and is being stocked at hardware stores and pharmacies for sale to the general public. According to the manufacturers, EcoBugFree for Bed Bugs is a safe product that can be used on and around the bed as well as in the presence of children and pets.

As with any pest problem, before resorting to pest control, consider alternative practices first. The first step is to inspect to see if you really have a bug problem. Some signs of a bedbug infestation include a pungent odor, and blood or fecal spots on your pillow casings and sheets. Search out eggs and adult bedbugs in the cracks and spaces in your bed frame and along the baseboard if you think you might have a bedbug problem.

The next step is to investigate the possible cause of the infestation. The bugs could be coming from a nearby bird's nest or bat nesting area. By getting rid of the source, you will help rid the infestation in your home. Be sure to caulk and paint the openings and cracks in your bed frame and surrounding area to close up any hiding places.

There are also more direct strategies to take care of a bedbug problem. If you need to take action right away, a good short-term emergency technique involves setting up a barrier so that the bugs cannot get on your bed. Place the legs of your bed in containers filled with soapy water, and make sure that no part of the bed is touching the wall.

You must thoroughly clean sheets and blankets. Try using an enzyme cleaner or borax for this. Steam clean all the furniture in your home. Infested mattresses and beds should be replaced.

Temperature manipulation provides another control method. Bedbugs can only survive in the range of 48° F and 97° F. By artificially raising the temperature in the infected area to 97° and 99° for several days, a large number of bedbugs will be killed. Lowering the temperature to 32° to 48° will take 30-60 days to kill off all the eggs. If you opt for temperature manipulation, use it in conjunction with the other techniques discussed above so that you can get rid of the entire infestation.

In addition to K4 Products' EcoBugFree for Bed Bugs, insecticidal soaps and silica aerogels provide least-toxic controls that you can employ if all else fails (Beyond Pesticides, November 13, 2006).

Funding Opportunity

- USDA CSREES National Research Initiative - Biology of Weedy and Invasive Species in Agroecosystems. Letter of intent due December 6, 2006; deadline February 14, 2007. The goal of the program is to support interdisciplinary experimental, observational, theoretical, and modeling studies of invasive species that lead to ecological and economic models in cost/benefit analyses of different management, control and elimination strategies. Applicants are strongly encouraged to read the entire Program Description section for current priorities and additional information relative to the programs of interest. This program accepts a wide range of applications, please carefully

review the budget guidelines to ensure application acceptance. Many groups (education, government, nonprofits, businesses, individuals) may be eligible. See the program announcement for information on eligibility and application instructions. The Request for Applications (RFA) link opens a large file with information about many NRI programs. Specific information about this program starts on page 70.

<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1123>

- The Cooperative State, Research, Education, and Extension Service (CSREES) is pleased to announce the release of the FY 2007 Request for Applications (RFA) for the Integrated Organic Program (IOP).

The purpose of the Integrated Organic Program is to solve critical agriculture issues, priorities, or problems through the integration of research, education, and extension activities in two program areas: (1) Organic Transitions Program (ORG); and (2) Organic Agriculture Research and Extension Initiative (OREI). ORG funds the development and implementation of research, extension, and higher education programs to improve the competitiveness of organic producers. OREI funds research and extension programs that enhance the ability of producers and processors who have already adopted organic standards to grow and market high quality organic food, feed, and fiber. These two funding opportunities are included in the same Request for Applications. Deadlines: Completed Application: December 18, 2006, 5 p.m. Eastern Time to Grants.gov

The Integrated Organic Program RFA may be accessed at the following websites:

CSREES: www.csrees.usda.gov/fo/integratedorganicprogramicgp.html

Grants.gov: www.grants.gov

- The Northeast Center for Risk Management Education, located at the University of Delaware, announces a funding opportunity for educational projects designed to help agricultural producers succeed through targeted risk management strategies. Grant awards will fund projects conducted between July 1, 2007 and June 30, 2008. For more

information and to view the complete Request for Applications, please see the Northeast Center's website at: www.necrme.org. The Pre-Proposal closing date is December 14, 2006. Questions or comments regarding the RFA may be directed to Dr. H. Don Tilmon (htilmon@udel.edu, 302-831-1325) or Susan Olson (sbolson@udel.edu, 302-831-6540).

