# Look What's Out There

## in

## Integrated Pest Management

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*http://www.wvu.edu/~agexten/*

### Unique Software for Preventing Pesticide Drift

The first user-friendly computer software for estimating the droplet drift distances for pesticide spray applications has been released by Agricultural Research Service (ARS) and Ohio State University (OSU) agricultural engineers.

Heping Zhu and Robert Fox at ARS' Application Technology Research Unit in Wooster, Ohio, and Erdal Ozkan at OSU-Columbus named the new software "DRIFTSIM," for Drift Simulator. ARS is the U.S. Department of Agriculture's chief scientific research agency.

The OSU Communications and Technology Office is distributing the DRIFTSIM software for a nominal fee. [To place an order, visit this OSU-CTS web page.] The Windows-based software can help farmers and Extension Service educators minimize pesticide drift by helping them choose equipment, settings and techniques. It also helps manufacturers design pesticide formulations and pesticide spraying equipment to minimize drift potential of their products. By Don Comis (USDA/ARS-July 25, 2005).

### Simazine Risk Assessments Available for Public Comment

The public can now access and comment on human health and environmental fate and effects risk assessments and related documents for the chlorinated triazine pesticide simazine (Docket ID number OPP-2005-0151). Simazine is a systematic herbicide that is usually applied to soil, absorbed through leaves and roots, and acts by inhibiting photosynthesis within targeted plants. Registered uses for simazine include pre-plant use or use in established fields of a variety of food and feed crops including fruit and nut crops in addition to field crops.

Through a Federal Register notice published on July 13, 2005, EPA initiated a 60-day comment period closing on September 12, 2005, which allows interested parties to provide comments and input on the Agency's risk assessments for simazine. Additionally, EPA is providing an opportunity for interested parties to provide risk management proposals. This review of simazine is part of the Agency's Interim Reregistration Eligibility Decision (IRED) and public participation process to ensure that all pesticides meet current health and safety standards.

Major potential human health and ecological risks of concern are summarized, and specific questions for which the Agency is requesting public input, are provided in a separate document available in the simazine docket titled Request for Additional Information and Risk Management Suggestions for the Reregistration of Simazine.
The Federal Register notice of availability, risk assessments, and related information on simazine are available on EPA's Web site at **http://www.epa.gov/oppsrrd1/reregistration/simazine/.** (US-EPA: Pesticide News, July 22, 2005).

## WVDEP Secretary Too Close to DuPont, Should Step Down

In the wake of revelations last week that the top communications official in the West Virginia Department of Environmental Protection (DEP) edited press releases on ammonium perfluorooctanoate contamination, at the request of DuPont representatives, Environmental Working Group president Ken Cook called on DEP Secretary Stephanie Timmermeyer to resign. Timmermeyer herself has been implicated in the matter, as she worked for a law firm representing DuPont before moving to DEP as a permitting director in the Division of Air Quality then assuming the title of director for that office and, subsequently, DEP cabinet secretary (Pesticide and Toxic Chemical News: July 11, 2005, Volume 33, Issue 38).

## Pesticide Resistance

Neonicotinoids, such as imidacloprid, are nicotinic acetylcholine receptor (nAChR) agonists with potent insecticidal activity. Since its introduction in the early 1990s, imidacloprid has become one of the most extensively used insecticides for both crop protection and animal health applications. As with other classes of insecticides, resistance to neonicotinoids is a significant threat and has been identified in several pest species, including the brown planthopper, a major rice pest in many parts of Asia. In a recent study, whole-body membranes prepared from imidacloprid-susceptible and imidacloprid-resistant strains of brown planthopper reveal a much higher level of imidacloprid-specific binding in the susceptible strain than in the resistant strain. A single point mutation at a conserved position in two nAChR subunits is responsible for this reduced binding. The study provides direct evidence for the occurrence of target-site resistance to a neonicotinoid insecticide. (Via Chemically Speaking, UFL, July-2005 issue).

## Agricultural and Environmental News

- Washington State agricultural officials will stop allowing application of herbicides directly to lakes by private individuals to occur without permit approval from the Department of Ecology (DOE), under a settlement reached with two environmental groups (Pesticide and Toxic Chemical News: DAILY, July 18, 2005, Volume 7, Issue 135).

- On July 7, the Florida Department of Agriculture and Consumer Services registered the insecticide spiromesifen (Oberon® 2SC) for control of whiteflies and mites in field crops, vegetable crops, fruiting vegetables, leafy green vegetables, brassica leafy vegetables, and strawberry. This is a new type of insecticide (spirocyclic phenyl- substituted tetronic acid) which is active against these two dissimilar groups of pests, with the juvenile stages more susceptible than adults. The EPA registration number for the Bayer CropScience product is 264-719 (Via Chemically Speaking, UFL, July 2005 issue)

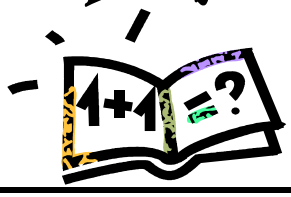
- The Third National Report on Human Exposure to Environmental Chemicals, released today by the U.S. Centers for Disease Control (CDC), contains “great news” about declines in chemicals detected in children's blood, including lead and the metabolite cotinine, known to be the result of second-hand cigarette smoke, CDC director Julie Gerberding said at a press conference unveiling the study (Pesticide and Toxic Chemical News: DAILY, July 21, 2005, Volume 7, Issue 138).

## Did You Know That

All forms of the United States' domestic livestock, except turkeys, were imported at some time (1600's – 1700's).

Crops borrowed from Indians included maize, sweet potatoes, tomatoes, pumpkins, gourds, squashes, watermelons, beans, grapes, berries, pecans, black walnuts, peanuts, maple sugar, tobacco and cotton (Source: Norbest Agricultural Facts - History of Agriculture).

## Events




**August 3-5, 2005**
National Pest Management Association Meeting Hot Springs, Virginia. For more information, please call 304-594-3030 or visit **http://www.thehomestead.com/index2.asp**

**October 5-7, 2005**
Northeast Division APS Meeting, Geneva, NY

**November 6-9, 2005**
ESA Annual Meeting, Fort Lauderdale, FL

**November 15-16, 2005**
APS Soybean Rust Symposium, Nashville, TN