ROW SPACING EFFECTS ON WEED MANAGEMENT IN GLYPHOSATE-RESISTANT SUGAR BEET. Jon-Joseph Q. Armstrong and Christy L. Sprague, Graduate Assistant and Associate Professor, Department of Crop and Soil Sciences, Michigan State University, East Lansing, MI 48824.

The introduction of glyphosate-resistant sugar beet (*Beta vulgaris*) will improve weed control and crop safety in sugar beet. With less need for in-row cultivation, this technology may also allow producers to plant sugar beet in narrower rows. Field trials were established in 2006 and 2007 to evaluate the effect of row width on canopy development and weed growth in glyphosate-resistant sugar beet. Row widths of 38-, 51-, 76-cm were investigated in this study. Canopy cover measurements in 2006 showed significantly greater cover in 38-cm rows compared to 76-cm rows at all sampling times. However, in 2007 canopy cover during the growing season was similar among the three row widths. In both years, plant population did not have an effect on canopy cover. Weed biomass was similar among all row widths in untreated plots both years. However, a trend of reduced weed biomass in narrower rows was present. Moisture limitations in 2007 may have contributed to the lack of differences in canopy cover among the row widths in 2007 as compared with 2006.

2007 North Central Weed Science Society Proceedings 62:4.