

Look What's Out There

in

Integrated Pest Management

John F. Baniecki, Ph.D., Coordinator, Pesticide Safety Education Program
David P. McCann, Graduate Assistant, West Virginia University
Rakesh S. Chandran, Ph.D. Coordinator, Integrated Pest Management Program
West Virginia University Extension Service.

Issue 10 November 2008
<http://www.wvu.edu/~agexten>

Carbaryl RED Amended; EPA Denies NRDC Petition to Cancel Uses and Revoke Tolerances

As announced in Federal Register notices published on October 29, 2008, EPA has amended the September 2007 Carbaryl Reregistration Eligibility Decision (RED) and denied a petition from the Natural Resources Defense Council (NRDC) to cancel all carbaryl registrations and revoke all tolerances. In responding to the petition, EPA found that NRDC has neither provided a basis for cancelling carbaryl uses nor demonstrated that carbaryl tolerances are unsafe. The Agency continues to believe that carbaryl tolerances provide a reasonable certainty of no harm. EPA has amended the carbaryl RED to incorporate a revised occupational exposure and risk assessment. The Agency reevaluated the occupational risk assessment and regulatory decision for carbaryl to consider and incorporate public comments on the RED, new worker monitoring and toxicology studies submitted by the registrant, and new science and methodologies. As a result, the Agency is modifying certain worker risk mitigation measures that were imposed in the 2004 Interim RED for carbaryl. For most handler and post-application scenarios, risk mitigation measures such as personal protective equipment (PPE) requirements either remain the same or are reduced. Details are provided in the Amended

RED for Carbaryl. In recent weeks, to implement other aspects of the Agency's reregistration decisions for carbaryl, EPA has announced proposed and final rules to revoke, modify, and establish specific carbaryl tolerances, and has requested comment on the registrant's requests to voluntarily cancel certain carbaryl uses, as specified in the RED and Interim RED. As a result of these actions, the increased protections envisioned in these decisions are being realized. For example, cancellation of all carbaryl dust formulations in agriculture will help protect bees because dusts are extremely hazardous to bees. An N-methyl carbamate insecticide, carbaryl is used to control pests on many agricultural food crops and on cut flowers, ornamentals, turf, and golf courses. Carbaryl may also be used on residential gardens and in oyster beds. Additional information is available on EPA's carbaryl reregistration Web page:

<http://www.epa.gov/pesticides/reregistration/carbaryl/>

(EPA October, 2008)

New Requirements for Controlling Manure, Wastewater from Large Animal Feeding Operations

(Washington, D.C. – Oct. 31, 2008) EPA has finalized a rule helping to protect the nation's water quality by requiring concentrated animal feeding operations (CAFOs) to safely manage

manure. EPA estimates CAFO regulations will prevent 56 million pounds of phosphorus, 110 million pounds of nitrogen, and 2 billion pounds of sediment from entering streams, lakes, and other waters annually. "EPA's new regulation of animal feedlots sets a strong national standard for pollution prevention and environmental protection, while maintaining our country's economic and agricultural competitiveness," said Assistant Administrator for Water Benjamin H. Grumbles. "This clean water rule strengthens environmental safeguards by embracing a zero discharge standard and requiring site-specific management plans to prevent runoff of excess nutrients into our nation's waters." This is the first time EPA has required a nutrient management plan (NMP) for manure to be submitted as part of a CAFO's Clean Water Act permit application. Manure contains the nutrients nitrogen and phosphorus, which, when not managed properly on agricultural land, can pollute nearby streams, lakes, and other waters. Previous rules required a CAFO operator to use an NMP for controlling manure, but the regulation builds on that by requiring the NMP to be submitted with the permit application. The

