Proper pesticide practices critical during pandemic

For those of us involved in pesticide education, it became apparent that the general public was not familiar with the proper use and safety of cleaners and disinfectants — particularly for the coronavirus. For one thing, cleaners and disinfectants are not the same thing.

Cleaners are products that remove dirt or contaminants (including germs) from surfaces, which include soaps and detergents. They can break down the protective membrane of some viruses, diminishing their attacking ability (part of the reason that washing your hands with soap and water is effective).

Disinfectants destroy or inactivate germs on surfaces and prevent them from growing. Disinfectants do not clean the surface or even necessarily remove the inactivated germs.

In addition, disinfectants are registered pesticides — registered by the U.S. Environmental Protection Agency (EPA). Disinfectant products are meant to be used on surfaces, not on people. They also aren’t meant to be sprayed into the air, which can be a health hazard.

As with any pesticide, disinfectants will have a label to ensure proper use and safety. An individual should only use EPA-registered disinfectants.

Disinfectant choice is an important consideration for people with health conditions — some disinfectants may exacerbate asthma or other health problems. Applicators should make sure there is adequate ventilation in the treated area.

Proper personal protective equipment (PPE) should be used as listed on the label. Gloves should be worn to protect the skin. Both gloves and eye protection should be used when applying bleach.

Do not mix disinfectants together or with other substances. For example, mixing bleach with ammonia produces a toxic gas.

In Ohio, common household disinfectants available at local retail stores do not require a pesticide license. However, stronger disinfectant products that are considered a restricted-use pesticide would require a license to purchase and use.

The EPA has a list of disinfectants to use against SARS-CoV-2, the novel coronavirus that causes COVID-19. This list may be found at https://www.epa.gov/pesticide-registration/list-of-disinfectants-use-against-sars-cov-2.

Before applying a disinfecting product, it is important to remove dirt and contaminants on the surface area that may interfere with the activity of the disinfectant. Thoroughly clean the surface area with soap or detergent, then rinse the area, and dry before applying disinfectant.

Do not skip any of the cleaning steps. All are important — for example, the drying step removes contaminants and residues.

After cleaning, apply the disinfectant product while following the label instructions. If the product is mixed with water, use the dilution recommended on the label. It is important that the disinfectant remain visibly wet on the applied surface for the labeled contact time (anywhere from 15 seconds to 10 minutes depending on the product).

If you are using disposable wipes, discard them in the trash, not the septic system. For surfaces used for food, be sure to rinse with a potable water source after disinfecting. When finished with the job, remove gloves and other PPE, and wash and dry hands.

Finding the proper PPE may be the biggest challenge an individual may have with following the disinfectant label. Finding this protective equipment has also been a problem for farmers.

Every pesticide product label includes a list of the required PPE to legally apply the product to fields. If the farmer cannot obtain the proper protective equipment, they cannot use the pesticide, but hopefully they can find an alternative product that does not require the PPE that is in short supply.

Farmers may have to purchase a higher level PPE than is required on the label. These products may be more available since they are not used by health care providers. However, these products are more expensive, hot and more uncomfortable on the face, and replaceable parts such as cartridges in respirator masks may be in short supply.

To avoid the PPE shortage, a farmer may select pesticides that do not require them. Many common pesticides require long-sleeve shirts, long pants, shoes and socks.

Besides our health, the COVID-19 pandemic has also affected individuals using pesticides, whether it be disinfectants or farm chemicals. Most of the pesticide concerns relate to a shortage of the proper PPE required by the product label.

Farmers may go to the website home.agrian.com to find labels and the required PPE for agricultural pesticides.

Cleaning and disinfection information may be found at the Centers for Disease Control: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html.

Additional pesticide information may be found at https://u.osu.edu/psep/.

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