

CORN RESPONSE TO MESOTRIONE AS AFFECTED BY SOIL INSECTICIDE APPLICATION METHOD AND RATE. Andrew J. Chomas, Michael R. Jewett, Christina DiFonzo, and James J. Kells, Research Technician, Department of Crop and Soil Sciences, Research Technician and Associate Professor, Department of Entomology, Professor, Department of Crop and Soil Sciences, Michigan State University, East Lansing, MI 48824.

A field trial was conducted in 2002 to examine the effect of insecticide type and mesotrione application rate on corn injury. Corn injury increased with increasing mesotrione rate. Corn injury from mesotrione at 0.21 kg ai/ha was 34, 19, and 13% in corn treated with terbufos, chlorpyrifos, and tefluthrin, respectively. Corn recovered rapidly from mesotrione injury with no measurable reduction in corn yield. A second study examined the effect of insecticide type, insecticide application rate, and insecticide application method on corn injury from mesotrione. Corn injury was greater in corn treated with terbufos than chlorpyrifos. Injury from mesotrione was greater with terbufos applied at two times the typical rate. Corn injury was slightly higher when terbufos was applied in-furrow versus T-band. Corn injury from mesotrione did not reduce yield.