

The University of Georgia College of Agricultural and Environmental Sciences



# Georgia Pest Management Newsletter

*Your source for pest management and pesticide news*

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## **Federal News**

**The EPA announced a new consolidated Spanish web site to help provide information both in Spanish and English.** The new site offers a wide variety of information, including asthma triggers, recycling, and pesticides. It also provides educational resources and opportunities for grants, small business, and employment.

You can find the site at [www.epa.gov/espanol](http://www.epa.gov/espanol)

We applaud EPA for making this information to a wider audience. However, we are increasingly frustrated that we have very few pesticide labels available in Spanish. Spanish labels would undoubtedly reduce human and environmental risks. It may not be completely the fault of EPA that we do not have pesticide labels in Spanish, but EPA could make it happen.

## FQPA and Reregistration

**The revised risk assessment and preliminary risk reduction options are available for the herbicide 2,4-D.** If 2,4-D is important to you, review the documents and provide comments to EPA. The deadline for comments is March 14, 2005.

This herbicide is used to control broadleaf weed agriculture, forestry, turf, aquatic, and other areas. The EPA has several risks of concern, including drinking water, swimmers, occupational, and ecological risks. The drinking water risks are linked to the application of 2,4-D for aquatic weed control. Under the EPA proposal, 2,4-D application to surface water would be limited to licensed applicators associated with local, state, federal agencies or water user organizations. Additionally, the Agency would place restrictions on the amount and rates of 2,4-D that could be applied. To mitigate risks to swimmers in waters treated with 2,4-D BEE, swimming would be prohibited for 24 hours after application.

The EPA is concerned about occupational and ecological risks associated with 2,4-D. To mitigate the worker risks associated with wettable powder formulations, the Agency proposes packaging in water-soluble bags. Proposals to mitigate ecological risks include limitations on 2,4-D amounts and rates.

The 2,4-D risk assessments, Preliminary Risk Mitigation Proposals, and related documents are available in docket and EDOCKET #OPP-2004-0167, and will also be available on the Agency's pesticide reregistration status Web page, <http://www.epa.gov/pesticides/reregistration/status.htm>

**The EPA is moving forward with their aggregate assessment of the N-methyl carbamate pesticides.** The Food Quality Protection Act requires EPA to consider groups of pesticides together when they share a common toxic mode of action. The Agency has completed a similar assessment of the organophosphate insecticides. Commonly used carbamates include carbaryl (Sevin), methomyl (Lannate), and aldicarb (Temik). At the request of EPA, a Scientific Advisory Panel will consider issues associated with the carbamate risk assessment, including pharmacokinetic/pharmacodynamic modeling, hazard assessment, ground water modeling, and the integration of hazard and exposure information.

Pay close attention to the process as EPA evaluates the carbamates. Be especially wary of negotiations between EPA and pesticide registrants. The best interests of the pesticide registrants and the pesticide applicators are not always the same. Minor crops and minor uses are particularly vulnerable because the markets are less lucrative. Peach growers in the southeast are still annoyed about the way in which the decision about methyl parathion was made.

**The EPA has described its standards for deciding how to use human data submitted to the Agency.** Emotions run high on both sides of this issue. Some people point out that drug companies and regulators rely heavily on human data to evaluate risks. I support that approach; I do not want a drug to go from rodent testing to my mouth. Others argue that it is always unethical to evaluate pesticide risks using human data. They are especially concerned that the data would be primarily derived from people who need some money or subjects who do not understand the potential risks. I agree with these sentiments as well. If you want to find human subjects for pesticide research, you do not look in Beverly

Hills (Jethro Bodine notwithstanding).

EPA's approach does not encourage private parties to conduct, nor commit EPA to rely on, human studies, but establishes a plan to develop and implement agency policy concerning human data. EPA will be applying the protections found in the Common Rule (a federal regulation that guides the use of human subjects), as well as high ethical standards, to determine if human studies can be considered in regulatory decisions. Studies conducted by third parties, including private industry organizations, are not currently required to meet the requirements of the Common Rule, although many do. By using acceptable human studies, the agency can generate more realistic and accurate risk assessments, and ensure that all relevant data is taken into account in regulatory decisions.

The EPA would also like comments on this process. You can find the details at their web site:

<http://www.epa.gov/oppfead1/guidance/human-test.htm>

## Don't Do It

**The Kahn Cattle Company, the owner, and the farm manager pled guilty to unlawfully killing more than 3,000 migratory birds.** The company also pled guilty to illegal disposal of hazardous wastes. In January 2003, the owner and the farm manager baited the birds with corn laced with Warbex, a topical treatment used to kill pests on cattle. The Atlanta Office of EPA's Criminal Investigation Division and the U.S. Fish and Wildlife Service investigated the case with support from the Georgia Department of Natural Resources. The U.S. attorney's office in Atlanta is prosecuting.

Even if the ultimate fine is small (and it won't be), these people will spend thousands of dollars defending themselves in this lawsuit. Luckily, you can learn this lesson without getting into a lot of trouble. DO NOT use pesticides to kill birds or other pest animals. These fellows probably intended to kill a few birds of little consequence. Maybe starlings were driving them crazy. If they had known how much trouble they would create for themselves, they never would have done it.

