PEP-Talk, November, 2003

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EPA Completes Scientific Review of Atrazine

EPA has released additional materials to support the Interim Re-registration Eligibility Decision (IRED) that was released in January. The materials give EPA's assessment of studies on the affects of atrazine.

EPA has carefully evaluated and received scientific peer review of studies regarding possible developmental effects on amphibians exposed to low doses of atrazine. These data do not provide evidence to show that atrazine produces a consistent, reproducible effect on amphibian development. An independent science peer review panel convened in June supported the Agency's conclusions and recommended that more data be generated to evaluate this potential relationship. Generation of this data is underway. Based on the available scientific work on the potential association between atrazine and cancer, the Agency does not find any studies that would lead the Agency to conclude that potential cancer risk is likely from exposure to atrazine. However, EPA will continue to review new studies on this issue and plans to convene and another independent Scientific Advisory Panel concerning atrazine and its potential association with carcinogenic effects.

As part of the agreement with EPA, the manufacturers of atrazine are required to monitor residue levels of atrazine in 40 indictor watersheds. If monitoring in these watersheds shows atrazine above set levels, the company is responsible for remediating the watershed, using standards and techniques like the Total Maximum Daily Load (TMDL) program through the Clean Water Act. If the remediation is not sufficient, EPA may withdraw atrazine use from the watersheds considered in jeopardy. (Source: EPA Pesticide Program Update, 11/03/03)

In an unrelated story, the European Union will not reregister atrazine and simazine, according to Syngenta. The company says the decision was made despite a favorable science review demonstrating the products' safety to humans and the environment. (Source: Pesticide & Toxic Chemical News, Vol. 31, No. 50)

Aerial Applicator Fined for Drift

An aerial applicator spraying in Arizona has been fined \$5,500 by EPA for allowing pesticides to drift onto nearby residences occupied by children and adults at the time of spraying. The company had a poor compliance history with the state, so the Arizona Department of Agriculture referred the case to EPA. The pesticide labels of the products used by the applicator prohibit application when persons, other than protected handlers, are in the area and forbid application in and around residential areas. (Sources: Pesticide & Toxic Chemical News, Vol. 31, No. 50)

An Example of 25B Pesticides

Pesticides with active ingredients that are considered minimum risk fall under the 25B Section of FIFRA (Federal Insecticide, Fungicide, Rodenticide Act). These pesticides that have active and inert ingredients identified in section 25B are not required to have an EPA registration number. However, in Ohio 25b products are required to submit label and MSDS to the Ohio Department of Agriculture and a state registration number is assigned. Any product sold in Ohio must have the state registration number, or ODA can issue a stop-sale order.

An example of this type of pesticide is a product which has the main ingredient as sodium lauryl sulfate 0.109%, soybean oil, 0.0004% and corn oil 0.002% and inert ingredients (99.89%): glycerin, guar gum, sodium chloride, onion, tallow, orange pulp and water. Sodium lauryl sulfate is a foaming agent refined from coconut oil and often found in shampoos. Even though a recent demonstration of this product, which is marketed as an insecticide, did not kill many insects it can still be sold. EPA and state registration processes are not concerned about efficacy.

The advice for buyers of pesticide products is to be aware and wary of unsupported claims that are made about insecticide or other pesticide products. The registration of a pesticide product is not based on efficacy. Products that fall under 25B are not prohibited from making efficacy claims. EPA allows products to make safety claims unless the product makes public health claims, such as products that promise to remove anthrax. (Source: American association of Pesticide Safety Educators (AAPSE) list-serve correspondence, University of Wyoming and U.S. EPA)

Don't Treat Swallowed Poison with Syrup of Ipecac

The American Academy of Pediatrics (AAP) has released recommendations that syrup of ipecac should not be used routinely to treat children who have swallowed a poisonous substance. Recent research has failed to show benefit for children who were treated with ipecac in a poisoning situations. More emergency rooms are using activated charcoal for poisoning victims.

The AAP encourages parents to keep the national phone number for poison control, (800) 222-1222, posted near phones. Parents are also urged to keep potential poisons locked out of sight and out of reach. The AAP stresses that substances should never to transferred from their original container to an alternate. More information about the AAP statement and supporting consumer brochures are available athttp://www.aap.org/advocacy/releases/novpoison.htm

Pesticide applicators should be aware that pesticide labels contain first-aid information for accidental ingestion, inhalation or skin contact. These instructions should be followed in an emergency poisoning situation.

Survey Shows Little Resistance to Bt Toxin

Researchers from the University of Arizona and Cornell University found that target insect pests have developed little or no resistance to Bt crops thus far. The survey showed that no pest has evolved resistance to transgenic Bt crops in the field. The researchers note that the diamondback moth is only pest to have evolved resistance to Bt sprays used by organic growers. More information is available in Nature Biotechnology, Vol. 21, No.9. (Source: Chemically Speaking, September, 2003)

Farmers Affected by USDOT Regulations

The U.S. Department of Transportation (USDOT) has released a security requirement for farmers transporting hazardous materials. The hazardous materials are fertilizer, pesticides, gasoline, diesel fuel or propane. The security requirements will apply if a

farmer is transporting hazardous materials in a package or container larger than 119 gallons or a single load heavier than 1,000 pounds.

