

On-Farm Comparison Results

2010 Growing Season

Final Copy – April 2011

University of Nebraska-Lincoln

Agricultural Research & Development Center

Near Mead, Nebraska

April 2011



To learn more about the Nebraska Soybean and Feed Grains Profitability Project, contact:

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April 2011



ON-FARM RESEARCH

In production agriculture,
it's what you think you know,
that you really don't know,
that can hurt you.

April 2011



Index of Projects

Index of Projects

- ARDC - Planting Depth
- Bartek - Insect Resistant Hybrids
- Bopp - Crop Growth Enhancement
- Bowman - Planting Depth
- Chvatal - Soybean Planting Date
- Chvatal - Using a Platform Air Reel

April 2011



Index of Projects - *continued*

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Index of Projects - continued

- Gross-Rhode - Using Biosolids
- Hilgenkamp - Fertilizer Recommendation Comparison
- Hilgenkamp - Lime Use on Acid Soils
- Kremlacek - Using Seed Applied Growth Promoters
- McNamara - Plant Population Study
- Mulliken - Profitability of Incorporating Lime
- Mulliken - Planting Depth

April 2011



Index of Projects - *continued*

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Index of Projects - continued

- Stewart - Insect Resistant Hybrids
- Williams - Planting Rate
- Williams - Fungicide Treatment on Soybeans
- Williams - Fungicide Treatment on Corn
- Williams - Insect Study on Corn
- Williams - Insect Study on Soybeans

April 2011



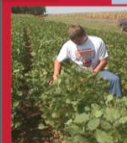
Visit the Nebraska Soybean and Feed Grains Profitability Project Website at:

ON-FARM RESEARCH

<http://farmresearch.unl.edu>

1-800-529-8030 * 1-800-830-4855

- Nutrient Management
- Pest Control
- Irrigation Strategies
- Conservation Programs
- New Technologies
- Soil Amendments
- Cultural Practices
- Hybrid & Variety Selection



Program Guidelines


- Comparisons are identified and designed to answer producers' production questions.
- Projects protocols are developed first and foremost to meet individual cooperator needs.
- Only projects that are randomized, replicated and harvested accordingly are reported.
- Treatment costs identified represent the economic difference among treatments applied.
- Multiple year comparisons are encouraged.

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Paired Comparison Design


FINAL Nebraska Soybean & Feed Grains Profitability Project FINAL

PAIR 1		PAIR 2		PAIR 3		PAIR 4		PAIR 5		PAIR 6		PAIR 7	
Trt A	Trt B	Trt A	Trt B	Trt A	Trt B	Trt A	Trt B	Trt A	Trt B	Trt A	Trt B	Trt A	Trt B

April 2011 

FINAL Nebraska Soybean & Feed Grains Profitability Project FINAL

Block 1				Block 2				Block 3				Block 4			
Treatment A	Treatment B	Treatment C	Treatment D	Treatment A	Treatment B	Treatment C	Treatment D	Treatment A	Treatment B	Treatment C	Treatment D	Treatment A	Treatment B	Treatment C	Treatment D

April 2011 

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2010
Title: Planting Depth
Crop: Corn
NSFGPP Operator: ARDC
Private Industry Cooperator: Mark Schroeder
Objective: Determine & document the effect of seed placement on the profitability of producing corn.
Treatments: 2010: Shallow Depth 1.5"
 Deeper Depth 2.5"

April 2011



FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010	(Pioneer 1395R)		
	<u>Depth</u>		<u>Prob>T/</u>
	<u>1.5"</u>	<u>2.5"</u>	
Yield, bu/ac @15.5%	134	135	0.418 ns
Moisture, %	13.0	13.1	0.0531 *
Monitor, bu/ac	137	138	0.578 ns

Planting Date: 5/05/10 Harvest Date: 10/25/10

Summary: Planting depth had no effect on corn yield or grain moisture at harvest in 2010.

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On-Farm Comparison Results Bartek

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Nebraska Soybean & Feed Grains Profitability Project

FINAL

Years: 2008-2010
Title: Insect Resistant Hybrids
Crop: Corn
NSFGPP Operator: Bob Bartek, Saunders County
Private Industry Cooperator: Keith Glewen
Objective: To determine & document the effect of growing corn hybrids with insect tolerant traits on the profitability of corn production in a corn-soybean rotation.
Treatments: 2008: No insect resistance vs. Corn borer resistant vs. Corn rootworm resistant (hybrid)
 2009 & 2010: Conventional vs. RR vs. VT3 hybrid

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On-Farm Comparison Results Bartek

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Nebraska Soybean & Feed Grains Profitability Project

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Results: 2008	Insect Resistance			
	LG2614RR	LG2614RRBT	LG2614VT3	
	<u>None</u>	<u>Borer</u>	<u>Rootworm</u>	<u>Prob>F</u>
Yield, bu/ac @ 15.5%	144	148 **	170 ***	<.0001 ***
Moisture, %	15.1 **	15.3	15.4	0.0107 **
Test Wt, lbs/bu	61.6 **	62.1	61.8	0.0330 **
Plants, 1000/ac	21.9	22.8	23.3	0.0782 *
Cost/ac	\$48.34	\$53.40	\$60.69	

