June 14, 2017: Highlighting No-till Soybeans into Rye Cover Crop

Field information and pictures provided are part of the Lower Fox Demo Farms Network Partnership and are intended to communicate practices being tested and to show progress and results throughout the project agreement. As the growing season progresses, more updates will be made available. For more information and background on the Lower Fox Demo Farms, visit www.foxdemofarms.org.

Rye was drilled in the fall of 2016, followed with a 10,000 gallon/acre liquid manure surface application shortly after seeding. In the spring of 2017, using a modified drill (see below), the rye cover crop was crimped after the pollination stage and in the same pass, the beans were drilled. Higher seeding rates (2 ¼ to 3 bu/ac) of rye offer weed suppression, but use caution in knowing the equipment that will be used to terminate the rye and drill soybeans, needs to have down pressure to cut through the residue and crimp effectively.

Interesting attributes to this drill are the shields and double disc row cleaners used to part and push the residue in front of the crimper rollers. The crimper rollers flex and contour and have hydraulic down pressure. The closing wheel follows the seeding operation. Having both the crimping and seeding in one pass, the directionality works well, resulting in less clogging, or binding of rye during the planting operation.

In a similar trial, these soybeans were first no-till seeded into the standing rye, followed by a separate crimping operation. Soybeans show good emergence and this should show good weed control. The roller crimper unit worked well when used in rye that was not mature enough for crimping. A follow up herbicide application will be needed to terminate the rye. Consideration should be given to using early maturing varieties of rye.

This trial shows soybeans no-till planted into standing rye cover crop.

Project goals are to keep soil biota fed with residue, maintain cooler soil conditions with residue cover between rows to keep soil biota alive, long term weed suppression, nitrogen holding from fall application, soil erosion control and improved soil health.