

Clopyralid Residues in Compost

Introduction

This fact sheet addresses the issue of clopyralid residues in compost and contains the following information: a brief review of the benefits of composting, clopyralid facts and characteristics, actions taken to date to prevent damage from clopyralid, what you can do, and other resources.

Benefits of Composting

Composting involves biological decomposition of organic materials to produce a stable, weed-free, pathogen-free, humus-like product. Using compost benefits the environment in a number of ways.

- Diverts yard trimmings, leaves, and other valuable organic materials from landfills, saving landfill space.
- Adds organic matter and nutrients to soil.
- Reduces the need for fertilizers.
- Increases biological activity in the soil.
- Prevents soil erosion.
- Reduces requirements for irrigation.
- Reduces the need for pesticides.
- Increases porosity of heavy clay soil.
- Encourages slow release of nitrogen.
- Improves drought tolerance.

Clopyralid Facts

No incidence of plant damage attributed to clopyralid residues in compost has been reported in California.

Clopyralid is the active ingredient in several herbicide products used to control broadleaf weeds such as yellow star thistle, dandelion, and clover.

Products

Clopyralid has been sold in California since 1997 under various trade names, including the following:

- Transline*—rangeland, pasture, and rights-of-way.
- Confront*—golf courses.
- Stinger*—vegetables and grains.
- Lontrel*—turf and ornamental plants.
- Riverdale products—landscape and golf courses.
- Andersons lawn fertilizer products.

*Trademark of Dow AgroSciences LLC



Characteristics of Clopyralid

- Exhibits low toxicity to animals, including humans.
- Half-life of 8 to 35 days under favorable conditions (that is, warm and moist compost), but up to 195 days in room-temperature compost.
- Shows up at low levels in some California composts.
- Does not affect most plants in low concentrations. However, some plants are unusually susceptible such as peas, potatoes, tomatoes, peppers, and sunflowers.



Actions Taken To Prevent Damage From Clopyralid

In early 2002, the Department of Pesticide Regulation (DPR) and California Integrated Waste Management Board (CIWMB) established a work group to review concerns about potential clopyralid contamination of compost and take appropriate action.

In March 2002, DPR initiated cancellation action against products used on residential lawns. As a result of this and other actions, Dow AgroSciences, the manufacturer of clopyralid, worked with the U.S. Environmental Protection Agency to change its labels so that clopyralid products are no longer allowed for residential use.

The CIWMB funded statewide testing of compost for clopyralid residues during fall 2003, summer 2004, and fall 2004. The highest levels detected during the three testing events were 6.40 parts per billion (ppb), 5.01 ppb, and 2.75 ppb, respectively. This preliminary data seems to indicate a downward trend in the levels of clopyralid residues in compost. The CIWMB will continue to monitor this potential threat to the compost industry.

DPR proposed regulations in early 2005 that would, if adopted as written, do the following:

- Prohibit application of clopyralid to residential lawns.
- Prohibit applications to lawn and turf unless applicator assures that treated clippings remain on property.

- Require applicators to sign a statement that clopyralid will not be applied to residential lawns and will only be applied to sites where grass clippings remain on property.

What You Can Do

The Department of Pesticide Regulation and California Integrated Waste Management Board offer the following recommendations:



Do not use clopyralid products on residential properties.

Instruct your lawn-care professional not to use clopyralid products on your property.

Do not compost materials that have been treated with a clopyralid product.

Contact your local compost facility for appropriate uses and application rates for compost (locate facilities at www.ciwmb.ca.gov/Organics/SupplierList/).

Ask your local compost facility whether it tests its compost for clopyralid residues.

Resources

DPR: www.cdpr.ca.gov

CIWMB: www.ciwmb.ca.gov/Organics/Threats/Clopyralid/

Dow Agrosciences: www.dowagro.com

Join Governor Schwarzenegger to Keep California Rolling. Every Californian can help to reduce energy and fuel consumption. For a list of simple ways you can reduce demand and cut your energy and fuel costs, Flex Your Power and visit www.fyppower.com.