Planting Date: 5/7/08

Harvesting Date: 11/21/08

April 2011



On-Farm Comparison Results Bartek

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009

	Resistance			<u>Prob>F</u>
	<u>LG2620</u>	<u>LG2620RR</u>	<u>LG2620VT3</u>	
	<u>Conv</u>	<u>RR</u>	<u>Insect</u>	
Yield, bu/ac @ 15.5%	203	194 ***	210 **	0.0001 ***
Moisture, %	16.8	17.1 **	17.7 ***	<0.0001 ***
Test Wt, lbs/bu	56.2	56.3	56.1	0.085 *
Plants, 1000/ac	21.5	22.7	22.0	0.158 ns
Cost/ac (Seed)	\$34.63	\$52.18	\$72.75	

Planting Date: 5/12/09

Harvest Date: 11/20/09

April 2011



On-Farm Comparison Results Bartek

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010

	Resistance			<u>Prob>F</u>
	<u>LG2620</u>	<u>LG2620RR</u>	<u>LG2620VT3</u>	
	<u>Conv</u>	<u>RR</u>	<u>Insect</u>	
Yield, bu/ac @ 15.5%	178	174	186 **	0.0050 ***
Moisture, %	13.5	13.5	13.5	0.508 ns
Test Wt, lbs/bu	58.2	58.4	58.2	0.656 ns
Plants, 1000/ac	24.0	24.0	23.6	0.689 ns
Cost/ac	\$42.45	\$52.83	\$69.40	

Planting Date: 5/17/10

Harvest Date: 11/1/10

Summary: Seed with corn borer resistance produced a higher yield than the non-Bt hybrid; however, rootworm resistance produced a higher yield. The non-Bt corn was slightly drier at harvest and had the lowest test weight in 2008.

In 2009, the Roundup Ready hybrid produced less yield than the conventional hybrid; however, the hybrid with RR and Insect resistance produced the highest yield. The VT3 hybrid had significantly higher moisture at harvest.

In 2010, the VT3 hybrid produced significantly more corn than the other two hybrids.

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On-Farm Comparison Results Bopp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2010
Title: Crop Growth Enhancement
Crop: Pivot Irrigated Corn
NSFGPP Operator: Ron Bopp, Dodge County
Private Industry Cooperator: Doug Kriete
Objective: To determine & document the effect of using Torque on the profitability of producing corn.
Treatments: Check vs Torque at 8 oz/acre

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On-Farm Comparison Results Bopp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010	Corn		(Hoegemeyer 6203)
<u>Variable</u>	<u>Check</u>	<u>Torque</u>	<u>Prob>/T/</u>
Yield, bu/ac @ 15.0%	180	178	0.357 ns
Moisture, %	15.3	15.2	0.052 *
Cost/ac	---	\$5.00	
Planting Date: 4/26/10	Harvesting Date: 10/22/10		

Summary: Torque had no effect on grain yield; however, moisture at harvest was slightly lower.


April 2011



On-Farm Comparison Results Bowman

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2009-2010
Title: Planting Depth
Crop: Corn
NSFGPP Operator: Ron Bowman, Dodge County
Private Industry Cooperator: Jerry Mulliken
Objective: To determine & document the profitability of planting deeper.
Treatments: Normal depth (2.25") vs. Deeper depth (3.0")

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On-Farm Comparison Results Bowman

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL


Results: 2009

Corn (Lund Field) (Pioneer 32N73)

<u>Variable</u>	<u>2.25" Depth</u>	<u>3.0" Depth</u>	<u>Prob>/T/</u>
Yield, bu/ac @ 15.5%	200	218	0.0123 **
Moisture, %	32.5	32.6	0.203 ns
Plant Population, 28,200 seeds/ac			
Planting Date: 4/23/09		Harvesting Date: 10/03/09	

Corn (Home Field)

<u>Variable</u>	<u>2.25" Depth</u>	<u>3.0" Depth</u>	<u>Prob>/T/</u>
Yield, bu/ac @ 15.5%	230	240	0.0187 **
Planting Date: 4/24/09		Harvesting Date: 10/07/09	

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On-Farm Comparison Results Bowman

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010	Corn (Pioneer 1395)		
<u>Variable</u>	<u>2.25" Depth</u>	<u>3.0" Depth</u>	<u>Prob>/T/</u>
Yield, bu/ac @ 15.5%	172	171	0.958 ns
Moisture, %	12.9	12.9	0.675 ns
Plant Population, 32,500 seeds/ac			

Planting Date: 4/17/10

Harvesting Date: 10/21/10

Summary: Grain yield was increased significantly by planting deeper in both studies in 2009. Planting depth had no effect on grain yield in 2010.

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On-Farm Comparison Results Chvatal

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years:	2007-2010
Title:	Soybean Planting Date
Crop:	Soybeans
NSFGPP Operator:	Bryon Chvatal, Saunders County
Private Industry Cooperator:	Keith Glewen
Objective:	To determine & document the effect of seeding date on the profitability of non-irrigated soybean production.
Treatments:	Normal seeding dates vs. earlier date. Early planted soybeans with CruiserMaxx.

