

## Cover crop and herbicide interactions: A Michigan perspective

Erin C. Hill, Christy L. Sprague, and Karen A. Renner

Michigan is ranked fifth in the nation in terms of cover crop acreage; with over 400,000 cover crop acres representing nearly 6% of the total cropland in the state. As cover crop use has increased so have grower questions to Michigan State University Extension. Top concerns in Michigan include: carryover issues with herbicides used prior to cover crop establishment, cover crop termination with herbicides, and the potential for cover crops to become weeds. Ongoing field and greenhouse experiments examine the influence of residual corn and soybean herbicides on the establishment and growth of cereal rye, oilseed radish, and medium red clover, and the impact of postemergence wheat herbicides on established medium red clover. Early results indicated that cereal rye, currently the most widely used cover crop in Michigan, is the least susceptible of these three cover crops to residual corn and soybean herbicides. Medium red clover establishment was negatively impacted by fall applications of mesosulfuron (i.e. Osprey) to winter wheat. Spring herbicide applications (i.e. May) to wheat resulted in 80-100% injury of frost-seeded (i.e. April) medium red clover. Research and extension efforts regarding cover crop and herbicide interactions will continue in Michigan over the next several years.

Hill, E., C. Sprague, and K. Renner. 2014. Cover crop and herbicide interactions. A Michigan perspective. North Central Weed Science Society annual meeting. 148. Minneapolis, MN. Oral presentation.