

## **On-Farm Field Trial Compares Cover Crops Interseeded into Twin Corn Rows & Single Corn Rows**

*By Jamie Fisher*

Nearly 30 farmers, ag businesses, and community members attended the Sheboygan River Progressive Farmers (SRPF) soil health field event in early September. The attendees learned about an on-farm field trial comparing cover crops interseeded into 45-inch twin rows and 30-inch single corn rows, along with a presentation from Michael Borucke, owner of Black Box Soil Lab. SRPF members, Mark and Joe Loehr of Loehr Dairy, hosted the event.

Loehr Dairy performs a number of field trials to help achieve their farm goals of finding forages to improve the cow's diet while continuing to conserve the soil. The field trial consisted of two 90-foot strips, 45-inch twin corn rows and 30-inch single corn rows with cover crops interseeded in between the rows. The field was planted in wheat last year and no-till planted this past spring. Molasses and manure applications were the only fertilizer applied to the field.

The 45-inch twin corn rows strip was planted with a modified four-row corn planter pulled behind a 15-foot no-till drill. This technique provided a one tractor, one pass opportunity. The 30-inch single corn rows strip was planted and drilled the same day with separate passes. The 97-day corn was planted with a cover crop population range of 28,000 to 32,000.

The dry season this year created a challenge for crop emergence but Loehr believes this field held moisture better than other fields on his farm.

"I think we got more benefit from our cover crop," said Mark Loehr. "We are excited to chop this field versus our other fields."

The soybean crop remaining in the field after harvest will provide nitrogen for next year's crop along with feeding the microbiology in the soil.

Michael Borucke, owner of Black Box Soil Lab, presented a microscopic view of the micro livestock in the soil. The slides compared a tilled corn field to the field day trial field. Attendees learned the good guys are the aerobic protozoa and fungi. A brief presentation showed the soil food web involving plants, organic matter, protozoa and bacteria. The take home message showed conservation practices support soil health, along with having the microbiology in the soil work for you.