PEP-TALK
OSU Extension Pesticide Education Program
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http://www.ag.ohio-state.edu/~pested/

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SPECIAL NOTES TO OHIO AGENTS

PAT Website

The PAT office has posted the New Ohio Department of Agriculture brochure entitled "Ohio's Pesticide Licensing Requirements: Answers to Common Questions About Ohio's Pesticide User Licensing Law" on our website. This easy-to-use brochure features definitions for Ohio pesticide licenses and Q & A's regarding licensing. Please visit http://www.ag.ohio-state.edu/~pested/odat.html

If you would like to have your county's pesticide applicator training dates for recertification and new applicator training posted on our website for all to see, please send me the dates whenever you have them determined and I will post them. Thanks! (roush-kopczewski.16@osu.edu)

PAT Training

The first Ohio PAT Commercial Recertification school will be held November 25 in Cleveland. Also, be watching your mail for the PAT Agent In-service brochure that will be mailed directly to you in the next week. The dates of the in-service are January 7 and 8, 1998. Please let us know if you do not receive a registration form.

PAT Videotapes

Because there will be no annual conference held this year, PAT video updates will be available at the agent in-service on January 7 and 8, 1998. If you need them before this date, please let me know and I will get them to you!

Pesticide Applicator Training Focus on Drift

The Coalition on Drift Minimization is a national task force made up of key leaders in agricultural organizations, USDA, EPA, and state/national organizations. The focus of the coalition is changing applicator's behavior through education. The goal is to minimize drift.

The Objectives of this initiative are:
1.To encourage responsibility and safety among all decision makers involved in the application of pesticides
2.To encourage the development and use of the best technology appropriate to the application methodology

3.To encourage coordination among all of the stakeholders
4.To encourage consistent education and enforcement in order to achieve improved compliance
5.To encourage accurate communication on drift minimization and the progress in addressing this issue
6.To evaluate and recommend the human, financial, and technological resources needed.

The Coalition has defined "drift" and "buffer zone" as:

DRIFT:
"Pesticide drift" means the physical movement of pesticide through the air at the time of pesticide application or soon thereafter from the target site to any non- or off-target site. Pesticide drift shall not include movement of pesticides to non- or off-target sites caused by erosion, migration, volatility, or windblown soil particles that occurs after application unless specifically addressed on the pesticide product label with respect to drift control requirements.

BUFFER ZONE:
A "buffer zone" is an area where pesticide is not directly applied, thereby providing protection to a defined area. Buffer zone designations are contingent upon: state regulation, pesticide product labels, prevailing weather conditions, and sensitive/protected area(s).Buffer zones are usually adjacent to a protected area.

John Impson, National program leader has asked all states to consider including a segment directed towards drift mitigation most of our training programs. Some of the goals of training over the next few years will be to:

1. Impress on applicators that this is a different world; the public is concerned about drift
2. Change applicators perspective on drift
3. Create a commitment to reduce drift
4. Change motivation (applicator's) from fear of regulatory action to that of commitment to professionalism
5. Emphasize to audience, of the commitment that is being made by agricultural interests, including regulatory, through the drift coalition, towards managing drift.
6. Define drift management and emphasize that applicators can make a difference.

Dr. Impson emphasized that evaluations of county programs on drift will become more important and should include:

1. Audience type (private, aerial, ornamental and turf, etc)
2. Major commodity or spray target
3. Specific training given (awareness, fly-in's, other specific hands-on calibration, spray table demonstrations, etc)
4. Numbers trained
5. Evaluation of training (behavioral changes, etc)

(John W. Impson, National Program Leader, Pesticide Applicator Training, September 15, 1997)

CHEMICAL & LABEL UPDATE
The following information provides registration status of particular pesticides and should not be considered as pesticide recommendations by OSU Extension.