- The Northeastern Integrated Pest Management (IPM) Center is pleased to announce the availability of funding through its IPM Partnership Grants Program for 2006. A Request for Applications (RFA) is posted on the Center's website at http://northeastipm.org/about_fund.cfm, where it can be downloaded in various formats. Approximately \$465,000 is available to support projects that will address or develop regional IPM priorities and will further the mission of the Northeastern IPM Center. Proposals are due Friday, December 15, 2005

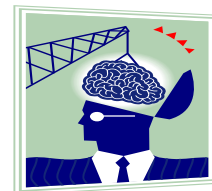
Agricultural and Environmental News

- Agriculture Secretary Mike Johanns announced that the USDA is awarding more than \$4.5 million in research grants to address organic agricultural issues and priorities, including global competitiveness. The grants will focus on two areas; improving the competitiveness of organic producers, and assisting producers and processors who have already adopted organic standards to grow and market high quality organic agricultural products.
- EPA is issuing its final decision to phase out the 10 remaining uses of the organophosphate insecticide azinphos-methyl (AZM) over the next few years. This phase-out will encourage and facilitate transition to safer alternatives and reduce risks to farm workers, pesticide applicators, and aquatic ecosystems. EPA is phasing out the use of AZM on brussels sprouts and nursery stock by September 2007; almonds, pistachios and walnuts by October 2009; and the remaining uses, apples, blueberries, cherries, parsley and pears by

September 2012. During the phase-out the agency is decreasing application rates and increasing buffer zones. All other uses of AZM have been voluntarily cancelled by the registrants. To facilitate the transition to safer alternatives, growers, registrants, and other stakeholders will meet with EPA periodically during the phase out to discuss alternatives to AZM. The pesticide manufacturers have also agreed to develop training materials to educate workers regarding how to avoid unnecessary exposure (USDA EPA News: Nov.17, 2006).

- Dow AgroSciences and FMC Corporation plan to market new premix herbicides to control glyphosate-resistant weeds in soybeans. In a joint statement issued this week, the companies announced they have agreed to supply each other with active ingredients to be combined in the new products (Pesticide and Toxic Chemical News: November 03, 2006, Volume 8, Issue 213).

Did You Know That

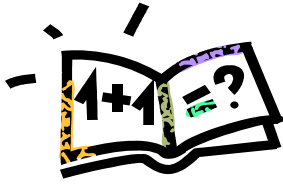


EPA research fellowships totaling \$4.5 million will provide tuition support for 142 students from across the country pursuing degrees in environmental studies.

Comment Section

If there are any comments from the information presented, please let us know by sending an e-mail to: jbanieck@wvu.edu

Events



December 3-6, 2006

4th International Bemisia Workshop.
Hawk's Cay Resort, Duck Key, Florida USA
For more information, please click
<http://conference.ifas.ufl.edu/bemisia/>

December 7-8, 2006

International Whitefly Genomics Workshop
Hawk's Cay Resort, Duck Key, Florida USA
For more information, please click
<http://conference.ifas.ufl.edu/bemisia/>

January 28-31, 2007

National Plant Diagnostic Network, National Meeting, Orlando, FL.
This event will be held at the Wyndham Orlando Resort. More details coming soon.

February 1 & 2, 2007

The NYS IPM Program/Cornell University is announcing a unique workshop in Albany, NY for agricultural educators! Participants will have the opportunity to design their own experiential, hands-on training program for small groups of farmers in local areas. Visit the following web site for a description of TAg:

http://nysipm.cornell.edu/fieldcrops/tag/tag_intro.asp

July 18-19, 2007

Public/Private Partnership-Educating Consumers about IPM and Water Quality. More Details are coming soon.