



Nebraska On-Farm Research Network

Years:	2009-2011
Title:	Using Biosolids
Crop:	Soybeans/Corn
Study ID:	065053200901M3
County:	Dodge
Objective:	To determine & document the profitability of using Biosolids as a nutrient in a corn/soybean rotation.
Treatments:	No Biosolids vs. Biosolids

Nebraska Soybean & Feed Grains Profitability Project



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: 2009

Soybeans (Hoegemeyer 303NRR)

Variables	None	Biosolids	Prob >/T/
Yield, bu/ac @ 13%	42	64	<0.0001 ***
Moisture, %	11.9	12.1	0.0107 **
Test Wt, lbs/bu	56.2	55.9	0.3392 ns
Plants, 1000/ac	135.6	135.0	0.9229 ns

Planting Date:

Harvest Date: 11/6/09

Soil Test: 10/8/09

Check: Org. Matter 1.7, Bray P, 4.4, Zn 1.1

Biosolids: Org. Matter 1.8, Bray P, 16.0, Zn 2.0

Results: 2010

Corn (Hoegemeyer 80412)

Variables	Check	Biosolids	Prob >/T/
Yield, bu/ac @ 15.5%	152	160	0.112 ns
Moisture, %	14.5	14.9	0.0834 *

Cost/ac

Planting Date: 5/7/10

Harvest Date: 11/1/10

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Results: 2011	Soybeans	(Hybrid)	
Variables	None	Biosolids	Prob >/T/
Yield, bu/ac @ 13%	46	58	0.0003 ***
Moisture, %	9.0	9.0	---
Cost/ac			

Planting Date: 5/7/11

Harvest Date: 9/30/11

Summary: The application of Biosolids during the 2009 growing season resulted in a significant increase in seed yield; however, moisture content at harvest was higher where Biosolids had been applied. The increase in seed yield is likely due to phosphorus in the Biosolids applied to this low phosphorus soil. In 2010, corn yields were not increased significantly; however, grain moisture was increased slightly. Plot was very variable due to excess rain. The 2011 soybean yields were significantly higher for the biosolids treatment.

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