April 2011



On-Farm Comparison Results Chvatal

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2007

(2A 93 RR) (2.9 maturity)

<u>Variable</u>	<u>Normal</u>	<u>Early</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	65	72	0.0001 ***
Moisture, %	9.8	8.9	0.0006 ***
Test Wt, lbs/bu	56.6	56.8	0.1946 ns
Protein, %	34.7	35.0	0.0557 *
Oil, %	19.0	19.3	0.0746 *
Cost/ac (CruiserMaxx)		\$10.00	

Planting Date: 5/18/07 & 4/30/07

Harvesting Date: 9/29/07

April 2011



On-Farm Comparison Results Chvatal

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2008

(NC+ 3A54RR) (3.5 maturity)

<u>Variable</u>	<u>Normal</u>	<u>Early</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	62	67	n/a
Moisture, %	12.6	12.7	n/a
Test Wt, lbs/bu	57.2	57.2	n/a
Protein, %	36.0	35.3	n/a
Oil, %	22.4	22.7	n/a
Cost/ac (CruiserMaxx)		\$10.00	

Planting Date: 6/1/08 & 4/30/08

Harvesting Date: 10/12/08

April 2011



On-Farm Comparison Results Chvatal

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009 (NC+ 2A63RR)

<u>Variable</u>	<u>Normal</u>	<u>Early</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	64	67	0.0016 ***
Moisture, %	13.8	10.2	0.0116 **
Test Wt, lbs/bu	56.1	57.0	0.0273 **

Planting Date: 5/3/09 & 5/21/09 Harvesting Date: 9/30/09
Both treatments (normal & early) treated with CruiserMaxx.

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On-Farm Comparison Results Chvatal

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010 (Channel 2751)

<u>Variable</u>	<u>Normal</u>	<u>Early</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	71	76	0.0021 ***
Moisture, %	10.3	10.3	0.793

Planting Date: 5/18/10 & 4/18/10 Harvesting Date: 9/30/10
Both treatments (normal & early) treated with CruiserMaxx.

Summary: Early planting of soybeans resulted in higher yield, dryer seed at harvest, and increased protein and oil content in 2007. In 2008, plots were not properly randomized; thus, no interpretation is possible. In 2009, early planting resulted in higher yield, dryer seed at harvest, and higher test weight. Early planting gave significantly higher seed yield in 2010.

April 2011



On-Farm Comparison Results Chvatal

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Nebraska Soybean & Feed Grains Profitability Project

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Years: 2008-2010
Title: Using a Platform Air Reel
Crop: Soybeans
NSFGPP Operator: Bryon Chvatal, Saunders County
Private Industry Cooperator: Keith Glewen
Objective: To determine & document the effect of a combine platform air reel on the amount of seed harvested.

Treatments: Air reel off vs. air reel on.
 15 inch rows
 Combine speed: 3.5 mph

April 2011



On-Farm Comparison Results Chvatal

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Nebraska Soybean & Feed Grains Profitability Project

FINAL

Results: 2008		(NC+ 3A32RR)	
<u>Variable</u>	<u>Check</u>	<u>Air Reel</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	63	62	0.334 ns
Cost/ac	---	\$1.00	
Planting Date: 4/30/08	Harvesting Date: 10/11/08		
Results: 2009		(NC+ 2900)	
<u>Variable</u>	<u>Check</u>	<u>Air Reel</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	55.7	55.4	0.0662 *
Moisture, %	11.7	11.8	0.1019 ns
Cost/ac	---	\$1.00	
Planting Date: 5/17/09	Harvesting Date: 10/04/09		

April 2011



On-Farm Comparison Results Chvatal

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Results: 2010	(Channel 2751)		
<u>Variable</u>	<u>Check</u>	<u>Air Reel</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	68	68	0.547 ns
Moisture, %	9.4	9.5	0.363 ns
Cost/ac		\$1.00	

Planting Date: 5/19/10

Harvesting Date: 9/29/10

Summary: The use of platform air reel had no significant effect on the amount of soybean seed harvested in 2008 & 2010; however, yield was reduced slightly in 2009.

April 2011



On-Farm Comparison Results Gross-Rhode

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Nebraska Soybean & Feed Grains Profitability Project

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Years:	2009-2010
Title:	Using Biosolids
Crop:	Soybeans/Corn
NSFGPP Operator:	Vaughn Gross-Rhode, Dodge County
Private Industry Cooperator:	Dave Varner
Objective:	To determine & document the profitability of using Biosolids as a nutrient in a corn/soybean rotation.
Treatments:	No Biosolids vs. Biosolids

April 2011



On-Farm Comparison Results Gross-Rhode

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Nebraska Soybean & Feed Grains Profitability Project

FINAL

Results: 2009

Soybeans (Hoegemeyer 303NRR)

<u>Variables</u>	<u>None</u>	<u>Biosolids</u>	<u>Prob >/T/</u>
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

April 2011



On-Farm Comparison Results Gross-Rhode

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Nebraska Soybean & Feed Grains Profitability Project

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Results: 2010

Corn (Hoegemeyer 80412)

<u>Variables</u>	<u>Check</u>	<u>Biosolids</u>	<u>Prob >/T/</u>
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

Summary: The application of Biosolids 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.

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2004-2006 & 2008-2010
Title: Fertilizer Recommendation Comparison
Crop: Soybeans (04, 06, 08, 10)
 Corn (05, 09)
NSFGPP Operator: Rusty Hilgenkamp, Washington County
Private Industry Cooperator: Dave Varner
Objective: To determine & document the effect of fertilizer treatments based on different soil tests on the profitability of corn/soybean production.
Treatments: No soil test vs. commercial lab test vs. UNL test.