plan will be reviewed by the permitting authority and conditions based on it will be incorporated as enforceable terms of the permit. The proposed NMP and permit will be available for public review and comment before going final. The regulation also requires that an owner or operator of a CAFO that actually discharges to streams, lakes, and other waters must apply for a permit under the Clean Water Act. If a farmer designs, constructs, operates and maintains their facility such that a discharge will occur, a permit is needed. EPA is also providing an opportunity for CAFO operators who do not discharge or propose to discharge to show their commitment to pollution prevention by obtaining certification as zero dischargers. In addition, the final rule includes technical clarifications regarding water quality-based effluent limitations and use of best management practices to meet zero discharge requirements, as well as affirming the 2003 rule requirement for reducing fecal coliform through

the use of best conventional technology. EPA worked closely with the U.S. Department of Agriculture during the development of the rule and will work closely with states during implementation. The rule deadline for newly defined facilities to apply for permits is February 27, 2009. EPA has been regulating CAFOs for more than 30 years. The final rule responds to a February 2005 federal court decision that upheld most of the agency's 2003 rule, but directed further action or clarification on some portions. Information on the concentrated animal feeding operation rule:

<http://www.epa.gov/npdes/caforule>

(Source: EPA>Contact Information: Dave Ryan, (202) 564-4355 / ryan.dave@epa.gov)

New Publication Tackles Growing Bed Bug Crisis

An overwhelming resurgence of bed bugs throughout the world is causing alarm, especially in urban areas. A new manual developed from a New York City homeless shelter project includes bed bug prevention and how to control them safely using integrated pest management. The epidemic of bed bugs is particularly evident in New York City, where most city residents live in multiple-unit housing. In 2005, New York City received almost 2,000 bed bug complaints, but just one year later this number soared to over 4,000, says Jody Gangloff-Kaufmann, area IPM specialist at Cornell University and project coordinator. According to Gangloff-Kaufmann, "Bed bugs are blood-feeding parasites that bite people at night while they sleep. These tiny (less than 1/8 inch) insects are difficult to control because they hide during the day. However, bed bugs can also occur in other parts of the house where people spend a lot of time. Bed bug bites cause itchy welts on their victims, and bed bugs often leave small dark spots on sheets and other surfaces." People become desperate to eliminate them, and in many cases will use illegal pesticide products or misuse legal products. "An alarming number of individuals report buying professional use or banned pesticides on the Internet and using them at home with no prior experience or

training,” says Gangloff-Kaufmann. “Pests like bedbugs and the pesticides used to control them are potential asthma triggers, which is approaching epidemic levels in urban areas,” says Gangloff-Kaufmann. In addition, victims of bed bugs can spend hundreds or thousands of dollars to hire a pest control professional who may be reluctant to guarantee the work because follow up visits and reinfestation are very common. Gangloff-Kaufmann reports that victims often resort to discarding their belongings, including mattresses, beds and other furniture, as well as moving from infested homes, all at great personal expense. “A manual that includes bed bug management strategies and relies on integrated pest management was urgently needed.” Integrated pest management, or IPM, is a common sense approach to managing pests that uses knowledge of pests’ habits and needs to help residents implement pest prevention tactics for long-term control. Only pesticide products that are least-toxic and that pose the least risk of exposure to residents are used. The project, supported by the New York State IPM Program and the Northeastern IPM Center, resulted in a manual for bed bug management in urban homeless shelters for pest control professionals, municipal agencies, and the public. *Guidelines for Prevention and Management of Bed Bugs in Common Living Settings* covers bed bug prevention, management and control, and education and awareness. The publication also includes fact sheets that can be used as standalone educational documents. The publication is very practical because its contents were the result of recommendations from a stakeholder advisory group that was formed for this project and includes pest control professionals, university and extension staff, and NYC municipal agency officials. In addition, five site visits to homeless shelters in New York City helped to develop a series of experience-based protocols that can be implemented in shelters where bed bugs are a problem. “Long-term shelters are a particularly challenging situation, where bed bugs may thrive and are easily spread within and among shelters and homes as residents come and go,” Gangloff-Kaufmann explains. “Yet because guests stay for

