

Weekly Article

1-23-2023

Preparing for Safe Pesticide Use This Growing Season

Hello, my name is Richard Purdin with OSU Extension, Ag and Natural Resource Educator, and Community Development Educator for Adams County. I hope to better inform local producers and the public of the latest news in the world of agriculture. Someone needs to have a talk with January and inform it that it is a winter month and not spring. If you are like me, it has been a great challenge to accumulate to the extreme changes in weather. From highs in the Low 60s to blowing snow, this winter has thrown just about everything at us. Even with the extremely variable weather farmers were able to get a chance to haul some stored grain as corn and soybean prices rallied mid-week, other than that it has been a slow go for field work as many fields lay saturated from heavy rains. This time of year, many farmers are in planning mode, preparing for the next growing season. Factors and input requirements such as cropping rotation, seed varieties, fertilizer type, and amounts, equipment upgrades, and pest management strategies. A pest is defined as an organism that appears in places and times that are inconvenient or damaging to people. The damage can be economic, aesthetic, and just a plain nuisance. The farmer often debates methods of controlling pests, and there are many choices of tools to choose from including scouting, hand removal, biological control, cultivation, cultural control, and chemical control. There are many factors that go into a farmer's decision to use one method over the other but at the end of the day, the choice must be the 3 E's, effective, economically sound, and ecologically compatible. Depending on the farm structure, goals, and preference, chemical pesticides often meet all of the 3E's.

Chemical pesticide use should be looked at as one tool in a toolbox filled with other options and not as a silver bullet to correct all pest problems. Pesticides can be very effective but can pose risks to not only the environment but the health and well-being of the applicator as well. This time of year, I conduct my annual pesticide and fertilizer applicator training for local agriculture producers renewing their pesticide and fertilizer applicator license. This license renewal is every 3 years and during the training, farmers are updated on the latest technology, techniques, invasive pest, and safety practices. Safe use of pesticide safety is one of the first things applicators should consider even before purchasing a pesticide. No matter if you apply glyphosate herbicide or tobacco sucker growth regulators, all can be a hazard to your health. Some key considerations and safety steps to take before applying any pesticide include.

1. Know the pesticide classification- There are 3 main classifications of pesticides expressed on the pesticide label as key signal words, Caution Warning, and

Danger, Caution signal word means the pesticide is slightly toxic or relatively nontoxic. Warning signal words means moderately toxic and likely to cause acute illnesses from oral, dermal, or inhalation of the pesticide. Danger signal word refers to highly toxic chemicals that are very likely to cause acute illnesses. These signal words can be found on the front page of the label in large capital letters.

2. Understand the formulation- Pesticides can be formulated in many different ways, fluid, powder, dust, and granulated. Many times, the label will have the chemical name on the label at the end to indicate formulation, and some with just have it printed out separately.
3. Know the routes of exposure- The routes of exposure include Dermal, Inhalation, oral, and ocular. The pesticide formulation can affect the different routes of exposure. For example, dust and dry formulations are more likely to be inhaled and liquids are more likely to be exposed through dermal and or ocular.
4. Minimize exposure as much as possible- Wearing the proper personal protective equipment referred to as PPE can greatly reduce the risk of exposure. The pesticide label will have a section that outlines the proper PPE that is should be used with the specific chemical. PPEs are classified as a minimum and maximum protection. Minimum protection is most likely what most agricultural, residential, and other commercial industry pesticides require, these include long-sleeved shirts, long pants or overalls, chemical-resistant clothes, and rubber shoes and socks. Maximum protection PPEs include Chemical Suits, Eye protection, respirators, and headgear.
5. Take time to clean after application- Even when you wear the proper PPE it is always remembering to wash after application, washing hands, and change clothes, before eating, using the restroom, or using tobacco products is very important. The highest route of pesticide absorption to the body is the scrotum area.

Dates to remember

- February 1, 2023 – Meet your local farm agencies- At the Ohio Valley Career and Technical Center from 6:00 to 8:00 pm. Call (937) 544-2339 to register.
- Adams/Scioto County Forestry Legacy workshop, February 9th at 6:00 pm Located at the Nile Township Community Center, 12099 Ohio River Scenic Byway US 52 Stout, Ohio 45684. Contact Brooks Warner to register for the event at 740-354-7870 or email warner.948@osu.edu
- Tobacco GAP training will be held on March 1, 2023, at the Raines Farms and Greenhouse 2667 Nicholes Ridge Road Seaman, Ohio 45679.

Ag Educator Words of encouragement – “Everything else can wait, agriculture can’t” Norman Borlaug (father of the green revolution)