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Ohio Pesticide Safety Education Program

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Training for General Pest Control New Applicators

By Cindy Folck

Commercial pesticide applicators preparing for the Category 10a exam for general pest control are able to attend training on April 21. The training will focus on the identification, biology, and control methods of structural pests that are included in the 10a category exam. This includes bed bugs, ants, cockroaches, and many others. Additionally, applicators will learn about effective pest management to help prepare them for work as licensed, pesticide applicators.

The training will be offered by the Pesticide Safety Education Program on April 21, from 9:00 a.m. – 4:30 p.m. at the Ohio Department of Agriculture in Reynoldsburg. Applicators will also be able to attend the Pesticide Safety Training at the same location on April 22. This training will help them prepare for the Core exam in the morning. Applicators will be able to take the Core and Category 10a exams in the afternoon. For more information about the training and registration costs, visit the Pesticide Safety Education Program website at pested.osu.edu or call 614-292-4070.

New Herbicide-Resistant Crops

By Mary Ann Rose

After lengthy reviews, the USDA recently deregulated several new genetically modified crops that are resistant to herbicides. Monsanto has approval for Xtend soybean and cotton varieties with resistance to both dicamba and glyphosate. Dow AgroSciences will release Enlist soybeans, resistant to 2,4-D,

glyphosate, and glufosinate, as well as Enlist corn, which is tolerant to 2,4-D and resistant to glyphosate and the FOP grass herbicides. The FOP grass herbicides (chemical name: aryloxylphenoxypropionate) include the active ingredients quizalofop, fluazifop, and diclofop. Volunteer Enlist corn seedlings that pop up after rotating out of corn may be controlled by other grass herbicides (e.g., the "DIM" herbicides that include the active ingredients sethoxydim and clethodim). It's hoped that these new herbicide resistance traits will help turn the tide against glyphosate resistant weeds, but farmers will have to wait until at least 2016 before the new crops are widely available.

Dow and Monsanto have developed herbicides to partner with the new varieties. Enlist Duo, Dow's low-drift formulation of 2,4-D and glyphosate, has received its federal registration. The label directions tell applicators this is the only 2,4-D formulation allowed for use on Enlist corn and soybeans. To prevent drift, the label has strict requirements with respect to wind speed, nozzle selection, operating pressure, and downwind buffers to sensitive crops. The Monsanto low-drift dicamba formulation has not been approved yet; that label will likely contain similar restrictions to prevent drift to sensitive areas. More information is available on the Purdue Extension fact sheet, "2,4-D and Dicamba-tolerant Crops – Some Facts to Consider" available at: https://www.extension.purdue.edu/extmedia/id/id-453-w.pdf

EPA Releases Assessment of Soybean Seed Treatments
By Mary Ann Rose

In late 2014, EPA released a memorandum on the use of neonicotinoid seed treatments in U.S. soybean production. EPA's analysis of published data suggested that neonicotinoid seed treatments provide negligible benefits to soybean yields. The evaluation of seed treatment effectiveness was part of the EPA's ongoing reevaluation of neonicotinoids under the registration review program. Controversy has been associated with neonicotinoid seed treatments because of reports of the toxicity concern of airborne seed dust to bees. The EPA's analysis suggested that most of the usage in the U.S. is preventative, and implied the seed treatments were not justified economically on a wide scale.

In 2009, 46% of soybean acres were reported to receive a seed treatment, and the figure today is likely to be higher. The EPA reopened the comment period on the EPA's assessment through January 23, 2015. The American Soybean Association challenged the EPA's findings, stating that seed treatments were used where they were needed and effective, and not used where they were unnecessary. In Ohio, as in many other states, the seed companies send untreated soybean seed to small businesses who treat the seed and sell it to farmers. Seed treatment applicators in Ohio are required to hold a commercial pesticide applicator license with the category 2d or work under the direct supervision of a licensee holding that category. Farmers who purchase and plant pesticide-treated seed are not required to hold a pesticide license because planting the pesticide-coated seed is not a pesticide application. For more information, visit EPA's site at: http://www2.epa.gov/pollinator-protection/benefits-neonicotinoid-seed-treatments-soybean-production

Ohio Agricultural Fertilizer Certification Update
By Cindy Folck

Over 6,000 applicators have attended training for the Ohio Agricultural Fertilizer Applicator Certification thus far this year. Ohio State University Extension Educators have planned and conducted over 100 meetings and have more planned in the spring and summer. The certification is required for farmers and commercial applicators who are applying fertilizer to more than 50 acres of cropland. The certification requires two hours of training for applicators who currently have an Ohio pesticide applicator license, and three hours of training for those without a current pesticide license.

Applicators have until September, 2017, to complete the required training. The training is offered by OSU Extension and focuses on the best management practices for fertilizer applications that have the appropriate rate, timing, placement, and source. Information about upcoming training opportunities is

available at nutrienteducation.osu.edu or by calling the local county OSU Extension offices or the Pesticide Safety Education Program at 614-292-4070.

Applicators who are a Certified Crop Advisor (CCA) and Certified Livestock Manager (CLM) are exempt from attending training, but not the certification. To receive instruction about the exemption, the applicators need to call the pesticide regulation section at the Ohio Department of Agriculture at 614-728-6987. An exemption form will need to be sent by the applicator with a copy of their credentials.

EPA Registers the Active Ingredient Flupyradifurone
By Mary Ann Rose

The EPA registered the active ingredient flupyradifurone in January, 2015, and in a news release, identified this insecticide as a "safer" alternative to neonicotinoids with respect to bees. The active ingredient will be available for brassicas, cucurbits, fruiting vegetables, leafy vegetables, berries, cereals, pome fruit, root crops, small fruits, and tree nuts. The insecticide will be available as a foliar spray or soil drench. The active ingredient will also be submitted for registration as a seed treatment for field crops such as soybeans. Flupyradifurone will be marketed as "Sivanto" by Bayer; it is a systemic pesticide with soil and foliar activity that will control sucking insects (e.g., aphids, whiteflies, thrips, psyllids) in crops and as a seed treatment.

