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PESTICIDE STORAGE TIPS

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As we move into winter, store lawn and garden pesticides correctly and securely. Storage information can be found on the label. Read and follow it for safety and to help keep pesticides from degrading.

Incorrect storage of pesticide can lead to accidental poisoning. A common mistake is pouring a pesticide into a container other than the original. This is against pesticide label laws and has led to poisoning.

Here are two examples that have occurred in the United States. In one incidence, a father placed a small amount of insecticide in a cup and set it outside, hoping to kill spiders. His 21 month old daughter found the cup and drank it.

In another incident, a gardener poured extra pesticide into a juice bottle. His wife found the bottle in his truck and took it into the house. She later drank some of it, thinking it was juice.

These are true incidents and fortunately, in both cases, the child and wife recovered after medical treatment. However, these cases emphasize the importance of storing pesticides in their original containers only; and in a secure location that can be locked.

A common question about winter storage is if a pesticide is still effective after freezing. Safety first; if a pesticide does freeze and expand, remember that a glass bottle or plastic container may crack and leak.

As for effectiveness; first check the product label for storage recommendations and any warnings against freezing. Most liquid pesticides are safely stored between 40 and 100 degrees Fahrenheit. If a liquid pesticide does freeze, it may be less effective in controlling pests.

Pesticides contain active and inactive ingredients. The active ingredient is what kills the pest. Inactive ingredients include solvents, carriers, or emulsifiers that make the pesticide more efficient.

Due to inclusion of some inactive ingredients, the freezing point of some liquid pesticides is lower than 32 degrees F., according to a University of Missouri Extension publication on pesticide storage. It is important to read the label for temperature storage requirements.

When a liquid pesticide freezes, the active ingredients can separate from the solvents or emulsifiers, causing the emulsifiers to become inactive, crystalize, and coagulate, breaking down the original product.

If frozen, some pesticides can be thawed naturally at room temperature, but never use a flame or heat. Make sure the container has not cracked. After thawing, roll and shake the container to resuspend the contents.

If crystals are still present after thawing, the pesticide should not be used as it will be ineffective. It should be properly disposed of according to label directions.

Generally, pesticides that are wettable powders or granules are not affected by low temperatures. Moisture, though, can cause caking that may reduce effectiveness. Products formulated in water-soluble packets should not be allowed to freeze as they will become brittle and break open.

When storing pesticides, do not store them near heat, sparks, or open flames. Keep containers tightly closed in a cool, locked, well-ventilated place away from children, pets and food items. And always store pesticides in their original containers.

22 November 21 PSAs

I was once asked how deep to bury old apples to control insects overwintering inside of them. Our common apple insects are codling moth and apple maggot. Both emerge from apples and overwinter as pupae in soil, rather than inside of fruit. It is important to promptly pick up and destroy apples as they fall from trees during summer and fall, before insects can emerge from the fruit. Now is a little late to use this as a control method. If burying is used to dispose of infested apples as they drop from trees, bury them at least twelve inches deep. When I asked this grower what apple insect he was trying to control, the answer was a small black, oval shaped beetle that was found in old apples and his old tomatoes. This is a sap beetle which is not an apple pest. Sap beetles feed only on old, overripe or damaged fruit. Sap beetles are easily controlled with prompt harvesting and removal of fallen fruit from gardens and orchards.

With winter approaching, exclusion is the best means of keeping mice out of buildings. Mice are attracted to buildings when they detect heat escaping from openings. Prevent mouse entry by eliminating all openings one-fourth inch or larger. Secure gaps less than one-half inch around pipes with sealant to stop airflow. For larger gaps, use copper woven-wire mesh, or a new product that uses stainless steel fibers to fill gaps. Complete the job with a sealant or mortar to prevent air movement. Larger openings can be secured with wood, aluminum flashing, concrete, or one-fourth inch wire mesh. Doors, windows, and screens should fit tightly. If needed, cover the edges of doors and windows with metal to prevent gnawing. Materials that are unsuitable for plugging holes used by mice include latex, plastic, rubber, boards less than one-half inch thick, or other soft materials. Mice will chew through these.

Once firewood begins to be brought indoors, calls start coming in about insects that might be seen emerging from firewood. The main concern is if these insects could damage the wood inside of homes. Most insects emerging from firewood, even tree borers and subterranean termites, are only considered nuisance pests when brought into the home in firewood. This is because most insects cannot survive in the home when introduced from firewood. For example, subterranean termites quickly die without their underground colony, and tree borers will not attack or damage aged or finished wood inside of a home. To avoid nuisance pests emerging indoors, only bring firewood inside as needed. Do not store firewood indoors. If firewood is held below 50 degrees Fahrenheit, insects in the wood will remain dormant. If brought indoors and allowed to warm, insect activity resumes and insects may emerge.

When houseplants are brought indoors in the fall, or new houseplants are purchased, it is not unusual for them to drop leaves with some leaves turning yellow first. The reason houseplants do this is because leaves that form in more intense light, like the outdoors or in a greenhouse, are different than leaves that form in lower light, such as in our homes. Leaves are referred to as sun leaves or shade leaves. To us, they look the same, however sun leaves are thicker and have less chlorophyll which is found deeper in sun leaves than shade leaves, which are also thinner and larger. When plants are moved from high to low light intensities, or vice versa, they need to adjust to the new environment. One way they do this is to drop many of their sun leaves and develop new shade leaves. The process can take 4 to 8 weeks so don't give up on houseplants dropping leaves too soon after bringing them indoors or buying new.

Boxwood are broadleaf evergreen shrubs; meaning they keep their leaves all winter and the leaves are not needle-like such as a pine. Even though Boxwood leaves are small, they're referred to as a broad-leaf plant versus a needle-leaf plant. An issue with Boxwoods is either the entire plant or a portion of the plant often turns brown at winter's end. This is because the green leaves continue to lose moisture over winter, especially on windy or warmer days; however, this moisture cannot be replaced by roots from cold or frozen soil. This is the challenge in growing any evergreen, but especially broadleaf evergreens. If you have a Boxwood or choose to plant one, keeping the soil consistently moist from spring through late fall is critical. Setting up a temporary windbreak may help; or plants can be sprayed with an anti-transpirant found at garden centers. These products need to be applied more than once to be effective all winter.