

BECK'S Cover Crop Study - 2012

Planted:	April 19, 2012	Tillage:	Various
Harvested:	September 7, 2012	Herbicide: Burndown:	64 oz. Glyphosate & 16 oz. Sterling Blue
Population:	34,000 seeds/A.		
Rows:	Six 30" rows	Post:	3 oz. Capreno & 1 qt. Atrazine
Replications:	Two (averaged)	Product Tested:	BECK EX 0219 (6543 Genetics) ^{™*}
Previous Crop:	Soybean		

RAINFALL	
April	0.91 in.
May	2.02 in.
June	0.25 in.
July	3.28 in.
August	<u>5.68 in.</u>
Total	12.14 in.

Purpose: This study was designed to evaluate various cover crop products for use in a corn following soybean rotation. For this year's study, soybeans were harvested in late September (2011) with the cover crop being no-tilled with a drill within a couple of days of harvest. The cover crops that did not winter kill were burned down in mid to late March. Corn was then no-tilled into the remaining cover crop residue. The following products were used as cover crops in this study.

GroundHog™ Brand Radish: This radish produces large root masses that can shatter compaction and scavenge nitrogen and nutrients deep within the soil. Radishes can capture up to 150 - 200 lbs. of nitrogen before winter killing.

Beck's Corn Champion Mix: A combination of Crimson Clover, GroundHog™ Brand Radish and Appin Turnips. This mix has the ability to produce, store, and release large amounts of nitrogen while also breaking up layers of compaction.

Crimson Clover: An aggressive clover that overwinters well and has the ability to produce large amounts of nitrogen.

Beck's Bean Builder Mix: A combination of Annual Ryegrass, GroundHog™ Brand Radish and Appin Turnips. This mix is a great combination of fibrous roots and tubers, which allows the Bean Builder Mix to break up layers of compaction.

N-Vest™ Soilbuilder Annual Ryegrass Blend: A combination of two deep rooted annual ryegrass varieties with exceptional winter hardiness.

Treatment	Seeding				
	Rate Lbs./A	Seed Cost/A.	Percent Moisture	Bushels [†] Per Acre	Net [^] Return
GroundHog™ Brand Radish	5.0	\$13.00	20.8	162.6	\$946.34
Beck's Corn Champion Mix	15.5	\$27.90	22.0	159.7	\$914.33
Crimson Clover	15.0	\$21.00	22.2	156.6	\$902.94
Beck's Bean Builder Mix	18.0	\$22.20	22.1	120.2	\$686.98
N-Vest™ Soilbuilder Annual Ryegrass Blend	15.0	\$12.00	20.5	117.2	\$679.48

[†]Bushels per acre corrected to 15% moisture.

^{*}XL® brand seed is distributed by Beck's Superior Hybrids, Inc. XL® is a registered trademark of DuPont Pioneer.

[^]Net return based \$5.90/Bu. corn minus the cost of cover crop seed.

GroundHog is a trademark of AMPAC Seed Company. N-Vest is a trademark of CISCO Companies.

Summary: The warm temperatures and dry conditions that accompanied the spring of 2012 led to above average growth for this year's cover crops. This allowed the entries containing annual ryegrass to produce deep roots for breaking compaction, while the entries containing crimson clover had ample opportunity to produce more nitrogen for the following corn crop. A glyphosate burndown was sprayed on March 13th resulting in a good kill on the annual ryegrass; however, the Crimson Clover continued to grow. The Clover was later killed with an application of dicamba closer to the time of planting. The GroundHog™ Brand Radishes provided both the highest yields and net return in this year's study followed by Beck's Corn Champion Mix. Both entries containing annual ryegrass showed significantly lower yields than the remaining entries. We will continue to evaluate this in future studies.