extended periods of time, bed bugs have reliable access to blood from the shelter residents.” While the publication was produced for use in homeless shelters, the broad protocols can be easily adapted by anyone in group homes or other communal living situations. It is available as a PDF file from <http://www.nysipm.cornell.edu/publications/bb%5Fguidelines/>. For more information on the publication or to request a hard copy, contact Gangloff-Kaufmann at (631) 420-2022 or e-mail jljg23@cornell.edu. The Northeastern Integrated Pest Management Center fosters the development and adoption of IPM, a science-based approach to managing pests in ways that generate economic, environmental, and human health benefits. The Center works in partnership with stakeholders from agricultural, urban, and rural settings to identify and address regional priorities for research, education, and outreach. For more information, visit <http://NortheastIPM.org>.

(By: Kristie Auman-Bauer, PA IPM Program.
Source: Northeastern IPM Center, 2008)

New Exotic Pest Invades Homes

The approaching cooler weather means fall is just around the corner, but it can also herald in unwanted pests looking for a warm place to overwinter. One pest that is invading homes and other buildings in the northeast at an increasing rate is the Brown Marmorated Stink Bug (BMSB). Long a pest in its native Asia, BMSB is an invasive agricultural pest of stone fruit, especially peaches, as well as many other plant species. It was first detected in North America in Allentown, Pennsylvania in 2001. In addition to being a strong flyer, BMSB is a hitchhiking pest that has the potential to spread rapidly with human assistance to other locations in the United States. The insect is also considered a nuisance pest, especially in the fall, when adult BMSB enter homes looking for a place to over winter. A new project funded by the Northeastern IPM Center will try to determine if mass pheromone trapping is a viable management tactic. According to George Hamilton, professor of entomology at Rutgers University and project

coordinator, currently there are no adequate pest management alternatives to prevent overwintering adults from entering buildings, resulting in illegal use of bug bombs and other insecticides, which can be dangerous. The traps Hamilton will be using contain pheromones, which are chemicals produced by insects to communicate with other individuals of their species. Pheromone traps are often used by growers to determine the status of pest populations in the field. Trapping insect pests can be one component of an integrated pest management (IPM) plan. IPM aims to manage pests -- such as insects, diseases, weeds and animals -- by combining physical, biological and chemical tactics that are safe, profitable and environmentally compatible.

The project, which is just beginning this fall, will take place in an industrial park in New Jersey. Researchers will evaluate tenants' awareness and concerns, as well as the effectiveness of pheromone traps in an industrial park setting and tenant satisfaction.

According to Hamilton, BMSB adults emerge in spring, and then mate and lay eggs from June to August. "BMSB grows to adulthood during July and August with the adults searching for overwintering sites in September until the first frost, often in homes and other human structures." During the winter, BMSB do not reproduce, and feeding, if any occurs, is minimal. They are plant feeders and will not bite people or pets. The best way to control BMSB is to prevent them from entering the structure. "Place screens over windows, doors and vents, remove window air conditioners and caulk cracks around windows and doorframes," says Hamilton. "Removing window air conditioners is important, as numerous BMSB will enter this way. Remove any BMSB you find indoors either by hand or by using a vacuum. Be sure to empty the vacuum or remove the bag after using." For more information about BMSB and its control or to report a sighting, go to web site <http://njaes.rutgers.edu/stinkbug/>. For more information about pheromone trapping, contact Hamilton at (732) 932-9774 or email at hamilton@NJAES.rutgers.edu. The Northeastern Integrated Pest Management Center fosters the

development and adoption of IPM, a science-based approach to managing pests in ways that generate economic, environmental, and human health benefits. The Center works in partnership with stakeholders from agricultural, urban, and rural settings to identify and address regional priorities for research, education, and outreach. For more information, visit <http://NortheastIPM.org>.