FIELD CROPS Alfalfa

Carfentrazone-ethyl--FMC--A temporary tolerance for combined residues of the herbicide carfentrazone-ethyl in or on corn (fodder, forage, and grain) and wheat (grain, hay, and straw) has been approved by the EPA. (Federal Register, September 30, 1997)

Glyphosate Oxidoreductase--Monsanto-- An exemption from the requirement of a tolerance has been approved for residues of this plant-pesticide inert ingredient glyphosate oxidoreductase (GOX) when used as plant-pesticides in or on all raw agricultural commodities. (Federal Register, October 8, 1997)

FRUIT
Kresoxim-Methyl-- BASF-- This new fungicide will be sold under the trade name Sovran for use on apples, grapes, pecans, pears and cucurbits. (Ag. Chem. News, October 15, 1997)

ORNAMENTALS
Dimension (dithiopyr)-- Rohm & Haas-- Added to their label the usage on over 150 ornamental plants. (Ag. Chem. News, October 15, 1997)

Kresoxim-Methyl-- BASF-- This new fungicide will be sold under the trade name Cygnus for use on ornamentals. (Ag. Chem. News, October 15, 1997)

TURF
Stopit (polyoxin D zinc salt)-- Kaken Pharmaceutical-- EPA approved an application to register this new active ingredient on turf in golf courses, home lawns, parks and institutional grounds to control various diseases. (Federal Register, September 17, 1997)

VEGETABLES
OMI-88--Mitsubishi--A new insecticide for usage on cole crops, vegetables and fruit crops to control aphids and diamondback moth. (Ag. Chem. News, October 15, 1997)

Spintor 2SC & Success (Spinosad)-- On its own initiative EPA has established time-limited tolerances for these insecticides in or on fruiting vegetables (except cucurbits), tomato paste, leafy vegetables, and Brassica (cole) leafy vegetables. This action is in response to EPA's granting of emergency exemptions under section 18 authorizing use of this insecticide in Florida, Georgia and Arkansas for the use of spinosad (Spintor 2SC) to control Western Flower Thrips, on tomatoes, peppers, eggplant and other members of fruiting vegetable (excluding cucurbits). Section 18 was also granted to Arizona for use of spinosad (Success) to control beet armyworm on leafy vegetables and Brassica leafy vegetables. (Federal Register, October 22, 1997)

MISCELLANEOUS
Cyromazine-- EPA, on its own initiative, has established time-limited tolerances for the combined residues of cyromazine in or on the meat, fat, and meat byproducts of turkeys. This action is in response to EPA's granting of emergency exemptions under section 18 authorizing use of the pesticide on turkeys to control flies which are thought to carry spiking mortality, an acute form of Poult Enteritis Mortality Syndrome (PEMS). This has been an extreme problem in North Carolina and Georgia. (Federal Register, October 22, 1997)

Notice of Receipt of Requests to Voluntarily Cancel Certain Pesticide Registrations
EPA has issued a notice of receipt of requests by registrants to voluntarily cancel the following pesticide registrations. Unless a request is withdrawn by March 30, 1998, orders will be issued canceling all of these registrations.

Bicep Herbicide
Bicep Lite Herbicide
Du Pont Lannate, L and SP Insecticides
Zep 50% Malathion Emulsifiable Concentrate
Pryfon 6 Insecticide
Monitor 4
Blanco Non Selective Weed Killer Concentrate
Turfic Trichlorfon 6.2% Insecticide Granules
(Federal Register, October 1, 1997)

NO LINK SEEN BETWEEN BREAST CANCER AND PESTICIDES

A new study examining the relationship of persistent pesticides and polychlorinated biphenyls (PCBS) with breast cancer shows that these compounds are NOT a risk factor for breast cancer for the general population of women. Researchers have found that blood levels of organochlorines (also called chlorinated hydrocarbons) such as DDE (a metabolite of DDT), hexachlorobenzene (HBC) and mirex, and PCBs were not higher in women with breast cancer than in healthy women. Environmental exposure to organochlorines was related, however, to the risk of breast cancer for one group of women: postmenopausal women who have never breast-fed. The exposure is NOT a risk factor for breast cancer for the rest of the general population. No difference was seen for women in either group with a history of breast feeding.

These results suggest that higher blood levels of organochlorines were a risk factor for breast cancer only for women with no history of breast feeding, according to the chief investigators of the study. Previous studies have found that breast feeding, as well as having been breast-fed, appeared to offer women some protection against developing breast cancer later in life. Unfortunately these other studies did not measure levels of organochlorines. Organochlorines are stored in fatty tissue, including breast tissue. The chief mechanism for eliminating them from breast tissue is lactation, which flushes them from the system. Even though the baby is exposed to these substances, the researchers said that the beneficial effects of breast feeding appear to outweigh the potential risks.