This registration is one of the first since the EPA instituted new requirements for risk assessments to bees. Laboratory studies submitted by the registrant indicated the compound is practically non-toxic to adult honeybees and has no adverse effects on bee colony health or overwintering survival. Flupryadifurone is more than 100X safer to bees than most (but not all) neonicotinoids; however, it controls insects by the same mode of action. While structurally different, flupryadifurone will not avoid cross resistance with IRAC group 4a insecticides (imidacloprid and others) because it binds to the same site of action. For this reason, rotations between the neonicotinoids and this new material will not be recommended. More information is available at: http://www.epa.gov/oppfead1/cb/csb_page/updates/2015/alt-neonicotinoids.html

Paraquat Poisoning Incident
By Chrissy Kaminski

A South Carolina man died in June 2014 from pesticide poisoning after his neighbor had sold him stolen paraquat in a plastic soda bottle. After purchasing, the man placed the bottle in his fridge and later mistook it for a drink. The neighbor that sold him the stolen paraquat has been charged with involuntary manslaughter following the accidental poisoning.

Paraquat dichloride, commonly referred to as paraquat, is a highly-toxic restricted-use herbicide; a person must hold a current pesticide license in order to purchase and apply it. Poisoning can occur through skin exposure and inhalation, but is most likely to occur through ingestion. As little as one sip can be fatal to an adult. To date, EPA has recorded 27 fatal paraquat poisonings. Of these, at least eight were due to accidental ingestion. All eight ingestion cases resulted from the pesticide being transferred to a beverage container. The EPA recommends the followings steps to avoid paraquat poisonings.

1. The pesticide should be only be applied and handled by certified applicators, or under the direct supervision of certified applicators.
2. The label clearly states "NEVER PUT INTO FOOD, DRINK OR OTHER CONTAINERS" and "DO NOT REMOVE CONTENTS EXCEPT FOR IMMEDIATE USE." It should never be transferred to another container.
3. Secure the pesticide so unauthorized persons and children cannot reach it.
4. The pesticide should never be stored in or around residential dwellings.

5. Paraquat has no homeowner uses, and no products are registered for application in residential areas. The pesticide should never be used around home gardens, schools, recreational parks, golf courses or playgrounds.
6. Paraquat has the signal word "Danger/Poison" on the label along with the skull and crossbones. According to Ohio Pesticide Law, any one under the age of 18 can't handle the product without on-site supervision by a pesticide applicator.

(Source: EPA Office of Pesticide Programs, 12/24/14)

Comment Period Extended for Corn Rootworm Management
By Cindy Folck

EPA has extended the comment period to April 15 on the proposed framework for managing corn rootworm resistance to Bt corn. The focus is to delay resistance from developing in corn rootworm populations. For areas at risk of corn rootworm resistance, the proposed framework will require crop rotation, use of corn varieties with more than one Bt toxin, and other IPM strategies. Additionally, the proposal would require development and implementation of strategies to better detect and address areas of resistance as well as the use of different and improved scientific tests and sampling requirements for identifying potential resistance.

Comments on the proposed framework are required by April 15. More information about the proposed framework and links to the federal docket for comments is available at: http://www.epa.gov/oppfead1/cb/csb_page/updates/2015/extends-rootworm.html

New Website for Minimum-Risk Pesticides Created
By Cindy Folck

Minimum-risk pesticides are considered by EPA to have little risk to human health and the environment and are exempt from the formal registration process required by other pesticide products. EPA has updated the website with information about the minimum risk pesticides. The website can be accessed at: http://www2.epa.gov/minimum-risk-pesticides. Under the Federal insecticide, Fungicide, and Rodenticide Act (FIFRA), these pesticides are classified as 25(b) and are listed on the EPA website at: http://www2.epa.gov/minimum-risk-pesticides/active-ingredients-allowed-minimum-risk-pesticide-products

Ohio Pesticide Law, however, requires pesticide products with minimum-risk active ingredients to be registered with the Ohio Department of Agriculture (ODA). These products must be registered with ODA to be used in Ohio. A searchable listing of pesticide products registered in Ohio is available at: http://state.ceris.purdue.edu/ . These products are considered pesticides, so applicators required to obtain a commercial license for other pesticide products still need a license if using the minimum-risk products, or be supervised by a licensed commercial applicator.

Consumers and all applicators using minimum-risk pesticide products must still read and follow label directions. These products still must be handled with care, stored properly, and only used according to the label.
(Source: EPA Office of Pesticide Programs, Minimum-Risk Pesticide Website)

Upcoming Events
More information about the following events is at: http://pested.osu.edu

Pesticide Safety Training – Commercial New Applicators & Trained Servicepersons
April 22, 2015 (General pest (category 10a) training on April 21)
May 27, 2015

August 26, 2015
September 30, 2015
Core and Trained Serviceperson trainings are held in the morning, and Categories 8, 5, 2c, and 6c in the afternoon. Visit http://pested.osu.edu for more details. *Taught at the Ohio Department of Agriculture, Reynoldsburg, Ohio*

Ohio Commercial Pesticide Applicator Recertification Conferences
January 28, 2016 (Thursday) – Sandusky, Kalahari Convention Center
February 3, 2016 (Wednesday) – Akron, John S. Knight Center
February 17, 2016 (Wednesday) – Dayton Convention Center
March 1, 2016 (Tuesday) – Columbus Convention Center