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2004

<u>Variable</u>	<u>Soybeans (DK 25-51)</u>			<u>Prob >F</u>
	<u>None</u>	<u>Comm</u>	<u>UNL</u>	
Yield, bu/ac at 13%	51	51	51	0.926 ns
Moisture, %	11.5	11.5	11.5	0.770 ns
Test Wt, lbs/bu	56	56	56	0.562 ns
Cost/ac	\$0.00	\$11.25*	\$0.00	

* 75 lbs of 11-52-0

Soil Test Results: UNL Lab - N 100 lbs/ac, P 11 ppm, K 369 ppm, Zn .29 ppm, pH 5.9, OM 2.3%

Soil Test Results: Comm Lab - N 109 lbs/ac, P 11 ppm, K 329 ppm, Zn n/a, pH 5.7, OM 2.8%

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2005

Corn (Pio 33B51)

Soil Test

<u>Variable</u>	<u>None</u>	<u>Comm</u>	<u>UNL</u>	<u>Prob >F</u>
Yield, bu/ac at 15.5%	140	146	141	0.258 ns
Moisture, %	14.7	14.7	14.8	0.308 ns
Test Wt, lbs/bu	61.7	61.7	61.5	0.264 ns
Plants, ac, 1000	21.0	22.0	21.5	0.430 ns
Cost/ac (11-52-0)	---	\$18.50	\$18.50	
Cost/ac (NH ₃)	\$32.00	\$32.00	\$32.00	

Fertilizer applied: 60 lbs of 11-52-0 & 100 lbs of NH₃

Note: Nitrogen application rate for UNL treatment was higher than recommendation. No treatment received nitrogen in corn production years & no other fertilizer.

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2006

Soybeans (Pioneer 93M11)

Soil Test

<u>Variable</u>	<u>None</u>	<u>Comm</u>	<u>UNL</u>	<u>Prob >F</u>
Yield, bu/ac at 13%	62	64 *	62	0.0745 *
Moisture, %	13.1 **	13.2	13.2	0.0227 **
Test Wt, lbs/bu	57.3	57.4	57.1	0.6844 ns
Plants, 1000/ac	138.8	141.5	143.8	0.9006 ns
Cost/ac (11-52-0)		\$9.17		---

Planting Date: 5-12-06

Harvesting Date: 10-24-06

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2008

Soybeans (Asgrow 3005)

Soil Test

<u>Variable</u>	<u>None</u>	<u>Comm</u>	<u>UNL</u>	<u>Prob >F</u>
Yield, bu/ac at 13%	43	44	43	0.643 ns
Moisture, %	10.1	10.3 **	10.2 *	0.0326 **
Test Wt, lbs/bu	58.4	58.6	58.4	0.325 ns
Plants, 1000/ac	172.2	167.3	164.4	0.623 ns
Cost/ac (11-52-0)	---	\$25.65 *	---	
Cost/ac (application)	---		---	

Phosphorus cost pro-rated (50% each year)

Planting Date: 5/20/08

Harvesting Date: 10/10/08

Lime at 2.5 Ton/ac applied to all plots in Fall 2008.

Soil Test Results:

None - pH 5.6, OM 2.5, N 12, P 12, K 302

UNL - pH 5.4, OM 2.6, N 0, P 24, K 367

Comm - pH 5.7, OM 2.3, N 10, P 34, K 292

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009

Corn (Dekalb 63-42)

Soil Test

<u>Variable</u>	<u>None</u>	<u>Comm</u>	<u>UNL</u>	<u>Prob >F</u>
Yield, bu/ac at 15.5%	202	211	207	0.314 ns
Moisture, %	17.4	17.5	17.4	0.453 ns
Test Wt, lbs/bu	57.8	58.3	58.0	0.310 ns
Plants, 1000/ac	22.8	24.6	23.4	0.180 ns
Cost/ac (11-52-0)	---	\$25.65 *	---	
Cost/ac (application)	---	---	---	

Planting Date: 5/02/09

Harvesting Date: 11/11/09

Lime at 2.5 Ton/ac applied to all plots in Fall 2008.

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010

Soybeans (Pioneer 93Y12)

Soil Test

<u>Variable</u>	<u>None</u>	<u>Comm</u>	<u>UNL</u>	<u>Prob >F</u>
Yield, bu/ac at 13%	60	61	61	0.114 ns
Moisture, %	8.5	8.5	8.5	---
Cost/ac (fertilizer)				
Cost/ac (application)				

Planting Date: 5/24/10

Harvesting Date: 10/8/10

Summary: In 2004, soybean growth was not influenced by fertilizer treatment. Corn growth was not affected by fertilizer treatment in 2005. In 2006, soybeans fertilized according to commercial lab yielded slightly more than the other treatments. Soybeans from plots that receive only nitrogen for corn were slightly drier at harvest. In 2008, soybeans fertilized according to a commercial lab had wetter seed at harvest than UNL or no test. Fertilizer phosphorus had no effect on corn in 2009. In 2010, soybeans yielded slightly less for the "No Test" strips.

