# PEP-Talk, May 2004

Pesticide Education Program Ohio State University Extension Joanne Kick-Raack, State Coordinator Cindy Folck, Communications Vol. 8. Issue 4

### In This Issue

- Mosquito Vector Control Workshops
- EPA Pulls More Funding from Pesticide Safety Education Programs
- Study on Glyphosate Exposures
- Chemical Theft in Iowa
- Study of Children's Response to Environmental Factors
- Model Developed to Predict Environmental Impact
- Beyond the Drift...
- Pesticide Crop Watch
- Upcoming Events

### **Mosquito Vector Control Workshops**

Do you know any pesticide applicators who will be doing mosquito spraying this year? Encourage them to attend the Vector Control Workshops, coordinated by Ohio State University Extension and the Ohio Department of Health. These workshops will be held around the state in June and the dates and locations are listed below.

Applicators will be able to bring in their mosquito ULV spraying equipment for droplet testing. The sprayers must be in working condition and calibrated prior to the workshop. Droplets can be taken only using pesticide as the spray, so have some pesticide in the tank.

At selected locations, an educational program and license exam testing will be available. The program includes a morning of new applicator training for the mosquito category on a pesticide applicator license. Applicators will be able to take their licensing exam the same morning. The afternoon educational session will feature an update on West Nile Virus and mosquito control. Pesticide recertification credits for the mosquito category will be available in the afternoon session.

The dates and locations of the workshops are:

**June 15 - Lake County Health Department,** 550 Black Brook Rd., Painesville Township, Educational session, ODA license exam and ULV droplet testing ALL available.

**June 16 - Toledo Area Sanitary District,** 5015 Stickney Ave., Toledo, ULV droplet testing only - NO education session or ODA license exam testing will be available

**June 22 - Whitehall Community Park**, 402 Hamilton Rd., Whitehall (Columbus area) Educational session, ODA license exam and ULV droplet testing ALL available.

**June 23 - Whitehall Community Park,** 402 Hamilton Rd., Whitehall (Columbus area) ULV droplet testing only - NO education session or ODA license exam testing will be available

**June 24 - ODOT - District 8,** 505 State Route 741, Lebanon (southern Ohio area) Educational session, ODA license exam and ULV droplet testing ALL available.

Registration is \$10/person for the educational session or \$10/machine for ULV droplet testing. On-line registration and more information is available on the Pesticide Education Program website at http://pested.osu.edu or by calling (614) 292-4070.

### **EPA Pulls More Funding from Pesticide Safety Education Programs**

Last year, EPA cut funding to state, tribal and territorial pesticide safety and education programs by over 60 percent. EPA is proposing to continue these cuts into the next fiscal year, even after promising last year to restore the funding. This means that only \$1.2 million will be split among 55 programs. The American Association of Pesticide Safety Educators (AAPSE) has met several times with EPA to express concerns that this lower funding level is inadequate to continue consistent pesticide education.

### **Study on Glyphosate Exposures**

Glyphosate exposure was the subject of a study of 48 South Carolina and Minnesota farmers. The study was done by Monsanto Co, Exponent Corp. and University of Minnesota and Emory University.

Urine samples were taken from the farmers the day before the herbicide application, again on the day of the application and three days after the application. The urine samples were also taken from the farmer's spouses and children on the same days. The farmers applied glyphosate to a minimum of 10 acres and some treated more than 100 acres. In the study, 60 percent of the farmers who applied glyphosate did show detectable levels of the herbicide in their urine, but none exceeded the EPA reference dose for glyphosate of two mg/kg/day. Forty percent of the farmers did not have detectable levels of the herbicide in their urine. The detection level was one ppb.

Four percent of the spouses had detectable levels of glyphosate on the day of application, with a maximum value noted at three ppb. With the children, 12 percent had detectable levels in their urine on the day of application. All but one of the children who had detectable levels had helped with the application of the herbicide or had been present during its mixing, loading or application.

Another interesting finding was that farmers who did not use chemical-resistant rubber gloves during mixing and loading had a geometric mean concentration of 10 ppb versus two ppb for gloved workers. The study is called "Glyphosate Biomonitoring for Farmers and Their Families:

Results from the Farm Family Exposure Study" was published in the March issue of "Environmental Health Perspectives." <u>The study is available at:</u> <a href="http://ehis.niehs.nih.gov/members/2003/6667/6667.html">http://ehis.niehs.nih.gov/members/2003/6667/6667.html</a> (Source: Pesticide & Toxic Chemical News, Vol. 32, No. 23)

