A Successful No-till Workshop in Juneau County

Sam Bibby with UW-Extension Crops and Soils in partnership with Dustin Ladd from Juneau County Land and Water hosted a well-attended no-till workshop just north of Mauston, WI. The workshop was hosted in a farmer's shop and included presentations from UW faculty, discussions between farmers, and on-farm research results.

Dr. Brian Luck with UW-Madison Extension covered no-till planters in his presentation. Brian reminded us to check over several maintenance items such as opening disc wear, play in bushings, vacuum lines, and much more. We also discussed consideration for planting in tough no-till conditions. Brian explained that his research showed an increase of around 2% in germination when using aftermarket closing wheels in place of John Deere's standard rubber wheel. His research also showed that aftermarket closing wheels can alleviate some of the compaction caused by using too much down force. Brian hopes to continue on-farm closing wheel studies across the state. If you are interested in participating and want to try out some different aftermarket closing wheels on your planter, contact your local UW-Madison Extension Crops Educator.

Sam Bibby presented results from the local on-farm research from 2023 in Juneau County. Two local farmers agreed to compare their planters to find out if added technology and precision equipment increased corn yield. They compared an old John Deere 7000 30-inch planter with a brand-new custom-built John Deere 20-inch planter with nearly every bell and whistle available. The experiment was conducted in a replicated strip trial. The new planter had significantly less doubles and error in precision. We did not find a statistically significant yield difference between planters, however the trend in yield favored the new planter by around 7.7 bushels.

Dr. Natasha Rayne and Jordan Schuler with UW-Madison Extension presented on starter fertilizer in no-till corn. Natasha explained how the extra residue in a no-till system can tie up nitrogen. Starter fertilizer is a good solution to this problem. Natasha covered several studies that all conclude starter fertilizer in a no-till system is usually economical and provides better yields. She also covered salt toxicity related to starter and recommended that N + K2O applications be limited to <70 lbs./ac applied 2X2 and <10 lbs./ac applied in furrow (less in coarse textured soils). Jordan covered the role of phosphorus and potassium in starter fertilizer. She explained how soils testing high in phosphorus can show deficiencies in cold soils because most of the phosphorus is made available by microbial activity, which is significantly less in cold soils. Jordan discussed how potassium starter response is also more likely in the compacted soil systems often found in no-till.

The presentations were supplemented by discussions amongst attendees about planter technology, tips/tricks, and previous experiences with different practices. We all learned something new and made some new connections with other local growers. The workshop was a success, and we hope to try it again next year. Don't hesitate to contact your Extension Crops Educator to discuss implementing these or other ideas on your farm or conducting on-farm research.