(By: Kristie Auman-Bauer, PA IPM Program.
Source: Northeastern IPM Center, 2008)

EPA seeking comments on the 2009-2014 EPA Strategic Plan

EPA has released the Agency's 2009-2014 *Strategic Plan Change Document* for a 60-day public review and comment period ending November 30, 2008. This is the Agency's initial draft document in carrying out the three-year update of the *Strategic Plan*, as required by the Government Performance and Results Act of 1993 (GPRA). The *Strategic Plan* identifies the measurable environmental and human health outcomes the public can expect over the next five years and describes how we intend to achieve those results. This update focuses on a limited number of targeted areas where the Agency believes it can make the most significant improvements in our strategies and performance measurement in advancing the Agency's mission of protecting human health and the environment. This approach acknowledges the change of administration in January 2009 and the need to deliver a final *2009-2014 Strategic Plan* to the Congress and to the Office of Management and Budget by September 30, 2009, as required by law. We will use public comments as well as input from Agency partners and stakeholders this fall as the Agency begins to prepare the full-text draft of the *Plan*, which we will issue for public review and comment in the spring of 2009. The *Strategic Plan Change Document* is designed to facilitate readers' review by highlighting the proposed changes we are considering in strategies and performance measurement. The *Change Document* also provides a side-by-side

comparison of the Agency's current (2006-2011) and proposed (2009-2014) strategic performance measure framework, which includes the Agency's goals, objectives, sub-objectives, and strategic measures. The document consists of three sections:

- Introduction and Overview
- Summary of Proposed Changes in Strategies
- Proposed Changes in the Strategic Measurement Framework

Readers may view the [2009-2014 EPA Strategic Plan Change Document](#) (PDF) (65pp, 904K) and, if interested, provide comments through the Public Comments Database by November 30, 2008 by going to <http://www.epa.gov/ocfo/plan/plan.htm>

(EPA October 2008)

Pseudomonas syringae Registration Review Proposed Decision; Notice of Availability, Comment Period

This notice announces the availability of EPA's proposed registration review decisions for the pesticides cases, *Pseudomonas fluorescens* and *Pseudomonas syringae*, and opens a public comment period on the proposed registration review decisions. Registration review is EPA's periodic review of pesticide registrations to ensure that each pesticide continues to satisfy the statutory standard for registration, that is, that the pesticide can perform its intended function without unreasonable adverse effects on human health or the environment. Through this program, EPA is ensuring that each pesticide's registration is based on current scientific and other knowledge, including its effects on human health and the environment. **DATES:** Comments must be received on or before December 8, 2008. **ADDRESSES:** Submit your comments, identified by docket identification (ID) numbers EPA-HQ-OPP-2007-0567 for *Pseudomonas fluorescens*, and EPA-HQ-OPP-2007-0509 for *Pseudomonas syringae*, by one of the following methods:

- *Federal eRulemaking Portal:* <http://www.regulations.gov>. Follow the on-line instructions for submitting comments.
- *Mail:* Office of Pesticide Programs (OPP) Regulatory Public Docket (7502P), Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460-0001.
- *Delivery:* OPP Regulatory Public Docket (7502P), Environmental Protection Agency, Rm. S-4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. Deliveries are only accepted during the Docket's normal hours of operation (8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays). Special arrangements should be made for deliveries of boxed information. The Docket Facility telephone number is (703) 305-5805.

Instructions: Direct your comments to docket ID numbers and the regulatory contacts listed under Table 1 for each of the cases to which you are submitting a comment. EPA's policy is that all comments received will be included in the docket without change and may be made available on-line at <http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through [regulations.gov](http://www.regulations.gov) or e-mail. The [regulations.gov](http://www.regulations.gov) website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an e-mail comment directly to EPA without going through [regulations.gov](http://www.regulations.gov), your e-mail address will be automatically captured and included as part of the comment that is placed in the docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your

comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the docket index available in regulations.gov. To access the electronic docket, go to <http://www.regulations.gov>, select “Advanced Search,” then “Docket Search.” Insert the docket ID number where indicated and select the “Submit” button. Follow the instructions on the regulations.gov website to view the docket index or access available documents. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either in the electronic docket at:

<http://www.regulations.gov>, or, if only available in hard copy, at the OPP Regulatory Public Docket in Rm. S- 4400, One Potomac Yard (South Bldg.), 2777 S. Crystal Dr., Arlington, VA. The hours of operation of this Docket Facility are from 8:30 a.m. to 4 p.m., Monday through Friday, excluding legal holidays. The Docket Facility telephone number is (703) 305-5805.

