INTRODUCTION: Cover Crops Learning Tour
Agronomic, environmental, and economic benefits have driven an increase in use of cover crops. However, use in Minnesota has been very limited in part due to establishment challenges in a corn/soybean rotation. A partnership of farmers, agricultural professionals and researchers will develop hands-on educational demonstration plots to complement on-going cover crop research. An interactive educational field day (mini-field school format) will allow farmers to see cover crops in production and discuss how to implement them on their farms. The demonstration plots will be adjacent to a University of Minnesota (UM) replicated research trial near Lamberton, MN. The research trial is evaluating the impacts of planting date, cover crop type and their interactions on corn and subsequent soybean yield. Data collected from these plots and the field day will help address future research needs. Educational materials will also be developed. The research trial is supported through Minnesota Department of Agriculture Clean Water Funds and complements more expansive, small-plot research trials being conducted on UMN Research and Outreach Centers. A request for funding the field day demonstration site and event, a needs assessment survey on cover crops, and additional demonstration sites and field day(s) in 2016 was submitted to North Central Region Sustainable Agriculture Research and Education (total requested over two years = $29,999).

OBJECTIVE: Implement hands-on, interactive field day on cover crops for farmers and ag professionals

Goal 1. Support educational plots and host an interactive educational field day that highlights UM research evaluating the impact of planting date, cover crop species and their impacts on cash crop yield. The target audiences are farmers, ag professionals, agency personnel, non-profit personnel, Extension, and other educators. The field day will be held adjacent to the UM replicated research trial near Lamberton, MN.

Goal 2. Results from the field day and research trials will be disseminated through newsletters, the UM Extension Crops website, factsheets, one peer-reviewed paper, field days, videos, and local, regional, and national meetings.

RESULTS: Cover Crop Learning Tour
- Research and demonstration plots were established at an on-farm location in southwestern MN. Factors evaluated included date of seeding, seeding rate, and species.
- The Cover Crop Learning Tour was held on September 15, 2015. There were 125 attendees including growers, consultants/ag professionals, agency personnel, non-profits, Extension/University, and students. Speakers, plot tours and demos were followed by equipment demos.
- The project was discussed on numerous radio spots, and a number of articles from have been published in the ag media about the program.
- Video footage was collected by U of MN Extension and the MN Corn Growers, and future videos are planned.
- Research conducted at the site (not funded through this project), will be published in a journal article in the future. Results have also been presented at numerous programs throughout the winter meeting season.
- The demonstration plot is currently being analyzed and summarized by the summer intern for a school science project. This information may be presented in a future UM Extension Fact Sheet and/or MN Crop News article.
- Feedback from the program was overwhelmingly positive. A brief summary of evaluations: On a 1-5 scale (1=Very Dissatisfied, 5 = Very Satisfied), attendees rated the program overall 4.6 (35 respondents). 100% of respondents indicated a learning gain (37 responses), that they had situations where they could use what they learned (37 responses) and that they planned to change at least one of their practices based on what they learned from the program (29 responses). Comments included “Best field day yet!”, “Well-planned event, kept on schedule”, “Well done”, “Great job!”, “Very good program”, and “Very enlightening and informative”.
- We continue to build on programming in the soil health arena, and future efforts will continue to build and develop on a sound research base.