Nebraska On-Farm Research Network

Years:	2012
Title:	Cover Crop
Crop:	Corn
Study ID:	108155201202
County:	Saunders
Objective:	Study effect of cover crop burndown timing on corn production.
Treatments:	Early & late burndown

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Information: 2012 Corn

Wheat Cover Crop

Hybrid	Pioneer 1324HR	Population	27k
Fertilility	NH3 Spring 110lb	Tillage	No-Till
Planted: 5/11/12		Harvested: 10/11/12	
Practice	Rainfed	Prior Crop	Soybeans
Burndown	Roundup PowerMax 32oz & 2,4-D 6 .3pt & AMS 2lb		
PreEmerge	5/14/12 - HarnessXtra 1.7qt & Roundup PowerMax 16oz & AMS 2lb		
Post Herbicide	6/6/12 - Roundup PowerMax 22oz & Impact 0.5oz & Atrazine 0.5oz & COC 19oz & AMS 2lb		

-5.5" Wheat ET for the period 3/28 to 4/18 (1st spray to 2nd spray) (40% higher than 2011)
-4.8" Corn ET from emergence (5/14) to 6/30
-10.3" Total Cover crop and Corn ET to 6/30
+7.9" Rain for the period 3/28 to 6/30 (66% of normal)
-2.4" Net Deficit due to late kill of cover crop.
Below normal rainfall and higher than normal cover crop ET for the period, resulted in less available soil moisture for the summer crop of corn with a corresponding reduction of yield.

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Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

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Results: 2012

	Corn	
	Wheat Cover Crop	
Burndown Date	3/28	4/18
Yield, bu/ac @15.5%	110.5	97.7
Prob>/T/ <0.0001***	A	B
Moisture, %	11.9	12.1
Prob>/T/ <0.0001***	B	A

Summary: The early burndown date of the wheat cover crop resulted in significantly higher corn yields with lower moisture content at harvest.

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