

CORN RESPONSE TO MESOTRIONE AS AFFECTED BY SOIL-APPLIED ORGANOPHOSPHATE INSECTICIDES. James J. Kells, Corey J. Guza, Christina DiFonzo and Michael R. Jewett, Professor and Graduate Research Assistant, Department of Crop and Soil Sciences, and Associate Professor and Research Technician, Department of Entomology, Michigan State University, East Lansing, MI 48824.

A field trial was conducted in 2002 to examine the interaction between mesotrione and soil-applied organophosphate insecticides. No corn injury occurred from soil-applied mesotrione at 0.21 kg ai/ha regardless of insecticide treatment. No injury occurred from foliar-applied mesotrione at 0.11 kg/ha in the absence of insecticide. Significant corn injury occurred from foliar-applied mesotrione following soil-applied organophosphate insecticides. Severity of corn injury from foliar-applied mesotrione was as follows: terbufos (3 times normal rate – 4.41 kg/ha) in-furrow > terbufos (normal rate – 1.47 kg/ha) in-furrow > terbufos (normal rate – 1.47 kg/ha) T-banded > chlorpyrifos (normal rate – 1.47 kg/ha) T-banded. Corn injury from the mesotrione/organophosphate insecticide interaction did not affect corn yield.