

# Look What's Out There

in

## Integrated Pest Management

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

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

### Compounds from American Beautyberry Repel Ticks

Compounds isolated from the American beautyberry that enable its crushed leaves to repel mosquitoes may also prove useful in combating disease-spreading ticks. Chemist Charles Cantrell (ARS Natural Products Utilization Research Unit, Oxford, MS) led work to isolate the compounds from the leaves. He got the idea from Charles Bryson, an ARS botanist in Stoneville, MS. Bryson's grandfather would use beautyberry leaves to protect people and farm-work animals from biting bugs in northern Mississippi. Now ARS scientists in Beltsville, Md., have shown that two beautyberry compounds—callicarpenal and intermedeol—may effectively repel blacklegged ticks as well. Blacklegged ticks are the principal carrier of bacteria that cause Lyme disease in humans. Tests showed that the compounds repelled 95 percent of blacklegged tick nymphs, repelled 100 percent of blacklegged ticks three hours after application, and 53 percent after four hours. The compounds however were not as successful at repelling nymphs of lone star ticks, which transmit potentially serious human diseases known as ehrlichioses. These compounds may have potential as tick repellents for humans and other animals.

*(USDA ARS: News and Events Jan 2007)*

### Hairy Nightshade Alternate Host for Late Blight Organism

Scientists with the Agricultural Research Service (ARS) in Orono, Maine, have found that *Phytophthora infestans*, the microorganism behind the devastating tuber disease that triggered the Irish potato famine of the mid-1800s, is seeking refuge in potato fields in another plant. Extension agents at the University of Maine Cooperative Extension in Presque Isle came across hairy nightshade plants that were speckled with suspicious dark and oily spots. Modesto Olanya, a plant pathologist at the ARS New England Plant, Soil and Water Research Laboratory in Orono, analyzed the microorganisms on the plants and verified, for the first time, that hairy nightshade is an alternate host of *P. infestans* in Maine. According to Olanya, the finding that hairy nightshade is an active host of *P. infestans* is problematic in two ways. First, the plant is a secondary source of the destructive disease and secondly hairy night shade is a weed. In terms of the presence of this weed in commercial potato fields in Maine, Olanya and University of Maine collaborators found that 55 percent of fields assessed in the state contained the plant. As a result of this ARS research, growers should realize the importance of controlling hairy nightshade as part of their overall late blight management program.

*(USDA ARS: News and Events Dec 2006)*

## **Emerald Ash Borer Quarantine**

The U. S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) expanded the quarantine for emerald ash borer (EAB) to Illinois, Indiana and Ohio. The quarantine regulations will help to mitigate the spread of this invasive pest that attacks ash trees. These devastating insects from Asia may be accidentally spread to new locations by campers, hunters, other outdoor enthusiasts and homeowners moving firewood from one location to another. Therefore all hardwood firewood, including ash, oak, maple and hickory that originates within the quarantine area are regulated articles and their interstate movement is prohibited. In addition to firewood, other regulated articles, such as ash nursery stock and green lumber; any other ash material including logs, stumps, roots, branches, as well as composted and uncomposted wood chips, also are restricted. EAB is responsible for over 20 million dead and dying ash trees in Michigan, Ohio, Indiana, and Illinois since its accidental introduction into the U. S. in 2002. The devastation caused by the tiny emerald ash borer comes from the larvae that feed on the inner bark of ash trees which disrupts the trees ability to transport water and nutrients. There are no native predators of the emerald ash borer in North America so these quarantines are essential to prevent its spread while the science community works to develop solutions to combat this invader. For more information on controlling EAB, go to:

<http://www.na.fs.fed.us/fhp/eab/firewood/> or  
[http://www.nps.gov/shen/planyourvisit/firewood\\_eab.htm](http://www.nps.gov/shen/planyourvisit/firewood_eab.htm)

*(Virginia IPM Hottopics Feb 2007)*

## **Pest Control Chemical Fact Sheets**

Beyond Pesticides has created a new database tool that is intended to provide practitioners with easier access to current and historical information on pesticide hazards and safe pest management, drawing on and linking to numerous sources and organizations that include

information related to pesticide science, policy and activism. Currently, the Gateway lists 81 chemicals and has 8 categories of information: chemical name, fact sheet and popular product and manufacturer names; chemical class; pesticide uses and information on less and non-toxic alternatives; toxicity rating; health and environmental effects; regulatory status; other information (brochures, fact sheets, databases, websites, etc.); and, key studies. These fact sheets are to be read in conjunction with the Health and Environmental Effects chart in the Gateway. These fact sheets are being revised constantly so they provide up-to-date information to ensure that the Gateway contributes to increased effectiveness in moving to the adoption of pest management policies and practices that better protect health and the environment.

