Using cover crops with wheat to improve rotational profitability

A University of Guelph study showed that diversifying by including wheat in the rotation has been shown to provide a 25-bushel yield benefit to corn and a four to six in soybean yield in the corn-soybean-wheat rotation. Including wheat in the rotation also provides an opportunity to further diversify the rotation through the addition of cover crops.

When red clover is frost seeded into wheat, the same University of Guelph study found on average an eight bushel per acre increase in corn yield. This project will evaluate corn only, soybean only, corn/soybean and corn/soybean/wheat with and without cover crops at two locations. These plots will be evaluated for the economic and agronomic performance of rotations with cover crops only, wheat only and wheat with three different cover crops over three years. This project is funded equally through the three commodity groups of Corn, Soybean and Wheat. The project was instigated in 2014 and continues in 2015. Replicated plots are established in Richville and East Lansing.

Soil samples were gathered to evaluate initial soil health conditions. Soil samples were split and are being analyzed using the Cornell Soil Test (http://soilhealth.cals.cornell.edu/). This project was presented to and the demonstration site toured by farmers at the MSU Saginaw Valley Research and Extension Center during the Wheat Field Day. Red clover plots will be established in the spring of 2015 and treatment will be followed through the season.

Click here to access the full research report for this project.