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BARNYARDS & BACKYARDS

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Gardeners, avoid damage to vegetables from these residual herbicides

"Dr. Caitlin" offers a simple test

If you are a gardener, you know adding manure and compost to the soil helps plants thrive, but how do you know if it contains harmful herbicides?

Most herbicides break down within days or weeks when exposed to sun, heat and soil microbes. The compost process, with its fluctuating temperatures and thriving microbial activity, also does a great job of degrading most herbicides, pesticides and other chemicals. There is one class of herbicides, however, that may persist up to several years in soil, livestock manure, mulch and compost. They can damage or kill sensitive plants, such as peas and beans, carrots, tomatoes, peppers, spinach and strawberries.

Herbicides that contain the active ingredients of aminopyralid, clopyralid, picloram and aminocyclopyrachlor have the potential to accumulate in manure, compost or soil. There are many products available that contain one or more of these active ingredients, so be sure to read the product label thoroughly!

These herbicides act as growth regulators and effectively kill broad-leaf plants (not grasses). For this reason, they are commonly used on lawns, pastures and hay fields. What makes these herbicides unusual is their persistence in livestock manure.

When an animal consumes the hay or grass from an area where these herbicides have been used, the active ingredients (clopyralid, etc.) do not break down in the gut and are excreted with the manure. They persist in the soil, stockpiled manure or compost.

Accidental damage to non-target plants can occur when these herbicides are used on lawns and the grass clippings are used for mulch or composting. Straw bales can also cause problems if they come from a field sprayed with one of these herbicides.

There are a few things you can do to reduce the risk of residual herbicides. First, do not use products containing the above-listed active ingredients on your lawn if you plan to compost the grass clippings or use them as mulch.

If you are using livestock manure in your garden (even after composting), find out what herbicides were used on the fields where the animals grazed or where the hay was grown. The same goes for straw bales used in the garden.

If you cannot determine the source of the manure or compost, consider conducting a bioassay to test for the presence of growth regulator herbicides. This simple test requires only a few seeds and a sunny windowsill, but it can help you determine if your compost or manure will cause damage before it is too late and your tomatoes are dead.

More information about residual herbicides in the garden and complete

bioassay instructions are available at *bit.ly/ResidualHerbicides*. Or contact your local UW Extension educator for assistance.

As always, carefully read and follow all instructions on the herbicide label. There you will find information about proper application rates.

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