Gateway on Pesticide Hazards and Safe Pest Management:

<http://www.beyondpesticides.org/gateway/about.htm>.

Go to the Gateway:

<http://www.beyondpesticides.org/gateway/index.htm>.

*(Beyond Pesticides Feb 2007)*

## **Agricultural and Environmental News**

### **USDA Seeks Public Comment on Deregulation of Genetically Engineered Soybean**

The U.S. Department of Agriculture's Animal and Plant Health Inspection Service is seeking public comment on a petition to deregulate MON 89788, a soybean genetically engineered (GE) to be resistant to the herbicide glyphosate. Notice of this action is published in the Feb. 5 Federal Register. The petition for deregulation, submitted by Monsanto Company, is in accordance with APHIS' regulations concerning the introduction of GE organisms and products. APHIS has prepared a draft environmental assessment (EA) to determine whether deregulating the soybean could have a significant impact on the environment. After a thorough

review of the scientific evidence, APHIS' current preferred action is to deregulate the soybean based on the determination that it is as safe as its traditionally bred counterparts. If APHIS grants the petition for deregulation, the soybean and its progeny would no longer be regulated articles. The product could then be freely moved and planted without the requirement of permits or other regulatory oversight by APHIS. APHIS is seeking comments on the petition and invites comments on the EA. Consideration will be given to comments received on or before April 6. Send an original and three copies of postal mail or commercial delivery comments to Docket No. APHIS-2006-0195, Regulatory Analysis and Development, PPD, APHIS, Station 3A-03.8, 4700 River Road, Unit 118, Riverdale, Md. 20737-1238. If you wish to submit a comment using the Internet, go to the Federal eRulemaking portal at <http://www.regulations.gov>, select "Animal and Plant Health Inspection Service" from the agency drop-down menu; then click on "Submit." In the Docket ID column, select APHIS-2006-0195 to submit or view public comments and to view supporting and related materials available electronically. Comments are posted on the Regulations.gov Web site and may also be viewed at USDA, Room 1141, South Building, 14th St. and Independence Ave., S.W., Washington, D.C., between 8 a.m. and 4:30 p.m., Monday through Friday, excluding holidays. To facilitate entry into the comment reading room, please call (202) 690-2817.

*(APHIS News Release Feb 2007)*

### **Pesticide Cancellation Orders: Lindane and Ethyl Parathion**

**Lindane** - EPA has issued final orders canceling the registrations of all remaining pesticide products containing lindane. In July 2006, EPA received formal requests to voluntarily cancel their lindane pesticide product registrations from all registrants, first Chemtura USA Corporation, followed by AGSCO Inc., Drexel Chemical Company, and JLM International, Inc. The Agency received no substantive comments in response to an August 23, 2006, Federal Register

notice announcing its receipt of these requests and inviting public comment. Therefore, as announced in the Federal Register on December 13, 2006, EPA has granted the voluntary cancellation requests, and sent cancellation orders to the registrants. Technical (manufacturing use) products were cancelled effective October 4, 2006, and the last date for use of these products will be July 1, 2007. Cancellation of end-use product registrations will be effective on July 1, 2007, and the last use date for these products will be October 1, 2009. The Agency expects that all existing stocks of lindane will be depleted by that time. This action results in the cancellation of all remaining lindane pesticide products registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for use in the United States. Lindane is a broad spectrum, organochlorine insecticide used to treat the seeds of barley, corn, oats, rye, sorghum, and wheat. Lindane is a toxic, persistent, and bio-accumulative pesticide that has been of international as well as domestic concern. EPA announced in early August 2006 that it has determined that the risks of continued lindane registration outweigh the benefits, and therefore the remaining uses of lindane are not eligible for reregistration. EPA expects the cancellation of these uses to result in no significant loss to U.S. agriculture due to the successful development and registration of safer alternative pesticides in recent years. Information about lindane is available at [Regulations.gov](http://www.regulations.gov) (<http://www.regulations.gov/fdmspublic/component/main>) in docket number EPA-HQ-OPP-2002-0202, and on the Agency's lindane reregistration web page (<http://www.epa.gov/oppsrrd1/reregistration/lindane/>).