The research involved 154 postmenopausal women with breast cancer and 192 healthy women of similar age selected randomly from the general population. Extensive information on diet, reproductive and medical history and other lifestyle information was obtained from all participants through personal interviews. Researchers also drew blood samples and measured levels of DDE, HCB, mirex and PCBS. Organochlorine pesticides and PCBS, were used widely in the U.S. until the 1970s, when they were banned due to concerns about potential harmful health and environmental effects.

Since these compounds are stored in body fat and are not easily broken down, they can accumulate in the body over time. Some of these chemicals have been associated with an increased estrogen activity in animals and consequently have been linked to breast-cancer risk. The investigators reported that it was tempting to blame environmental exposure to potential carcinogens for causing breast cancer, and, thus, eliminating responsibility for changing one's lifestyle or habits, but this study and others do not show an adverse effect for the general population. (Univ. at Buffalo Press, Release, August 20, 1997; Chemical Regulation Reporter, August 22, 1997; Chemically Speaking, September 1997)

ONE BIOCONTROL GONE TOO FAR

Scientists have reported in the journal *Science* that a weevil originally introduced in Virginia more than 30 years ago to control rampaging European thistles has become a renegade and is starting to prey on native plants. This case illustrates one of the possible dangers associated with using living organisms to control pests, and solidifies the fact that researchers/authorities need to be careful about what they let into the country.

Originally the weevil really did prefer the European thistles, but populations build up on these plants and then go over and feed on the native thistles. The fear is that it is evolving to specialize on the natives. The director of global food issues for the Hudson Institute pointed out that pesticides have yet to cause a documented species extinction in more than **40** years of use worldwide, but he noted that 39 percent of 626 documented species extinctions have been caused by introduction of non-native species. (Reuter, August 21; Bridge, August 29, 1997; Chemically Speaking, September 1997)

PESTICIDE FEES TO INCREASE

EPA's Office of Pesticide Programs has announced that the annual maintenance fee paid by pesticide registrants will again increase, this time as authorized by the 1996 FQPA. No registrant will pay more than $55,000 for the first 50 products, and no registrant will pay more than $95,000 total annually. (EPA press release, September 5, 1997)

RESPONSE TO ENVIRONMENTAL WORKING GROUP REPORT

EPA's Office of Prevention, Pesticides and Toxic Substances released an informational document on August 12, 1997 in response to the Environmental Working Group's recent report on pesticides in drinking water in Midwest communities. " The document contains questions and answers on the triazine pesticides: atrazine, cyanazine and simazine; and the acetanilide pesticides: alachlor, metochlor and acetochlor. Atrazine is one of the two most widely used agricultural pesticides in the United States, based on pounds of active ingredient applied per year, EPA notes. About two-thirds of field corn and sorghum acres are treated with the herbicide atrazine, accounting for most of the 64 million to 80 million pounds used each year, the agency noted. The herbicide cyanazine is being phased out by the agency, and annual use has fallen to between 21 million and 25 million pounds, EPA said. After December 2002, no cyanazine use will be permitted. About 5 million to 7 million pounds of simazine are used each year, with about one-third applied on field corn, one-third on orchard fruits and nuts, and the remainder on lawns and other non-crop sites, the agency said. All of the triazines are classified as possible human carcinogens, based on an increase in mammary gland tumors in female laboratory animals. (P & T News, August 27, 1997)

If you would like a copy of the Q & A document either call the Ohio PAT office or it can also be found on the Internet at the following address: http://www.epa.gov/oppfead1/cb/csb_page/qsas/triazine.htm

NEW ONE-STOP WEBSITE FOR FEDERAL INFORMATION

Www.statelocal.gov. is the US State and Local Gateway, a new one-stop website with federal information that employees of state and local governments need to do their jobs. Fifteen federal agencies will listen. They make up the team that created the Gateway.

What is included? For example, under Environment/Energy, a site visitor might find information on laws and regulations, funding, training, and best practices from the Environmental Protection Agency, Department of Energy, US. Army Corps of Engineers, Department of the Interior and other federal organizations.

The Gateway offers user-friendly features including links to other customer one-stop websites, a reference room, most frequently requested information, direct e-mail to those who maintain the subject pages, a site map for easy navigation, and links to state and local government home pages. Check it out!