## Biotechnology

**This 10-second quiz may change the way you think about food.** How much of the food you eat contain pesticide residues? According to the USDA pesticide data program, nearly 60 percent of the samples from 2002 (the latest published report), had no detectable pesticide residues; more than 50 percent of the fruit and vegetable samples had no detectable residues. Some readers may get hung up on the word *detectable*; the detection limits are very low (parts per million or lower). Read the entire report here <http://www.ams.usda.gov/science/pdp/Download.htm>

How much of the food you eat contains genetically modified components? According to a survey commissioned by the Food Policy Institute, few Americans realize that many people consume foods with genetically modified ingredients nearly every day. Many estimates indicate that 60-70 percent of processed foods on American grocery store shelves contain ingredients from genetically modified crops. This high percentage is not surprising when you consider that more than 75 percent of the soy and cotton grown in the United States is genetically modified, along with 40 percent of the corn. Components from these crops are ubiquitous in the U.S. food supply. You will find the Food Policy Institute report here <http://www.foodpolicyinstitute.org/>

## Health and the Environment

**Public concern about West Nile virus has led to additional risks to human health and the environment.** Health concerns have driven sales of automated pesticide misting systems for use in residential areas. These systems make regular, unmonitored applications of pesticides and create many possibilities for unwanted human and environmental exposure. The State FIFRA Issues Research and Evaluation Group in Region 6 addressed this issue in a paper issued in 2004. The situation remains unresolved, but this early draft of the paper will help you understand the concerns.

1. **Uncertified Applicators.** The misting systems are often marketed and installed by company employees with little or no experience with pesticide application. Because the employees are installing equipment instead of actually applying pesticide, many state pesticide regulations do not cover this activity.
2. **Unsubstantiated Claims.** Some companies are making improper claims about health protection. West Nile virus can cause health problems for some people; but West Nile virus does not represent health risks comparable to malaria or encephalitis. In this case, the unwarranted application of pesticide may pose a risk greater than the disease.
3. **Off Site Drift.** The mist units automatically spray pesticide at time intervals. The units deliver pesticide on schedule, regardless of weather conditions. There seem to be no requirements for setbacks from other property. Additionally, the pesticide will be released even if insects are not causing a problem. How would you like to live next to a property where pesticides were released on a schedule even if the wind was blowing into your backyard while your children were playing there?
4. **Human Exposure Risks.** Remote control units are available, possibly allowing the application to be 'controlled' by children or teens 'playing' with the system causing potential harm to unsuspecting friends or pets. The pesticides may be sold or provided to the homeowners to 'maintain' the system often without appropriate precautions regarding proper mixing, use, or disposal.
5. **Non-target Exposure.** Dripping nozzles may be attractive as a water source, particularly during dry weather.
6. **Discourages Integrated Pest Management (IPM).** An IPM program is the best way to minimize pesticide applications by emphasizing non-chemical alternatives. One of the most important things a person can do to control mosquitoes is to empty sources of water for mosquito breeding or to add an appropriate larvicide to water sources. Many people using this automated system will assume that additional steps are unnecessary.
7. **Increased Resistance.** The continual, indiscriminate application of a pesticide is one of the best (or is it worst?) ways to select for resistance. Some of the web sites for the mosquito mister program report that insects cannot develop resistance to the active ingredients they recommend. I am not sure what entomology program they attended, but they were not in my classes.

Many state regulators and the American Association of Pesticide Safety Educators (of which I am a proud member) think automated, unmonitored pesticide applications are a bad idea. They are encouraging EPA to prohibit application of pesticides through this system.

If you were thinking of buying an automated system to spray for mosquitoes, please think again. The idea of killing mosquitoes automatically may be appealing, but the associated risks are not.

**An environmental justice group in Harlem and a national environmental organization filed a lawsuit against (EPA) claiming that the Agency failed to protect children from rodent poisons.** Many children are reportedly poisoning by rat poisons each year. When EPA considered reregistration of rodenticides, the addition of bittering agents and/or a dye was considered as means to mitigate the risks. Although attractive on the surface, both of these ideas have significant drawbacks. Rats are often difficult to control because they are so suspicious, and they can taste a bittering agent. Why bother to

sell a rodenticide that rats will not eat? The dye was suggested as a signal to an adult that a child had eaten rat poison. What unique color could the dye be so that parents would not mistake a food/candy dye for the rat poison dye? Snacks and candies seem to be available in every color that adults consider disgusting; just ask my children. How long should the dye last? Who is responsible if the dye stains the child's clothes or the family's furniture? Because EPA could not devise reasonable answers to these questions, the Agency agreed to drop these requirements from the reregistration of rodenticides.

However, the West Harlem Environmental Action (WEACT) and the National Resources Defense Council (NRDC) disagreed, and they filed a complaint to challenge the EPA decision in U.S. District Court. There is some information to support this lawsuit. Some companies are marketing rodenticides with bittering agents. I have not seen data concerning the effectiveness of these products, but human bittering agents may not repel rats. Rats eat quite a few things that would not appeal to me. (NRDC, 11/8/04)

During my research for this story, it was never clear to me how so many children were exposed to rat poison. Lest you think me overly privileged, I have experience with rats. I have walked into a dark room at a dairy with the sound of scurrying all around. A dozen or more rats scattered when I turned on the light. When we lived in Washington DC, I shot at rats with a slingshot through the back door of our townhouse.

We were desperate to get rid of the rats, but I would have never allowed the use of a rodenticide where it was accessible to my children. Rats go places children cannot go; rodenticides can be placed in tamper-resistant containers. I may be missing some key information, but a lot of children's exposure to rodenticide sounds like some applicator error was involved. Even if the rat baits have bittering agents and dyes, I still do not want them placed where children could be exposed.

**The appearance of any trade name in this newsletter is not intended to endorse that product nor convey negative implications of unmentioned products.**

Dear Readers:

The *Georgia Pest Management Newsletter* is a monthly journal for extension agents, extension specialists, and others interested in pest management news. It provides information on legislation, regulations, and other issues affecting pest management in Georgia.

Do not regard the information in this newsletter as pest management recommendations. Consult the *Georgia Pest Management Handbook*, other Extension publications, or appropriate specialists for this information.

Your input in this newsletter is encouraged.

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