**Ethyl Parathion** - This notice announces EPA's order for the cancellations, voluntarily requested by the Drexel Chemical Company and accepted by the Agency, of products containing the pesticide ethyl parathion, pursuant to section 6(f)(1) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended. This cancellation order follows April 27, 2005 Federal

Register Notice of Receipt of Requests from the ethyl parathion registrant to voluntarily cancel all their ethyl parathion product registrations. These are the last ethyl parathion products registered for use in the United States. In the April 27, 2005 Notice, EPA indicated that it would issue an order implementing the cancellations and/or amendments to terminate uses, unless the Agency received substantive comments within the 30-day comment period that would merit its further review of these requests, or unless the registrants withdrew their requests within this period. The Agency did not receive any comments on the Notice. Further, the registrant did not withdraw their requests. Accordingly, EPA hereby issues in this notice a cancellation order granting the requested cancellations. Any distribution, sale, or use of the ethyl parathion products subject to this cancellation order is permitted only in accordance with the terms of this order, including any existing stocks provisions.

*(Utah Pesticide and Toxic News Jan 2007)*

### Funding Opportunities

- Funding for Regional Integrated Pest Management Centers. The goal of the Regional Integrated Pest Management Centers (IPM Centers) is to promote the development and implementation of IPM by facilitating collaboration across states, disciplines, and purposes. IPM Centers will establish and maintain information networks, build partnerships to address pest management challenges and opportunities, evaluate the impact of IPM implementation, communicate positive outcomes to key stakeholders, and manage funding resources effectively. Successful applicants to this program will demonstrate the capacity and commitment necessary to advance the goals of the National Roadmap for Integrated Pest Management ([www.ipmcenters.org/IPMRoadMap.pdf](http://www.ipmcenters.org/IPMRoadMap.pdf)), and evaluate the progress of this advancement. The IPM Roadmap addresses pest management needs for production agriculture, natural resources and recreational environments, and residential and

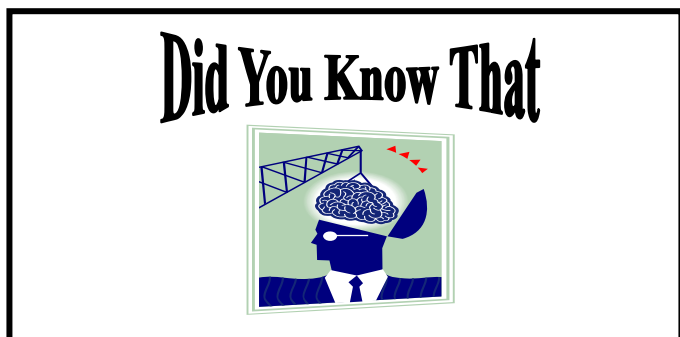
public areas. The deadline for application is **March 30, 2007**. The duration of funding will last 4 years and with a total of \$3.89 million to divide evenly among four centers. For complete information and application instructions see: <http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1640>

- Funding for National Research Initiative in Plant Biosecurity through USDA - CSREES. This program supports integrated projects aimed at ensuring a continued supply of safe, high-quality, affordable food and fiber for consumers in the U.S. and international trade partners. The goal of the program is to harness our Nation's scientific and technological resources to help agricultural producers and professionals implement strategies to safeguard agriculture in the U.S. from high-consequence plant diseases. Applicants are strongly encouraged to read the entire Program Description section for current priorities and additional information relative to the program of interest. Deadline for application is **June 5, 2007**. This program accepts a wide range of applications, please carefully review the budget guidelines to ensure application acceptance. <http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1521>