(EPA October 2008)

Funding Opportunity

- 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 18-month projects conducted between July 1, 2009 and December 31, 2010. The Pre-Proposal closing date is Thursday, December 11, 2008. Eligibility: Applications are sought

from qualified public and private groups, organizations, and institutions with a demonstrated capacity to develop and manage educational projects that create risk management results for agricultural producers and their families. The Northeast Center serves the region which includes Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont and West Virginia. Application Process: The application process consists of two stages which are each conducted online. The first is a brief Pre-Proposal, followed by a more detailed Full Proposal for those applicants who are invited to proceed to the second stage. For more information and to view the complete Request for Applications, please go to the link on the Northeast Centers website (www.necrme.org). 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).

- Strategic Agricultural Initiative Request For Application FY2009 U.S. Environmental Protection Agency (EPA) Region 2 is soliciting applications to help implement the Food Quality Protection Act (FQPA) and to support efforts by the agricultural community to transition away from high risk pesticides (Organophosphates, Carbamates, and Fumigants) to the use of less and reduced risk pesticides, alternative methods of agricultural pest control, and sustainable practices in food production. The program supports grants for education, extension, demonstration, and studies for FQPA transition and reduced risk practices for pest management in agriculture. The closing date is December 11, 2008. Please read the Request for Applications carefully and follow all directions. You can view the announcement at <http://epa.gov/region02/pesticides/>.

- The Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers

Competitive Grants Program (OASDFR) provides funds to organizations to conduct outreach and technical assistance to encourage and assist socially disadvantaged farmers and ranchers to own and operate farms and ranches and to participate in agricultural programs. The OASDFR will support a wide range of outreach and assistance activities in farm management, financial management, marketing, application and bidding procedures, and other areas. The primary purpose of the OASDFR is to deliver outreach and technical assistance, to assure opportunities for socially disadvantaged farmers and ranchers to successfully acquire, own, operate, and retain farms and ranches; and assure equitable participation in the full range of USDA programs. Postsecondary educational institutions and community-based organizations, networks, or coalitions of community-based organizations that meet certain criteria. Organizations that received funding under this section before Jan. 1, 1996 are also eligible. **IMPORTANT!** See RFA for specific eligibility requirements. Awards range from \$100,000.00 to \$300,000.00, the closing date for proposals is December 12, 2008. For more information go to:
<http://www.csrees.usda.gov/fo/outreachassistance/sociallydisadvantagedfarmersranchers.cfm>

- The Cooperative State Research, Education, and Extension Service (CSREES) is soliciting stakeholder input on the implementation of the Smith-Lever 3(d) Extension IPM Competitive Grants Program (new EIPM), which is authorized under section 3(d) of the Act of May 8, 1917, as amended by section 7403 of the FCEA (7 U.S.C. 343 (d)). The significant changes to the program are 1) conversion to a competitive program and 2) expanded eligibility to include and 1890 land grant colleges and universities, including Tuskegee University and West Virginia State University. Section 7417 of FCEA amended section 208 of the District of Columbia Public Postsecondary Education Reform Act also provides eligibility to the University of the District of Columbia (UDC) for programs authorized and

appropriated under section 3(d) of the Smith-Lever Act. Under the new EIPM program, eligible institutions may compete for and receive funds from the U.S. Department of Agriculture (USDA) to provide, for a specific period of time as identified in the agreement, Integrated Pest Management (IPM) programming to the clientele of the state and any other geographic area defined by the agreement.