### **Chemical Theft in Iowa**

In late April, about 7,000 pounds of herbicides were stolen from a local chemical dealer in Cass County, Iowa. The theft took place about 6:30 on a Friday night. A man who drove a pickup truck with Minnesota plates wrote a check for an order of seven types of herbicides. On Monday, the chemical company tried to call the bank who issued the check and realized the bank did not exist. The Department of Homeland Security and the FBI are involved in the investigation. The Agribusiness Association of Iowa is alerting their members to have customers identify themselves prior to releasing fertilizer or chemicals to unknown persons. (Source: Agribusiness Association of Iowa)

### Study of Children's Response to Environmental Factors

The journal "Pediatrics" recently released a supplement entitled: "The Vulnerability, Sensitivity, and Resiliency of the Developing Embryo, Infant, Child and Adolescent to the Effects of Environmental Chemicals, Drugs and Physical Agents as compared to the Adult." The study looks at various areas of environmental exposures including chemicals and how these affect children in their various stages of growth. The link for the study is: <a href="http://pediatrics.aappublications.org/content/vol113/issue4/index.shtml#SUPPLS1">http://pediatrics.aappublications.org/content/vol113/issue4/index.shtml#SUPPLS1</a> (Source: Program on Breast Cancer and Environmental Risk Factors (BCERF), Cornell University)

## **Model Developed to Predict Environmental Impact**

A predictive model that could help determine the impact of pesticides on the immune system of animals has been developed by a professor of zoology at the university of Wisconsin-Madison. The model uses GIS information to integrate information on animal behavior and physiology with climate conditions. The model has been used to link the death of birds off the coast of Florida with applications of Fenthion, an organophosphate pesticide. The university has applied for a patent on the model. The research was funded by the Department of Energy and the National Science Foundation. (Source: Pesticide & Toxic Chemical News, Vol. 32, No. 16)

### **Beyond the Drift...**

The Russian government is distributing more than 500 tons of pesticides free to offset large cereal crop losses. Last year, farmers lost more than 70 million tons of cereal crops last year to pests. The free pesticides target locust and meadow moth, which are held responsible for most of the damage. (Source: Pesticide & Toxic Chemical News, Vol. 32, No. 16)

### **Pesticide Crop Watch**

### **Insecticides**

**Buprofezin** - Nichimo America has added to the Applaud label the control of mealybugs, leafhoppers and scales and has added to the Courier label the usage on snap beans.

**Dimethoate** - correction from the April, 2004, PEP-Talk. Dimethoate is not cancelled on broccoli, just on broccoli raab.

**Guthion** (*azinphos-methyl*) - Bayer Crop Science has added to their label the control of the raspberry crown borer.

**Merit** (*imidacloprid*) - Bayer Crop Science has added to their label the control of European crane flies in turf.

#### Herbicides

**Aquamaster** (*glyphosate*) - Monsanto has added to the label the control of salvinia in aquatic sites.

**Extreme** (*imazethapyr/glyphosate*) - BASF has added to their label the application on soybeans in the fall before the ground freezes.

**Prism** (*clethodim*) - Valent has added to their label the control of bentgrass and millets.

**Scepter** (*imazoquin*) - BASF's product has been approved for use on soybeans applied in the fall in Ohio, Indiana, Illinois, Missouri and Kansas.

### **Fungicides**

**Methyl bromide** - The U.S. has received critical use exemptions for 2005 for methyl bromide in the following situations: food processing, commodity storage, forest and orchard seedlings, orchard replant, turf and sod, tomatoes, peppers, eggplant, strawberries, strawberry nurseries, cucurbits, ornamentals, ginger, sweet potatoes and transplant trays used in certain greenhouse production systems.

#### MISC.

**IMC Global** plans a merger with Cargill's fertilizer business, Cargill Crop Nutrition, to become the leading U.S. phosphate fertilizer company.

(Source for Pesticide Crop Watch: Agricultural Chemical News, Vol. 295, Pesticide & Toxic Chemical News, Vol. 32, No. 24.)

## **Upcoming Events**

Mosquito Vector Control Workshops (see details in this issue)

June 15 - Lake County Health Department

June 16 - Toledo Area Sanitary District

June 22 - Whitehall Community Park (Columbus area)

June 23 - Whitehall Community Park (Columbus area)

June 24 - ODOT District 8, Lebanon

### **Ohio Commercial Recertification Schools**

General Schools (turf, ornamental, industrial vegetation and pest control) Cleveland - November 22, 2004 Perrysburg - December 16, 2004 (notice switch to December) Dayton - January 19, 2005 (notice switch to January)

Field Crop Conferences (agronomic pest control)

Dates to be determined soon.

Columbus - February 17, 2005