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 1995-2010
Title: Lime Use on Acid Soils
Crop: Corn (95, 97, 99, 01, 03, 05, 07, 09)
 Soybeans (96, 98, 00, 02, 04, 06, 08, 10)
NSFGPP Operator: Rusty Hilgenkamp, Washington County
Private Industry Cooperator: Dave Varner
Objective: To determine & document the profitability of using lime on acid soil in a corn/soybean rotation.
Soil Type: Marshall

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 1995		Corn		
<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>	
Yield, bu/ac at 15.5%	74	73	0.59	ns
Moisture, %	16.4	16.5	0.42	ns
Test Wt, lbs/bu	57.8	57.6	0.07	*
Cost/ac	---	\$6.29		

Results: 1996		Soybeans		
<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>	
Yield, bu/ac at 13%	42	43	0.32	ns
Moisture, %	9.0	8.9	0.03	**
Test Wt, lbs/bu	56.1	56.1	0.88	ns
Cost/ac	---	\$6.29		

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 1997		Corn		
<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>	
Yield, bu/ac at 15.5%	121	125	0.10	*
Moisture, %	19.5	19.5	0.56	ns
Test Wt, lbs/bu	56.4	56.3	0.88	ns
Cost/ac	---	\$6.29		

Results: 1998		Soybeans		
<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>	
Yield, bu/ac at 13%	50	58	0.0002	***
Moisture, %	12.8	12.9	0.48	ns
Test Wt, lbs/bu	55.2	54.4	0.002	***
Cost/ac	---	\$6.29		

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 1999

Corn

<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Soil pH	5.6	6.3	---
Yield, bu/ac at 15.5%	145	149	0.177 ns
Moisture, %	12.9	12.5	0.002 ***
Test Wt, lbs/bu	58.4	58.1	0.045 **
Cost/ac	---	\$6.29	

Results: 2000

Soybeans

<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 13%	37	43	0.0001 ***
Moisture, %	8.7	8.9	0.0046 ***
Test Wt, lbs/bu	57.4	57.7	0.099 *
Cost/ac	---	\$6.29	

1



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2001

Corn

<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Soil pH	5.3	6.0	
Yield, bu/ac at 15.5%	130	132	0.657 ns
Moisture, %	15.1	14.9	0.020 **
Test Wt, lbs/bu	58.0	57.8	0.128 ns
Cost/ac	---	\$6.29	

Results: 2002

Soybeans

<u>Variable</u>	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Soil pH	5.2	6.1	
Yield, bu/ac at 13%	43	50	0.0003 ***
Moisture, %	9.9	9.9	0.477 ns
Test Wt, lbs/bu	55.6	55.8	0.284 ns
Cost/ac	---	---	

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On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2003		Corn		
<u>Variable</u>		<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 15.5%		88	99	0.016 **
Moisture, %		12.5	12.7	0.171 ns
Test Wt, lbs/bu		60.1	61.0	0.017 **
Cost/ac		---	---	

Results: 2004		Soybeans (DK 25-51)		
<u>Variable</u>		<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 13%		40	44	0.0067 ***
Moisture, %		11.2	11.2	0.501 ns
Test Wt, lbs/bu		56.2	56.1	0.803 ns
Cost/ac		---	---	

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2005		Corn (Pioneer 33P97)		
<u>Variable</u>		<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Soil pH		5.5	6.5	
Yield, bu/ac at 15.5%		145	147	0.306 ns
Moisture, %		15.4	15.2	0.108 ns
Test Wt, lbs/bu		59.8	59.6	0.284 ns

Results: 2006		Soybeans (Asgrow 3005)		
<u>Variable</u>		<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 13%		53	57	0.0186 **
Moisture, %		14.9	14.9	0.7040 ns
Test Wt, lbs/bu		56.2	56.0	0.1084 ns
Plants, 1000/ac		133.8	125.8	0.1876 ns

Planting Date: 5/12/06

Harvesting Date: 10/24/06



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2007

Variable

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Soil pH	5.5	6.2	
Yield, bu/ac at 15.5%	121	119	0.256 ns
Moisture, %	15.7	15.4	0.003 ***
Test Wt, lbs/bu	58.7	58.7	0.859 ns
Plants, 1000/ac	20.4	19.8	0.756 ns

Planting Date: 5/2/07

Corn (LG 2540BT)

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Harvesting Date: 10/22/07			

Results: 2008

Variable

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 13%	40	45	0.0009 ***
Moisture, %	10.5	10.6	0.208 ns
Test Wt, lbs/bu	57.6	57.4	0.345 ns
Plants, 1000/ac	182.2	155.2	0.385 ns

Planting Date: 5/26/08

Soybeans

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Harvesting Date: 10/10/08			

April 2011



On-Farm Comparison Results Hilgenkamp

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009

Variable

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 15.5%	212	204	0.234 ns
Moisture, %	17.6	16.5	0.005 ***
Test Wt, lbs/bu	58.6	59.3	0.041 **
Plants, 1000/ac	24.6	24.0	0.500 ns

Planting Date:

Harvesting Date: 11/11/09

Corn (Midwest 79504)

Results: 2010

Variable

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Yield, bu/ac at 13%	49	62	0.0292 **
Moisture, %	8.5	8.6	0.374 ns

Planting Date: 5/31/10

Soybeans (Asgrow 2909)

	<u>No Lime</u>	<u>Lime</u>	<u>Prob >/T/</u>
Harvesting Date: 10/7/10			

April 2011



On-Farm Comparison Results Hilgenkamp

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Nebraska Soybean & Feed Grains Profitability Project