- The U.S. Environmental Protection Agency (EPA), as part of its Greater Research Opportunities (GRO) program, is offering Greater Research Opportunities (GRO) undergraduate fellowships for bachelor level students in environmental fields of study. The deadline for receipt of pre-applications is December 11, 2008 at 4:00 PM Eastern Time. Subject to availability of funding, the Agency plans to award approximately 20 new fellowships by July 31, 2009. Eligible students will receive support for their junior and senior years of undergraduate study and for an internship at an EPA facility during the summer between their junior and senior years. The fellowship provides up to \$19,250 per year of academic support and up to \$8,000 of internship support for a three-month summer period. For more information go to:
http://es.epa.gov/ncer/rfa/2009/2009_gro_undergrad.html
- Environmental Education Grants Deadline: December 18, 2008 The Grants Program sponsored by EPA's Environmental Education Division (EED), Office of Children's Health Protection and Environmental Education, supports environmental education projects that enhance the public's awareness, knowledge, and skills to help people make informed decisions that affect environmental quality. EPA awards grants each year based on funding appropriated by Congress. Annual funding for the program ranges between \$2 and \$3 million. Most grants will be in the \$15,000 to \$25,000 range. For more information go to:
<http://www.epa.gov/enviroed/grants.html>

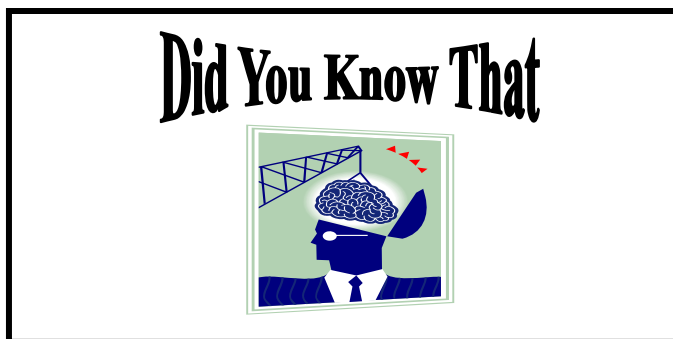
Don't Forget to Take Advantage of Online First Detector Training

The National Plant Diagnostic Network (NPDN) is pleased to announce that the Online First Detector Training modules are up and running and can be found at: <http://cbc.at.ufl.edu/>. The site allows anyone to participate in the First Detector Program. The course is composed of several modules, and includes topics such as:

- The NPDN Mission
- Agricultural Biosecurity
- Purpose of a First Detector
- Monitoring for Exotic Pests
- How to Submit a Suspicious Sample
- The Art and Science of Plant Pest Diagnostics
- And more....

Each module takes anywhere from 40 to 60 minutes and the course can be completed at your own pace. To get started, first register for the First Detector Training Workshops to get your user name and password.

The general goal of the program is to get the public involved in protecting our plant related industries and our natural plant resources from being impacted by exotic and potentially damaging plant pests be they insects, weeds or pathogens. Upon completion of the training, First Detectors receive a certificate of training completion. Trained First Detectors are also provided with the opportunity to receive the national NPDN First Detector newsletter as well as pest alerts via e-mail through the National First Detector registry. For more information, go to <http://cbc.at.ufl.edu/> or contact Dr. John Baniecki at: John.Baniecki@mail.wvu.edu.



Gentic Engineering is Not All it is Cracked up to Be

Gentically engineered strains of crop plants or ornamentals may result in increased yields and disease resistance but there are consequences. The loss of diversity resulting from engineering may result in the loss of genes related to defense against attack by pests. A crop resistant to one pest may be attacked by another that is no longer constrained by competition. Furthermore, insect and fungal pathogens reproduce at much faster rates than hosts and can quickly develop strains that can overcome host defenses. The benefits of using genetically engineered crops and ornamentals should be carefully weighed relative to the possible drawbacks.

Questions?

If you have any comments or questions regarding any of the material presented, please let us know by sending an e-mail to:

John.Baniecki@mail.wvu.edu.