

Nebraska On-Farm Research Network

Corn Planted into Summer Cover Crop Mix

Study ID: 038035201401

County: Clay

Soil Type: Hastings Silt Loam Planting Date: 5/6/2014 Harvest Date: 11/5/2014 Population: 27,500 seeds/acre

Row Spacing: 30" Hybrid: DKC 60-67

Reps: 6

Previous Crop: Wheat

Tillage: No-till

Herbicides: Pre: None

Post: 1 qt. Roundup PowerMAX 1 qt. TripleFLEX on 5/30/14

Insecticides/Fungicides: Acceleron Seed treatment Fertilizer:150 lbs 46-0-0, 3 lb Zn, 10 lb Sulfur, 6 gal

10-34-0

Irrigation: None

Rainfall:

Introduction: This study is looking at the effects of a cover crop on the subsequent cash crop.
The cover crop used in this study was a summer cover crop mix including winter pea, mung bean, sorghum x sudangrass, pearl millet, oats, nitro radish, and sunflower. It

was seeded at 36#/acre into wheat stubble on





Figure 1: Strips of summer cover crop mix and no cover crop (wheat stubble remaining) on November 18, 2013.

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August 3, 2013 and was winter killed. Corn was planted into residue in 2014. The cover crop treatment is compared to planting into wheat stubble with no cover crop. Figure 1 shows strips of cover crop mix and no cover crop.

Results:

	Yield† (bu/acre)	Moisture (%)	Test Weight (lb/bu)	Harvest Pop	Net Return‡
No Cover Crop	178 A*	14.4% A	62.3 A	26,667 B	\$623
Cover Crop	173 B	14.1% A	63.3 A	27,833 A	\$572.50
P-Value	0.0953	0.1113	0.4045	0.0842	

[†]Bushels per acre corrected to 15.5% moisture.

Summary: This year, the cover crop mixture resulted in lower yields for the following corn crop. There was no difference in moisture or test weight for either treatment. The yield reduction and cost of cover crop resulted in a loss of \$50.50/acre.

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^{*}Values with the same letter are not significantly different at a 90% confidence level.

[‡]Net return based on \$3.50/bu corn, \$26/acre cover crop, and \$7/acre drill rental cost.