Clopyralid in Turfgrass Clippings: Formulation and Mowing Effects on Dissipation. (C05-miltner162548-Poster)

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Abstract:

During the Spring of 2000, plant injury in several gardens near Spokane, WA was traced to clopyralid contamination of compost produced at the local yard waste composting facility. Previous and subsequent research has indicated that clopyralid does not break down completely during composting. Research was conducted at Washington State University Puyallup in 2001 to determine if there were management practices that would limit the amount of clopyralid entering the compost stream in turfgrass clippings. Clopyralid was applied at the rate of 0.28 kg ae/ha in both sprayable and granular formulations. Clippings were either removed or mulched with each weekly mowing. Samples were collected at 0, 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 weeks after treatment (WAT) and analyzed for clopyralid content. Clipping clopyralid content was not affected by mowing treatment, and the formulation effect was limited to higher concentration for the sprayed application at 0 and 0.5 WAT only. Concentrations ranged from approximately 200 mg/kg at 0 WAT to 1 mg/kg at 10 WAT, still far above the injury threshold of 3 ug/kg (0.003 mg/kg) for certain sensitive species.

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Presentation Information:

Presentation Date: Tuesday, November 12, 2002 Presentation Time: 9:00-11:00 am Poster Board Number: 1138

Keywords:

turfgrass, clopyralid, compost, pesticide fate