

Look What's Out There

in

Integrated Pest Management

John F. Baniecki, Ph.D., Coordinator, Pesticide Safety Education Program
M. Essam Dabaan, Ph.D., 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/>

Finding Out How Genes Govern Bees' Lives

Efforts by Agricultural Research Service (ARS) scientists and cooperators to sequence the honeybee genome are paying off, as researchers are learning more about how the honeybee's genes protect it against disease and control its behavior, among other traits.

Spearheaded by ARS scientists since 2003, the sequencing project is sponsored by the U.S. Department of Agriculture (USDA) and the National Human Genome Research Institute at the National Institutes of Health, in cooperation with the Baylor College of Medicine in Houston, Texas. The latest findings in the sequencing effort are reported in today's edition of *Nature*.

Sequencing the honeybee genome gives researchers an invaluable tool for better understanding this essential pollinator of many of the world's important crops.

Jay Evans, an entomologist at the ARS Bee Laboratory in Beltsville, Md., has been working on the project along with a number of Beltsville colleagues, including entomologist Judy Chen, geneticist Anita Collins, research associate Laura Decanini and technician Dawn Lopez. Other ARS cooperators are molecular biologist Kate Aronstein from the ARS Honey Bee Research Unit in Weslaco, Texas, and Kevin Hackett, the ARS national program leader for research on bees and pollination.

With the genomic sequence of the honeybee, *Apis mellifera*, in hand, the team will be looking at how better bee-breeding and management practices might help bees fend off diseases such as American foulbrood, chalkbrood and mites, as well as produce bees with high honey production, pollination efficiency and winter hardiness.

The researchers think that by crossing bees from different genetic lines across the United States, they will be able to determine which genes help certain crossbred offspring survive longer than others when exposed to disease agents. They will test the disease resistance of offspring from their experimental crosses in a controlled environment, then use the results to guide breeding programs at the ARS Honey Bee Breeding, Genetics and Physiology Research Lab in Baton Rouge, La.

The ARS bee research team also has been using the genome to investigate bee management practices, honeybee nutrition and the production of healthy worker bees (USDA-ARS News: October 25, 2006).

West Virginia IPM Program will Manage Weeds with Biocontrol.

The West Virginia IPM coordinator, Rakesh Chandran and other research collaborators have received a Conservation Innovation Grant from NRCS to implement a cost share program. The

proposed project will help 30 farmers use goats and sheep in a prescribed grazing system to control thistle and other invasive pasture weeds. This strategy is expected to reduce dependence on pesticides and fossil fuel and to convert weed biomass to marketable products.

New IPM Publications

A brand new EPA booklet “GreenScaping: The Easy Way to a Greener, Healthier Yard” is available for use and share. You can partner with GreenScape at no charge (See www.epa.gov/GreenSapes).

A Pest Alert fact sheet on the Brown Marmorated Sting Bug was produced by the Maryland Department of Agriculture with support fund from the Northeastern IPM center.

A fact sheet on “Pesticides in the Nation’s Streams and Ground Water, 1992-2001” was developed by USGS in March, 2006 and is available at: <http://ca.water.usgs.gov/pnsp/>

Funding Opportunity

- The Northeast Vegetable IPM Working Group, funded by the Northeastern IPM Center, is launching an Educator Exchange Program. They will pay for qualified expenses to help agricultural professionals in the Northeast to learn about and share integrated pest management practices in vegetables and strawberries. The Request for Applications to download is at: <http://northeastipm.org/IWG/veg/VegStrIPMEducatorExchange.doc>
Deadline is November 30, 2006.

- The Northeastern Integrated Pest Management (IPM) Center is pleased to announce the availability of funding through the Northeastern Regional IPM Competitive Grants Program. A Request for Applications (RFA) is posted on the Center's web page at http://NortheastIPM.org/abou_fund.cfm. Approximately \$610,000 will be available in 2006 to support projects that develop individual

pest control tactics, integrate tactics into an IPM system, and develop and implement extension education programs. A letter of intent is required with a deadline of Friday, October 7, 2005. Proposals are due Friday, November 18, 2005.

- 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/abou_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

- Online guidance offered on pesticide label warranty disclaimers. After frequently receiving questions from registrants about warranty disclaimer language and finding pesticide product labels with statements containing “potentially false or misleading language, or words and phrases that [were] in some way objectionable,” EPA Oct. 20 posted guidance on warranty disclaimers on its Web site. The warranty guidance document can be accessed at on the Web site in the "Labeling Resources1" box. You may access the pdf file directly at:

<http://www.epa.gov/pesticides/regulating/labels/warranty.pdf>.

(USDA EPA News: October 20, 2006).

- EPA Proposes New Guidance on Small-Scale Field Testing and Low-level Intermittent Presence in Food of Plant-Incorporated Protectants. In a draft Pesticide Registration (PR) Notice issued by EPA, the Agency is clarifying the process by which it reviews and ensures the safety of residues of plant-incorporated protectants (PIPs) in food or feed and the conditions under which a tolerance (maximum allowable residue limit) or an

exemption from a tolerance would be required for field tests for biotechnology-derived food and feed crop plants containing PIPs. Plant-Incorporated Protectants are pesticidal substances produced by plants, including the genetic material necessary for the plant to produce the substance. PIPs also include any inert ingredients, such as selective markers used to insert the active ingredient in to the plant. The Federal Register Notice¹ announcing a 60-day public comment period is available on the Web site. The draft Pesticide Registration notice can be found at:

<http://www.regulations.gov/fdmspublic/comment/main>. Under "Keyword", type in docket number: EPA-HQ-OPP-2006-0291. (USDA EPA News: September 29, 2006).

Did You Know That

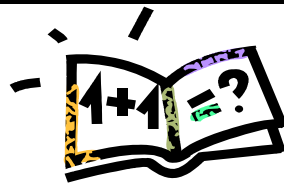


EPA programs for schools can help improve the health, productivity and performance of 53 million children and 6 million staff in the nation's 120,000 public and private schools, as well as save energy and money.

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



November 13 and 14, 2006

Pesticide Recertification Training Workshop. For West Virginia Categories 7 (Right-of-Way), 11 (Demonstration and Research), and private. Conducted at two locations, Ramada Inn, Morgantown, WV. and at Hampshire County High School, Romney, WV. For more information, please contact Bruce Loyd at 304-269-4660 or via e-mail: BMLOYD@mail.wvu.edu

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.

July 18-19, 2007

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