FINAL

Summary: A 2-ton lime application with a 7-year life expectancy was applied in spring 1995. A significant difference was detected between test weights at the 90% confidence level in 1995. In 1996, there was a significant difference in moisture content of seed at harvest. In 1997, the use of lime increased corn grain yield slightly. In 1998, lime increased seed yield of soybeans significantly; however, seed test weight was reduced. In 1999, lime reduced grain moisture at harvest and resulted in a slightly lower test weight. In 2000, the lime application resulted in higher seed yield, slightly higher moisture, and slightly higher seed test weight. In 2001, grain moisture was lower at harvest where lime had been applied. In 2002, seed yield of soybeans was increased significantly by lime. In 2003, grain yield of corn was increased and grain test weight was higher where lime had been applied. Seed yield was again higher in 2004 where lime had been applied in 1995. Lime application had no effect on corn in 2005; however, soil pH was still higher where lime had been applied. In 2006, soybean seed yield was significantly higher where lime had been applied. The grain moisture of corn was significantly lower at harvest in 2007 where lime had been applied. Soil pH was higher in the fall of 2007 where lime had been applied and soybean seed yield in 2008 was significantly higher from lime application. Yield of corn was not significantly effected in 2009 from lime application; however, grain moisture at harvest was lower and test weight was higher where lime had been applied. In 2010, the seed yield of soybeans was increased significantly by the application of lime.

April 2011



On-Farm Comparison Results Kremlacek

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Nebraska Soybean & Feed Grains Profitability Project

FINAL

Years: 2010
Title: Using Seed Applied Growth Promoters
Crop: Corn
NSFGPP Operator: Bill Kremlacek, Saunders County
Private Industry Cooperator: Jerry Mulliken
Objective: To determine & document the effect of applying growth promoters at planting on the profitability of corn production.
Treatments: Check vs Amplify vs Jumpstart

April 2011



On-Farm Comparison Results Kremlacek

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010 Corn (Mycogen 2D770)

<u>Variable</u>	<u>Check</u>	<u>Amplify</u>	<u>Jumpstart</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 15.5%	146	148	150 *	0.170 ns
Moisture, %	12.6 **	12.8	12.8	0.0309 **
Cost/ac		\$2.80	\$3.94	

Planting Date: 5/5/10

Harvesting Date: 10/21/10

Summary: Yields in 2010 were not significant due to treatment. Yield for Jumpstart was slightly higher than the Check. Grain moisture at harvest was lower than the treated plots.

April 2011



On-Farm Comparison Results McNamara

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2010
Title: Plant Population Study
Crop: Corn
NSFGPP Operator: John McNamara, Cass County
Private Industry Cooperator:
Objective: To determine & document the effect of plant population on the profitability of corn production.
Treatments: 24,000 seeds vs 30,000 seeds

April 2011



On-Farm Comparison Results McNamara

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010	Corn (Dekalb DKC65-63) Planting Rate		
<u>Variable</u>	<u>24,000</u>	<u>30,000</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 15.5%	152	166	0.0001 ***
Moisture, %	18.5	18.5	1.000 ns
Plants, 1000/ac	22.1	28.3	<0.0001 ***
Cost/ac	\$75.00	\$93.75	

Planting Date: 4/6/10

Harvesting Date: 9/15/10

Summary: The higher plant population resulted in significantly higher grain yield and profit per acre.

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years:	2001-2002, 2004-2010
Title:	Profitability of Incorporating Lime
Crop:	Soybean/Corn Rotation
NSFGPP Operator:	Jerry Mulliken, Dodge County
Private Industry Cooperator:	Jerry Mulliken
Objective:	To determine & document the effect on incorporating lime on the profitability of crop production. Soil pH 5.5.
Treatments:	No tillage, no lime vs. tillage, no lime, vs. no tillage, with lime, vs. tillage w/lime. Lime incorporated April 2001.
Soil Type:	Moody Silty Clay Loam Soil, No-Till
Costs:	Lime - 2.4 T/ac x 14.30/T = \$34.32 Prorate for 8 yrs = \$4.29/ac/yr Tillage - 2 x Disc @ \$7/ac = \$14.00

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2001

Soybeans

<u>Treatment</u>	<u>Yield, bu/ac @ 13%</u>	<u>Moisture %</u>	<u>Test Wt lbs/bu</u>	<u>Cost \$/ac</u>
No Tillage, no lime	48	9.7	56.0	---
No Tillage, lime	51	9.9	56.2	4.29
Tillage, no lime	51	10.0	56.2	1.75
Tillage, lime	54	10.1	55.9	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.002 ***	0.399 ns	0.746 ns
Lime (L)	0.008 ***	0.544 ns	0.935 ns
TxL	0.778 ns	0.776 ns	0.302 ns

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2002

Corn (Pioneer 34M94)

<u>Treatment</u>	<u>Yield, bu/ac @ 15.5%</u>	<u>Moisture %</u>	<u>Test Wt lbs/bu</u>	<u>Cost \$/ac</u>
No Tillage, no lime	92	17.1	58.4	---
No Tillage, lime	94	16.9	58.2	4.29
Tillage, no lime	83	16.7	58.6	1.75
Tillage, lime	91	16.8	58.6	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.009 ***	0.228 ns	0.260 ns
Lime (L)	0.022 **	0.754 ns	0.601 ns
TxL	0.190 ns	0.281 ns	0.703 ns