Farmers who meet these criteria must develop a security plan. Currently, there is no official form, but farmers can access an example template developed by USDOT and the American Farm Bureau Federation. It's posted by Rutgers University at http://www.rce.rutgers.edu/farmsafety/security/HM232.pdf

Although the regulation went into effect on November 1, staff at USDOT indicate they are more interested in outreach and education than enforcement at this time. Stay tuned for more information as it becomes available.

Health News

People with asthma could be immunized by eating genetically modified plants, according to scientists at the Australian National University in Canberra who have engineered a new type of lupin. The protection is based on the principle that very low doses of an allergen can be used to induce a protective immune response in the body.

In another story, researchers are looking at bacterial proteins that may lead to a mechanism to stop tomato speck bacteria from injuring tomatoes. The bacteria, Pseudomonas syringae, is related to a bacterium that causes humans with weak immune systems to develop rashes and nausea. Patients with the lung disease cystic fibrosis can suffer heart failure if they become infected. The researchers at the Boyce Thompson Institute for Plant Research is hoping to help growers who face growing resistance to copper-based sprays to kill the bacterium and help doctors who face resistance by the bacterium to currently used antibiotics. (Source: Chemically Speaking, September, 2003)

CAST Releases IPM Report

The Council for Agricultural Science and Technology (CAST) released an analysis of IPM approaches and the scientific, political and environmental developments affecting IPM practices over the last 20 years. The report also looks at the future of IPM in terms of upcoming challenges such as the mounting threat from invasive insects, weeds and pathogens and the increasing restrictions on traditional pest management products. The report notes that chemical pesticides should remain part of the IPM equation that can be incorporated by growers along with biological, cultural, sanitary and preventive methods. The authors also note the emergence of herbicides that can be used at low rates. Changes in nematicides, fungicides and the emergence of urban IPM are also discussed. The report is available for \$50 plus shipping

at http://www.cast-science.org. (Source: Pesticide & Toxic Chemical News, Vol. 31, No. 44)

Beyond the Drift...

Ranchers in New Zealand are protesting a governmental plan to introduce a flatulence tax on sheep and cattle. Nationwide demonstrations by ranchers were called "Fight Against Ridiculous Taxes" (FART) to protest the fees that the government says will go to global warming research. The government claims that half of its greenhouse gas emissions are from ruminants and ranchers should share the costs of finding ways to reduce these gases. (Source: Chemically Speaking, University of Florida Extension, September, 2003)

Pesticide Crop Watch

Insecticides

Intrepid (methoxyfenozide) - Dow AgroSciences is adding to their label the control of foliar insects on artichokes, stone fruits, tree nuts, pistachios, fruiting vegetables and cole crops.

Pylon (chlorfenapyr) - BASF added to their label the control of foliar nematodes on ornamentals.

Success (**spinosad**) - Dow AgroSciences added to their label the control of foliar insects on herbs.

YieldGard Plus (Bascillus thuringiensis) - Monsanto has been approved for this genetically engineered crop that controls European corn borer and corn rootworm. This is the first genetically engineered crop that has the ability to control two difference insect groups (moth and beetle).

Fungicides

Researchers at Purdue University believe they have identified a bread-wheat gene that will offer long-lasting resistance to Septoria tritici leaf blotch (STB) in wheat. The gene, identified as Stb8, is believed to have genetic characteristics that may allow it to be effective for long periods of time. More information is available at http://www.apsnet.org/phyto/current/top.asp

Miscellaneous

Monsanto announced that it would exit the European breeding and seed business for wheat and barley and discontinue its plant-made pharmaceuticals program. The company sites fourth-quarter losses which were attributed to a \$390 million settlement in August to end litigation over polychlorinated biphenyl contamination in Anniston, Ala.

Syngenta has developed the first hybrid barley variety. Called Calussus it will first be introduced in England.

(Sources for Pesticide Crop Watch: Agricultural Chemical News, Vol. 289; Pesticide & Toxic Chemical News, Vol. 31, No. 52 and No. 46, EPA Pesticide Program Update, 11/05/2003)

Upcoming Events

PAT Agent Inservice

January 7 & 8, 2004 Agriculture Administration Building Auditorium Ohio State University Campus, Columbus

General Commercial Pesticide Applicator Recertification Conferences

(turf, ornamental, pest control, industrial vegetation)
November 25, 2003 - Cleveland/Independence Holiday Inn
December 17, 2003 - Dayton Convention Center
January 14, 2004 - Perrysburg Holiday Inn, French Quarters
February 17, 2004 - Columbus Convention Center

Field Crops Commercial Pesticide Applicator Recertification Conferences

January 28, 2004 - Lima Holiday Inn February 4, 2004 - Fawcett Center, Ohio State University, Columbus

Commercial New Applicator Training

March 9, 2004

Ohio Department of Agriculture, Reynoldsburg

Wood-Destroying Insect Inspection Training

February 26, 2004, 9:00 a.m. - 4:00 p.m. Ohio Department of Agriculture, Reynoldsburg

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