THBUTHE GREEN

Clopyralid And Compost

What's at Issue?

Clopyralid is a herbicide that farmers, foresters, ranchers, golf course managers, parks and recreation professionals and others rely on to control hard-to-manage invasive weeds. Products containing clopyralid have been on the market for more than 15 years. Compared to similar products, clopyralid has a relatively favorable health and safety profile for both people and wildlife.

Note: Clopyralid is registered for use on a number of food crops, and around a variety of turf and ornamental plants. However, if not used according to the product label it can cause adverse effects on beneficial plants belonging to the same family of weeds for which it is used. Examples of sensitive plants include legumes such as clover, as well as peas and beans; Asteracea such as thistles and dandelions, but also sunflowers; and Solenacea such as nightshade, but also tomatoes and potatoes.

Recently, clopyralid residues have been reported in compost at levels that could damage sensitive plants such as tomatoes, sunflowers and legumes. Few documented instances of plant damage have actually been reported, with the reports primarily deriving from Washington State.

The primary source of these residues is believed to be the composting of clopyralid-treated grass clippings from residential lawns. Label directions on clopyralid products restrict the use of clippings for mulch or compost. But treated grass clippings may still find their way into compost because homeowners using professional lawn care services may not have been informed that clopyralid was used and/or may not be knowledgeable of the restrictions that apply.

How Does This Issue Affect Me?

Based on data from environmental fate studies, clopyralid is not persistent in the natural environment and breaks down readily in soil. Similar studies suggest that it does not break down as readily in compost.

Dow AgroSciences, state and federal regulators, users of the product, composters

and others are working toward new use restrictions, product stewardship initiatives, communications and training programs, and compost use practices to keep clopyralid residues out of compost at levels of concern for sensitive plants.

Note: Blending compost with soil or other organic potting media (such as pine fines, peat moss, perlite) is a widely accepted and commonly recommended practice. (U.S. Compost Council field guide, www.compostcouncil.org. However, unblended compost has the potential to shrink appreciably, decrease water holding power of the growing medium, and contain unwanted components (soluble salts, organic acids, etc.), especially if not sufficiently cured or mature. Documented cases of injury to sensitive plants from compost containing inadvertent clopyralid residues have included the use of unblended and/or immature compost.

The potential for clopyralid residues to cause adverse effects on plants is a function of label restrictions not having been followed, inappropriate use of the compost, the susceptibility of the plant species and a several other factors. (An extensive list of plants that are not susceptible to clopyralid is available from Dow AgroSciences.)

By contrast, use of clopyralid where treated grass clippings will not be composted — for example, golf courses, parks, cemeteries, home lawns where mulching mowers are used and other, similar managed turf situations — would not be sources of compost harmful to plants due to clopyralid residues.

Why Not Just Ban All Uses of Clopyralid?

Ill-conceived or hastily imposed restrictions may, while well-meaning, create a number of unintended, and potentially greater, problems than those they sought to correct. For example:

* Many states require the control of noxious weeds because of their harmful impact on recreational areas and range and farmland. Clopyralid products control invasive weeds that alternative products may only suppress.

- * Clopyralid is highly effective on certain hard-to-control weeds that infest residential lawns (e.g., clover). A well-maintained lawn not only has aesthetic value; it also increases property values and protects children against falls and stings from bees drawn to yards by flowering weeds.
- * Eliminating clopyralid uses could result in greater and more frequent use of other pest control products, with less impact on hard-to-control weeds, greater public exposure to pesticides and less land available for wildlife and recreation.

Conclusion

Dow AgroSciences is working with the U.S. Environmental Protection Agency, state regulatory agencies and other affected parties to develop new federal labeling for clopyralid products on an expedited basis. This new labeling will incorporate use restrictions in addition to the current label prohibition against using compost from clopyralid-treated foliage.

Dow AgroSciences is expanding communications with product users to provide increased product stewardship and better address this issue. We also look forward to working with composters to improve communication of best management practices for proper compost use.

A Note of Appreciation

By Bob Whittaker

As most of you know, I lost my wife Joyce this past year. Joyce and I would have been married 33 years this past April 2nd. I would like to extend my sincerest thanks to each of you for your sympathy and concern for my family and me. Your thoughtful cards and letters and your outpouring of grief and sympathy have been overwhelming and yet welcome and appreciated. I find it difficult to express in words alone how your support has helped me during this most difficult time in my life. I don't know how else to express my heartfelt appreciation than to say, "Thank you, friend."