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2004

Corn (GH 8906)

<u>Treatment</u>	<u>Yield, bu/ac @ 15%</u>	<u>Moisture %</u>	<u>Cost \$/ac</u>
No Tillage, no lime	159	15.5	---
No Tillage, lime	167	15.9	4.29
Tillage, no lime	160	15.5	1.75
Tillage, lime	174	15.6	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.382 ns	0.334 ns
Lime (L)	0.018 **	0.037 **
TxL	0.424 ns	0.204 ns

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2005

Soybeans (Latham 967)

<u>Treatment</u>	<u>Yield, bu/ac @ 13%</u>	<u>Moisture %</u>	<u>Cost \$/ac</u>
No Tillage, no lime	45	11.0	---
No Tillage, lime	47	11.4	4.29
Tillage, no lime	46	11.6	1.75
Tillage, lime	48	11.2	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.465 ns	0.341 ns
Lime (L)	0.006 ***	0.907 ns
TxL	0.680 ns	0.148 ns

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2006

Corn (Dekalb 6716)

<u>Treatment</u>	<u>Yield, bu/ac @ 15.5%</u>	<u>Moisture %</u>	<u>Cost \$/ac</u>
No Tillage, no lime	123	16.2	---
No Tillage, lime	125	16.2	4.29
Tillage, no lime	123	16.3	1.75
Tillage, lime	124	16.3	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.951 ns	0.313 ns
Lime (L)	0.444 ns	0.696 ns
TxL	0.914 ns	0.859 ns

Planting Date: 4/28/06

Harvest Date 10/18/06

1 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Soil Tests: 3/15/06

<u>Treatment</u>	<u>Water pH</u>			
	<u>0-2</u>	<u>2-4</u>	<u>4-6</u>	<u>6-8</u>
No Tillage, no lime	5.9	5.3	5.6	5.4
No Tillage, lime	6.6	5.5	5.5	5.7
Tillage, no lime	5.8	5.3	5.5	5.6
Tillage, lime	6.6	5.8	5.5	5.7

<u>Treatment</u>	<u>Buffer pH</u>			
	<u>0-2</u>	<u>2-4</u>	<u>4-6</u>	<u>6-8</u>
No Tillage, no lime	6.7	6.5	6.6	6.5
No Tillage, lime	7.0	6.6	6.5	6.7
Tillage, no lime	6.4	6.5	6.6	6.6
Tillage, lime	7.0	6.6	6.5	6.6



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2007

Soybeans (Latham 967)

<u>Treatment</u>	<u>Yield, bu/ac</u> <u>@ 13%</u>	<u>Moisture</u> <u>%</u>	<u>NDVI</u>	<u>Cost</u> <u>\$/ac</u>
No Tillage, no lime	56	9.3	0.08	---
No Tillage, lime	60	9.2	0.28	4.29
Tillage, no lime	57	9.3	0.17	1.75
Tillage, lime	60	9.3	0.27	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.524 ns	0.762 ns	0.057 *
Lime (L)	0.0007 ***	0.497 ns	<0.0001 ***
TxL	0.224 ns	0.786 ns	0.028 **

Planting Date: 4/30/07

Harvesting Date: 9/22/07



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2008

Corn (Hybrid)

<u>Treatment</u>	<u>Yield, bu/ac</u> <u>@ 15.5%</u>	<u>Moisture</u> <u>%</u>	<u>Cost</u> <u>\$/ac</u>
No Tillage, no lime	129	15.1	--
No Tillage, lime	133	14.8	4.29
Tillage, no lime	131	15.1	1.75
Tillage, lime	129	14.7	6.04

Statistical Analysis: (Prob >F)

Tillage (T)	0.524 ns	0.973 ns
Lime (L)	0.535 ns	0.313 ns
TxL	0.021 **	0.973 ns

Planting Date: 5/5/08

Harvest Date 10/30/08



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009 Soybeans (Pioneer 93M43)

<u>Treatment</u>	<u>Yield, bu/ac @ 13%</u>	<u>Moisture %</u>	<u>Cost \$/ac</u>
No Tillage, no lime	63	9.9	---
No Tillage, lime	65	10.2	---
Tillage, no lime	65	10.1	---
Tillage, lime	65	10.8	---

Statistical Analysis: (Prob >F)

Tillage (T)	0.231 ns	0.327 ns
Lime (L)	0.606 ns	0.300 ns
TxL	0.285 ns	0.626 ns

Planting Date: 4/24/09

Harvest Date 10/11/09

April 2011



On-Farm Comparison Results Mulliken

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010 Corn (DK 62-29)

<u>Treatment</u>	<u>Yield, bu/ac @ 15.5%</u>	<u>Moisture %</u>
No Tillage, no lime	159	15.7
No Tillage, lime	160	15.7
Tillage, no lime	158	15.8
Tillage, lime	160	15.6

Statistical Analysis: (Prob >F)

Tillage (T)	0.641 ns	0.915 ns
Lime (L)	0.558 ns	0.347 ns
TxL	0.765 ns	0.311 ns

Planting Date: 4/18/10

Harvest Date: 9/27/10

April 2011



On-Farm Comparison Results Mulliken

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Summary: In 2001, Tillage & Lime increased soybean yields independently & the effects were additive. In 2002, grain yield was lower due to tillage done in 2001 where no lime was applied. Yield data were not obtained in 2003. In 2004, grain yield & grain moisture at harvest were increased by lime applied in 2001. Soybean seed yield was increased by lime in 2005 where lime was applied in 2001. In 2006, corn growth was not affected by lime applied in 2001. In 2007, seed yield was increased significantly but seed moisture at harvest was not affected. The NDVI (an estimate of crop canopy density) was increased slightly by tillage where no lime was applied in 2001, however, lime increased NDVI significantly regardless of tillage. In 2008, corn yields were not increased by lime applied. Soybean yields were not increased in 2009 and corn yields were not affected by treatments in 2010.

