

BACKGROUND

The mission of this project is to demonstrate soil health principles and gather technical agronomic feasibility information that will help define real world implementation in and around Olmsted County and Southeast Minnesota.

SOIL HEALTH RESEARCH

The research plots are approximately 8 acres in size and used for testing soil health principles in a scientific design study to validate the use of a variety of cover crop types and planting techniques to show the effectiveness as a green manure, nitrogen scavenging, reducing nitrogen application, compaction reduction, organic matter builder, and the effect on crop yields.

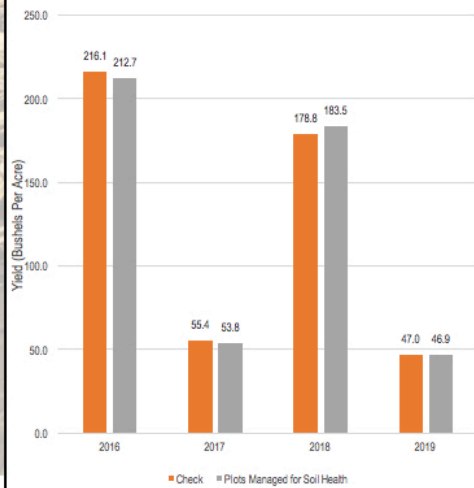
NITRATE REDUCTION RESEARCH

Within the research plots, twelve lysimeters were installed in 2016, (two lysimeters per plot.) The lysimeters collect water moving through the soil profile below the rooting zone of the grain crop and cover crop. The water samples collected from the lysimeters will help to determine if utilizing cover crops in an agronomic system can help reduce nitrogen leaching into groundwater.

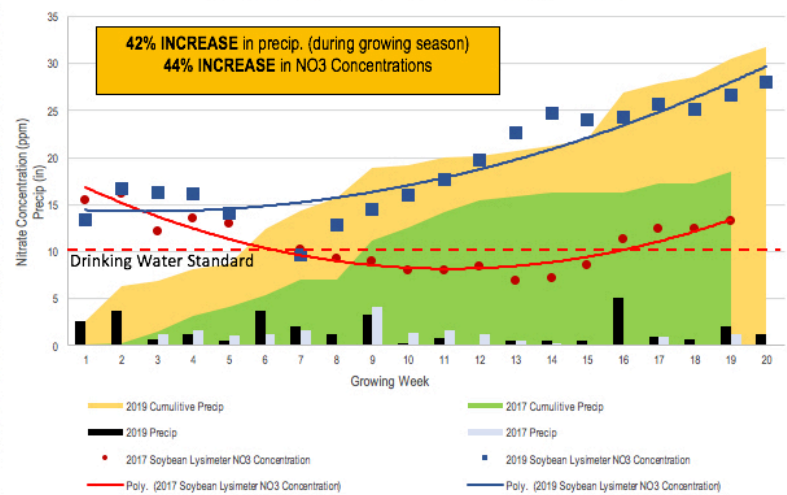
SHARING RESULTS

The results from the Soil Health Farm have been shared with the public at field days held at the Soil Health Farm, other local producer's field days, and multiple cover crop meetings. Data sets are also shared with other agencies to support ongoing research.

Comparing Soil Health Practices



Olmsted County Soybean Year Lysimeter Results (2017 + 2019)



Soybean Year Lysimeter Results (224 Samples)

