RESPONSE OF WINTER WHEAT TO POSTEMERGENCE HERBICIDES APPLIED IN THE FALL. Andrew J. Chomas, James J. Kells, Lee F. Siler, and Richard W. Ward. Research Assistant, Professor, Research Assistant and Professor, Department of Crop and Soil Sciences, Michigan State University, East Lansing, MI 48824.

Weed control is essential for successful winter wheat production. Winter annual weeds have increased in winter wheat, leading to increased interest in fall herbicide application as compared to the typical practice of herbicide application in the spring. Field research was conducted in 2004 and 2005 at two sites each year in Michigan to evaluate crop response to several postemergence wheat herbicides applied in the fall. Crop injury was evaluated at harvest and yields determined at all four locations. No significant injury, height reduction or yield reduction was observed with Banvel, Harmony Extra, Stinger, or Express used at typical use rates and with typical adjuvants. 2,4-D applied at either 0.5 or 1.0 lb ai/A injured wheat in three of the four sites and reduced wheat yield at one of two sites each year. Addition of non ionic surfactant to 2,4-D amine reduced wheat yield at one of four sites. Increasing 2,4-D ester rate from 0.5 to 1.0 lb ai/A reduced wheat yield at one of four sites. 2,4-D reduced plant height at both sites in 2005.