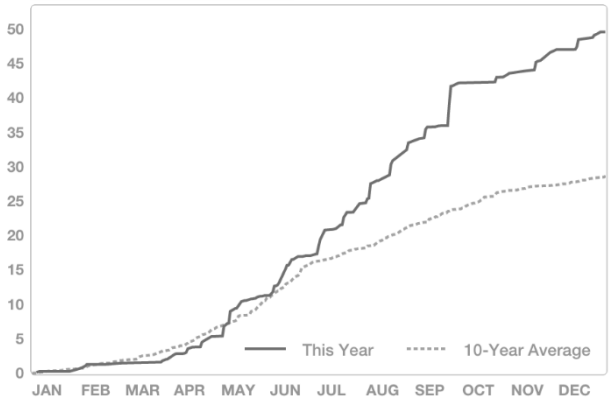
Corn Planted into Wheat Cover Crop and Wheat plus Radish Cover Crop

Study ID: 223037201501
County: Colfax
Soil Type: Beldon fine sandy loam; Shell silt loam; Zook silty clay loam;
Planting Date: 5/19/15
Harvest Date: 11/4/15
Population: 35,000
Row Spacing (in.) 30
Hybrid: Hoegemeyer 8294
Reps: 4
Previous Crop: Soybean
Tillage: No-Till
Herbicides: ***Pre:*** Bicep and Roundup (32oz) on 4-28-2015 ***Post:***
Seed Treatment: Standard
Foliar Insecticides: none
Foliar Fungicides: none
Fertilizer: 18 gal 10-34-0 dribbled on top 2" from seed trench
32% @187 lbs/ac sidedress with no-till applicator on 6-23-2015

Irrigation: Pivot, Total: 7.0"
Rainfall (in.):



Introduction: Cover crop was planted 10/21/2014 following soybean harvest. Wheat cover crop was seeded at a rate of 1 bu/ac. Wheat plus radish treatment had a seeding rate of 1 bu/ac for the wheat and 3.75 lb/ac for the radish. Plots were randomized. Cover crops were seeded at 1" depth. Radish did not establish well in the fall, however the wheat stand was good.

The field was sprayed on 4/28/15 with Bicep and 32 oz/ac Roundup to kill the cover crop. This herbicide application is part of the farmer's standard practice, therefore an additional cost of herbicide was not charged to the cover crop treatment. Corn was planted on 5/19/15.

Results:

	Yield (bu/ac)†	Moisture (%)	Marginal Net Return ($/ac)‡
Check	235 A*	14.3 A	$857.75
Cover Crop - Wheat	238 A	14.0 A	$846.33
Cover Crop - Wheat and Radish	238 A	14.3 A	$836.35
P-Value	0.4032	0.1566	N/A

†Bushels per acre corrected to 15.5% moisture.
*Values with the same letter are not significantly different at a 90% confidence level.
‡Net return based on $3.65/bu corn, $9.00/bu wheat seed cost, $2.66/lb radish seed cost, and $13.37/acre drill application cost.

Summary: There was no grain yield difference for the corn planted into bean stubble, wheat cover crop, or wheat plus radish cover crop. Because of the increased cost of cover crop seed and drill application for the two cover crop treatments, the net return was lower for the cover crop treatments than for the check.