- National Research Initiative - Arthropod and Nematode Biology and Management (B) and (C): Suborganismal Biology and Tools, Resources, and Genomics through USDA - CSREES. The Arthropod and Nematode Biology and Management Program supports fundamental research at the suborganismal and molecular levels to address the problem of controlling invasive and re-emerging pests and the Nation's over-dependence on environmentally persistent pesticides. Advances in the molecular genetics, physiology biochemistry and genomics of arthropods and nematodes are poised to provide novel solutions to these problems which threaten the Nation's food supply and natural resources. The program has two elements: Suborganismal Biology, and Tools, Resources, and Genomics. 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. Total amount available is \$3.9 million with a per grant limit of \$750,000. Deadline for application is **June 5, 2007**. Please see website for more details:

<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1602>



Humans are the preferred host of bed bugs but in our absence bed bugs will feed on poultry, canaries, English sparrows, mice, rats, guinea pigs, and bats. Although the bite of bed bugs is painless, most people (80%) develop an allergic reaction to the saliva injected by the bug as it feeds. A swelling usually results from feeding but there is no red spot such as is characteristic with flea bites. (*P.E.I Pest Control Ltd. 2006*)



**March 8, 2007**

**Perennial Plant Conference**, Univ. of Connecticut, Storrs Campus. For more information go to:

<http://www.hort.uconn.edu/Ipm/greenhs/htms/pernconf07.htm>

**March 9 - 10, 2007**

**Appalachian Grazing Conference**

The 2007 Appalachian Grazing Conference features presentations targeted towards increasing profitability for livestock producers in Kentucky, Maryland, Ohio, Pennsylvania, Virginia and West Virginia. LakeView Resort, Morgantown, West Virginia. For more information:

[http://www.wvca.us/grazing\\_conference/](http://www.wvca.us/grazing_conference/)

**March 16, 2007**

**Western Pennsylvania Turf Conference and Trade Show**. For more information and registration go to:

[http://www.paturf.org/07wptcts\\_brochure.htm](http://www.paturf.org/07wptcts_brochure.htm)

**March 21-23, 2007**

**American Phytopathological Society, Potomac Division Meeting**. Blacksburg, Va. For more information go to:

<http://www.filebox.vt.edu/users/abaudoin/potomac/>

**April 18-20, 2007**

**VIIth National Stored Product Integrated Pest Management Training Conference** will be held at Oklahoma State University in Stillwater, OK. For more information go to:

<http://www.ento.okstate.edu/spipm/>

**March 24-26, 2007**

**The Sixth International IPM Symposium**

Symposium sessions will address IPM across disciplines, internationally, in the market place, urban settings, greenhouses, and more. Portland, Oregon. For more information:

<http://www.ipmcenters.org/ipmsymposium09/> or [www.conferences.uiuc.edu](http://www.conferences.uiuc.edu)

**April 27-28, 2007**

**Organic Beekeeping Workshop** to be held in Chestnut Ridge, NY. This workshop is for active beekeepers as well as for beginners. In this workshop we will look at the bee colony as an organism and what it needs in order to further its health and vitality. Lots of practical advice and demonstrations will give novices enough information to get started with their own hive,

and encourage experienced beekeepers to adopt organic procedure. For More Information on this event please send email to [beework@pfeiffercenter.org](mailto:beework@pfeiffercenter.org) or call 845-352 5020 ext.20 or visit our website [www.pfeiffercenter.org](http://www.pfeiffercenter.org).

**May 7-9, 2007**

**Invasive Arthropod Workshop**, Clemson, South Carolina. For more information go to: <http://conference.ifas.ufl.edu/arthropod/>

**June 17-29, 2007**

**The International Short Course in Agroecology, IPM, and Sustainable Agriculture** will be held in East Lansing, MI. For more information contact: K.M. Maredia, IIA, 416 Plant/Soil Sci. Bldg., Michigan State Univ., East Lansing, MI 48824, USA. [KMaredia@msu.edu](mailto:KMaredia@msu.edu). Fax: 1-517-432-1982. Phone: 1-517-353-5262.

**July 11-14, 2007**

**The Second National Conference on Facilitating Sustainable Agriculture Education.** Cornell University. For more information contact Kathi Colen Peck, Conference Coordinator, [kscp@turbonet.com](mailto:kscp@turbonet.com).

**Comments or Questions?**

If you have any comments or questions regarding any of the material presented, please let us know by sending an e-mail to: [jbanieck@wvu.edu](mailto:jbanieck@wvu.edu). Thank you.