EXTENSION

Nebraska On-Farm Research Network

Years:	2007-2009
Title:	Incorporating Biosolids
Crop:	Soybeans (07 & 09), Corn (08)
Study ID:	122053200701M3
County:	Dodge County
Objective:	To determine & document the effect of incorporating municipal biosolids on the profitability of corn/soybean
Treatments:	2007 No Incorporation vs. Incorporation (disk & field cultivate).

Nebraska Soybean & Feed Grains Profitability Project

University of Nebraska Lincoln

Nebraska On-Farm Research Network

Results: 2007 **Soybeans (Asgrow 3101)**

Variable	None	Incorporated	Prob>/T/
Yield, bu/ac @ 13%	58	59	0.0298**
Moisture, 13%	9.5	9.5	0.351 ns
Test Wt, lbs/bu	58.6	57.9	0.006 ***
Cost/ac (disk/mulch finish, pro-rated 3 yrs)	---	$5.00	--

Planting Date: 5/13/07
Harvest Date: 9/30/07

Results: 2008 **Corn (Hybrid GH6381RR)**

Variable	None	Incorporated	Prob>/T/
Yield, bu/ac @ 15.5%	150	158	0.0011***
Moisture, 15.5%	15.8	15.8	0.895 ns
Test Wt, lbs/bu	62.6	62.5	0.284 ns
Cost/ac (disk/mulch finish, pro-rated 3 yrs)	--	$5.00	--

Planting Date: 4/20/08
Harvest Date: 10/20/08

Results: 2009 **Soybean (Variety)**

Variable	None	Incorporated	Prob>/T/
Yield, bu/ac @ 13%	60	62	0.0038***
Moisture, 13%	13.7	13.7	0.4512 ns
Test Wt, lbs/bu	57.6	57.7	0.5205 ns
Cost/ac (disk/mulch finish, pro-rated 3 yrs)	--	$5.00	--

Planting Date:
Harvest Date: 10/19/09

Summary: The incorporation of municipal biosolids (tillage) resulted in a slight, but significant increase in yields and decrease in test weight in 2007. Corn yield was significantly increased in 2008 by incorporating biosolids. Harvest moisture and test weight were not affected. In 2009, incorporation of the applied biosolids resulted in a higher seed yield.

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INCORPORATED	OM	P_1	K	Mg	pH	S	Zn	Mn	Fe	Cu	B
INC 2	3.5	57	287	206	6.1	9	3.9	14	65	2.6	0.7
INC 4	2.5	16	280	318	5.8	10	1.4	13	58	1.7	0.7
INC 6	2.4	5	231	361	5.8	9	0.6	11	61	1.7	0.7
INC 8	2.4	5	195	397	5.9	10	0.4	8	48	1.6	0.6
NON-INCORPORATED											
NONINC 2	3.4	62	385	298	6.1	12	3.4	11	50	1.9	0.6
NONINC 4	2.4	7	297	378	5.8	11	0.9	13	63	1.7	0.6
NONINC 6	2.3	4	209	380	5.8	11	0.5	9	48	1.3	0.6
NONINC 8	2.4	5	180	397	5.6	10	0.4	8	44	1.4	0.6