

# Tillage & Clover Effect on Wheat Production

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## Objective

To evaluate the effect of tillage and adding red clover cover crop on wheat production.

## Background

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Cooperator:	O.A.R.D.C. NW Branch	Fertilizer:	fall 300 # 10-26-26
County:	Wood		4-5-10 topdress, 20 GPA 28%
Nearest Town:	Hoytville	Planting Date:	10-22-09
Drainage:	Tile, well-drained	Planting Rate:	1.8 million/acre
Soil type:	Hoytville, clay	Row Width:	7.5 in
Tillage:	notill & conservation	Herbicides:	none
Previous Crop:	see below	Harvest Date:	7-1-10
Variety:	Becks 113DT		

## Methods

The entries were replicated four times in a randomized complete block design. Plot size- 10 feet x 70 feet each entry. Harvest data collected from center rows. All systems compared no-till to conservation tillage which left 30% surface residue. Conservation tillage used shallow field cultivator in soybean residue and disk chisel and finish tool in corn residue. The same crop was planted on all treatments on the same day, using the same variety, and fertility. Red clover was seeded by hand on 4-5-10 at a rate of 12 lb/ac., simulating a typical situation of mixing the seed with the topdress fertilizer application.

## RESULTS

### 2010 - Wheat Yields bushels / acre

#### WHEAT

2007	2008	2009	2010	Tillage	Yield
Wheat	Corn	Soybean	Wheat/Clover	No-till	57.5 a
Wheat	Corn	Soybean	Wheat	No-Till	60.6 a
Wheat	Corn	Soybean	Wheat	Tillage	69.9 b
Wheat	Corn	Soybean	Wheat/Clover	Tillage	71.1 b
				LSD (0.05)	5.1

## Summary

The tillage system was significantly better in yield compared to the no-till wheat system. (In most previous years, no-till has given higher yields than tillage.) The addition of red clover underseeding did not effect wheat yield when comparing the same tillage system.

For more information, contact:

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