

# 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.**

Issue 12– Dec. 2005  
<http://www.wvu.edu/~agexten/>

#### **New Web Address for Pesticide Product Database**

The U.S.EPA/OPP Pesticide Product Database, formerly available through the California Department of Pesticide Regulation (CDPR), will now be available through Purdue University's Center for Environmental Regulatory Information Services (CERIS) at the following Web address:

<http://ppis.ceris.purdue.edu/>.

This interactive database offers brief registration information on approximately 90,000 products. The data include: registration number and name, company number and name, registration date, cancellation date and reason (if canceled), and product manager name and phone number. Also offered are databases containing chemical ingredient information, searchable by common, technical, synonym, CAS number, or trade names, and firm information, searchable by firm number or name (US-EPA: News for Release, Nov. 8, 2005).

#### **Little Risk from Antibiotic Markers**

Antibiotic-resistance markers in genetically modified (GM) plants do not pose a substantial risk to human health, concludes a review article published in the October issue of *The Lancet Infectious Diseases*. Antibiotic resistance marker genes are used as a tool to recognize the successful introduction into plant cells of a new gene with beneficial characteristics. The markers

are coupled with the new gene, so by selecting those cells that express the resistance marker, the cells that have incorporated the gene of interest into their DNA can be identified. Plants derived from these cells neither contain nor produce antibiotics.

The issue of the safety of incorporating antibiotic-resistance markers into GM plants has been a matter of public debate since the early stages of their development. Concern has surrounded the possibility that antibiotic-resistance genes might be passed from GM plants to bacteria, thus creating bacteria that are resistant to antibiotics such as those used to treat common skin, ear, and eye infections. In this review, authors Stephen Gillespie (University College, London) and Philippe Gay evaluate the scientific evidence regarding the impact of antibiotic-resistance markers on human health. They consider the biological barriers to the transfer of antibiotic-resistance markers into bacteria that cause disease in animals and humans, and the possible clinical consequences of this transfer.

The authors conclude that whereas there is no evidence that antibiotic resistance from GM crops is being transferred to bacteria, this does not exclude the possibility that it might occur. However, the evidence suggests that, if it occurs at all, the contribution to the burden of antibiotic resistance from GM plants is low, and is dwarfed by inappropriate prescribing of antibiotics in medical practice and their use as animal growth

promoters in agriculture. Professor Gillespie comments: "...antibiotic-resistance markers do not pose a substantial risk to human health because the contribution that recombinant bacteria might make - should the enormous barriers to transfer be overcome - is so small that any contribution to antibiotic resistance made by GM plants must be overwhelmed by the contribution made by antibiotic prescription in clinical practice." (*The Lancet Infectious Diseases*, 9/27/05 Via Chemically Speaking, UFL).

## Avian Influenza

Avian influenza (AI) is a virus-caused disease usually infecting birds. AI viruses can infect chickens, turkeys, pheasants, quail, ducks, geese and guinea fowl as well as a wide variety of other birds, including migratory waterfowl.

AI viruses are classified by a combination of two groups of proteins: hemagglutinin proteins (H), of which there are 16 (H1-H16), and neuraminidase proteins (N), of which there are 9 (N1-N9).

AI strains are also divided into two groups based on pathogenicity—the ability of the virus to produce disease. Most AI strains are classified as low pathogenicity (LP) avian influenza and cause little or no clinical signs in infected birds. LPAI poses no serious threat to humans. Some strains of LPAI—H5 and H7—can mutate to the more highly pathogenic forms. Birds with HPAI get a more virulent form of avian influenza.

People can get HPAI from birds, but it requires extensive close contact with infected birds. For HPAI to spread from person to person, the virus would have to mutate, to change.

The strain that is currently a problem from Southeast Asia is H5N1 HPAI.

To learn more about ARS avian influenza research, see:

"International Partnership for Poultry Safety," in the November 2005 issue of *Agricultural Research* magazine.  
(Ref. USDA-ARS, Dec. 2005)

## Funding Opportunity

- The Cooperative State Research, Education, and Extension Service (CSREES) is pleased to announce the release of the Integrated Organic Program's Request for Applications (RFA). The RFA can be found at the CSREES Funding Opportunities website:

<http://www.csrees.usda.gov/fo/funding.cfm> or at grants.gov: <http://www.grants.gov/>.

Proposals must be received at CSREES headquarters by close of business December 20th, 2005.

- The Northeastern IPM Center is pleased to announce the availability of the IPM Partnership Grants program (due on December 15th, 2005).  
<http://www.ncipmc.org/symposium/enterPoster.php>

## Agricultural and Environmental News

- EPA is releasing its revised 2005 Worker Protection Standard for Agricultural Pesticides How-to-Comply Manual. This compliance assistance tool has been updated to reflect amendments to the Worker Protection Standard (WPS), a regulation designed to protect agricultural workers and pesticide handlers. The revised manual provides detailed information on who is covered by the WPS and how to meet regulatory requirements. The updated manual will facilitate better protection of pesticide workers and handlers in agriculture from the potential risks of pesticides.

For further information about the revised manual and how to obtain print and/or CD-ROM versions of the manual, or for additional information about the WPS, please visit:

<http://www.epa.gov/agriculture/htc.html>.  
(US-EPA: News for Release, Dec.1, 2005)

- Environmental groups are fighting a U.S. Bureau of Land management (BLM) draft plan for herbicide spraying on government

land in 17 U.S. states, arguing it would “triple current annual herbicide spray totals” and “put applicators at risk” of exposure to herbicides such as 2, 4-D and bromacil, Californians for Alternatives to Toxics (CAT) announced last week (Pesticide and Chemical Toxic News, November 29, 2005, Volume 7, Issue 227).

- Sen. Mike Enzi (R–Wyo.) introduced legislation Nov. 18 to help U.S. companies communicate better about the risks posed by hazardous chemicals (Pesticide and Chemical Toxic News, November 23, 2005, Volume 7, Issue 225).

## Did You Know That

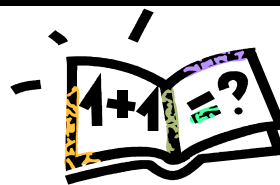


The most economically important insect pests of tomato in West Virginia

Are

Colorado potato beetle, fruit worms, aphids, stink bugs, flea beetle, and spider mites. Other reported insect pests include cutworms, white flies, thrips, and leafminers

## Events



### February 14-15, 2006

NEPDN Regional Meeting, Tampa, FL.  
Deadline for registration is December 1, 2005.  
Please contact Karen Snover-Clift  
(kls13@cornell.edu) for more information.

### April 4-6, 2006

The Fifth National IPM Symposium, "Delivering on a Promise," will be held in St. Louis, MO at the Adams Mark Hotel. The deadline for Poster Abstract submission is December 16th, 2005.  
More information is at:

<http://www.ipmcenters.org/ipmsymposium/>