Other Web Resources:

* **ChemFinder**--Online search engine looks exclusively for information about chemicals, including pesticides. Finds pesticides by common name, brand name, CAS number, chemical formula or other designations. Http://chemfinder.camsoft.com/
* **Reregistration Eligibility Document Fact Sheets**--USEPA archive of RED fact sheets includes information about many pesticides that have been through reregistration process. http://www.epa.gov/docs/oppsrrd1/REDs/index.html
* **Pesticide Information Service** -- PESTIS-- Online database of articles, reports and action alerts related to pesticides and sustainable agriculture. http://www.panna.org/panna/pestis.html (Georgia Pest Management Newsletter, August 1997)

FAO ADDS FIVE PESTICIDES TO 'WATCH LIST'

"Five organophosphates - methamidophos, methyl parathion, monocrotophos, parathion and phosphamidon - were added to an international watch list of 'extremely hazardous' pesticides September 23." According to a Food and Agriculture Organization (FAO) news release, these five pesticides were added to a list of 17 harmful pesticides and five industrial chemicals which should not be exported without the agreement of the importing country. "Currently, 154 nations participate in the procedure, which is jointly administered by FAO and the United Nations Environment Program. (P & T Chem. News, September 24, 1997)

METHYL BROMIDE UPDATE

Rep. Dan Miller (R-Fla.) introduced a bill Oct. 6 to amend the Clean Air Act and delay the phaseout of methyl bromide in the U.S. and other countries until effective replacements are found. The bill would give EPA the say in phasing out methyl bromide when the USDA determines that there are viable and affordable alternatives.

Because of methyl bromide's ozone depleting characteristics, the EPA ordered a ban on production by 2001. The concern is that if no alternative is found, U. S. farmers will not be able to compete with foreign growers who are still able to use the chemical. California and Florida researchers have been aggressively looking for other chemicals to replace methyl bromide, but given current alternatives, they "predict that the ban would cost as much as $1.5 billion in Florida, Georgia, California, North Carolina and South Carolina." (P & T Chem. News, October 15, 1997)

STUDY LINKS MINNESOTA WATER TO DEFORMED FROGS

Researchers from the Minnesota Pollution Control Agency and the National Institute of Environmental Health Sciences (NIEHS) released results of new research showing that a yet-unknown chemical in the water is causing developmental abnormalities in frogs. Embryos of the Xenopus frog were allowed to develop in a variety of watery environments: at concentrations above 50 percent of Minnesota water from sites where deformity rates were high, deformities were common; embryos grown in water from ponds without deformed frogs developed normally. Researchers hope to isolate the chemical causing the abnormalities and to study the health of people living near the affected ponds. EPA officials have not yet seen the new research, but Robert W. Perciasepe, assistant administrator for water, said through a spokeswoman: "'We look forward to reviewing the findings of this research and stand ready to assist the state to take whatever steps necessary to protect public health and the environment.'" (Washington Post, October 1, 1997)

The puzzling phenomenon of widespread malformed frogs in Minnesota emerged in the summer of 1995 after a group of grade school students discovered large numbers of frogs with misshapen, missing or extra limbs in a wetland they were studying near Henderson, Minn., according to an MPCA fact sheet. By the end of that season, malformed frogs had turned up elsewhere in the Minnesota River Valley.

In the summer of 1996, deformed frogs were reported all over the state. By the end of the year, the MPCA had received more than 175 reports of deformed frogs in two-thirds of the state's counties. Deformed frogs were also being reported in other states and other parts of the world.

Widespread findings of malformed frogs sparked international alarm among scientists because frog populations are thought to be a "sentinel" species, whose deformities may be a sign of widespread environmental poisoning. Frogs' skins are permeable to water, and they can easily absorb pollutants. (P & T Chem. News, October 1, 1997) Although pesticides is at the top of everyone's list of causes, no one really has a clue.

For more information regarding this situation, the Minnesota Pollution Control Agency has created a web page with a brief summary of information and a link to the New Country School (the kids who found the frogs) where additional information about the frogs can be found. http://www.pca.state.mn.us/water/frogs.html
(Dean Herzfeld, MN PAT Coordinator, e-mail, October 18, 1997)

PSST...
"Less than 45% of the $1.4 billion spent last year by the federal government to clean up toxic waste sites was actually used for cleanup, the General Accounting Office said in a recent study. GAO reports that $704 million was spent on administration and support, including rent, utilities and accounting systems for EPA offices, legal expenses and salaries / travel for EPA employees. About $210 million went to legal expenses." (P & T Chem. News, September 24, 1997)

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