April 2011



On-Farm Comparison Results Mulliken

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Years:	2010
Title:	Planting Depth
Crop:	Corn
NSFGPP Operator:	Jerry Mulliken, Dodge County
Private Industry Cooperator:	Jerry Mulliken
Objective:	To determine & document the influence of seed placement on the profitability of producing corn.
Treatments:	Shallow Depth 2.25" Deeper Depth 3.00"

April 2011



On-Farm Comparison Results Mulliken

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Results: 2010 Corn (Hybrid)

<u>Variable</u>	<u>2.25 "</u>	<u>3.00 "</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	178	171	0.0047 ***
Moisture, %	16.1	16.1	0.903 ns

Planting Date: 4/17/10

Harvesting Date: 10/13/10

Summary: Planting deeper resulted in a significant reduction in grain yield in 2010.

April 2011



On-Farm Comparison Results Stewart

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Years:	2008-2010
Title:	Insect Resistant Hybrids
Crop:	Corn
NSFGPP Operator:	Jim & Mike Stewart, Lancaster County
Private Industry Cooperator:	Keith Glewen
Objective:	To determine & document the effect of growing corn hybrids with insect tolerant traits on the profitability of producing corn in rotation with soybeans.
Treatments:	No insect resistant hybrid Corn borer resistant hybrid Borer & rootworm resistant hybrid

April 2011



On-Farm Comparison Results Stewart

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2008

Insect Resistance

Variable	Insect Resistance			Prob >F
	GH8852GT None	GH8952(CBLL) Borer	GH8953(CBLLRW) Borer & Rootworm	
Yield, bu/ac @ 15.5%	148	157 *	150	0.143 ns
Moisture, %	20.4	20.5	20.9 *	0.090 *
Test Wt, lbs/bu	54.8	54.3	53.4 **	0.004 ***
Plants, 1000/ac	25.0	25.5	24.6	0.415 ns
Cost/ac	\$40.35	\$38.46	\$48.13	

Planting Date: 5/5/08

Harvesting Date: 10/2/08

April 2011



On-Farm Comparison Results Stewart

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009

Insect Resistance

Variable	(9014GT)	(9014GTCBLL)	(90143000GT)	Prob >F
	None	Borer	Borer & Rootworm	
Yield, bu/ac @ 15.5%	155 **	162	162	0.0551 *
Moisture, %	17.9	18.0	18.2	0.1739 ns
Test Wt, lbs/bu	57.6	57.2	57.6	0.2467 ns
Plants, 1000/ac	23.6	22.8	23.4	0.5736 ns
Cost/ac	\$46.13	\$49.50	\$59.85	

Planting Date: 4/23/09

Harvesting Date: 10/5/09

April 2011



On-Farm Comparison Results Stewart

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Results: 2010

Variable	Insect Resistance			Prob >F
	(9014GT) None	(9014GTCBLL) Borer	(90143000GT) Borer & Rootworm	
Yield, bu/ac @ 15.5%	157	152	157	0.707 ns
Moisture, %	19.5	19.5	19.5	0.923 ns
Test Wt, lbs/bu	54.7	54.6	54.4	0.419 ns
Plants, 1000/ac	26.3	26.4	26.6	0.911 ns
Cost/ac	\$52.40	\$56.24	\$68.00	

Planting Date: 4/17/10

Harvesting Date: 9/20/10

Summary: Results for 2008 are quite variable; thus, minimal effects were detected. The corn borer/rootworm hybrid had slightly wetter grain at harvest and slightly lower test weight. Results for 2009 show that the non-Bt corn had a significantly lower yield than the Bt hybrids. In 2010, results were variable, thus no differences due to treatment were detected.

April 2011



On-Farm Comparison Results Williams

FINAL

Nebraska Soybean & Feed Grains Profitability Project

FINAL

Years:	2009-2010
Title:	Planting Rate
Crop:	Corn
NSFGPP Operator:	Brad Williams, Saunders County
Private Industry Cooperator:	Jerry Mulliken
Objective:	To determine & document the influence of plant population on the profitability of producing corn.
Treatments:	2009: 26,500 vs. 30,000 seeds/ac 2010: 27,000 vs 30,500 seeds/ac

April 2011



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2009		Corn (GH9014)		
<u>Variable</u>	<u>Low Pop</u>	<u>High Pop</u>	<u>Prob >F</u>	
Yield, bu/ac @ 15.5%	216	219	0.1129	ns
Moisture, %	17.8	18.0	0.0038	***
Cost/ac	\$55.47	\$62.79		

Planting Date: 4/11/09 Harvesting Date: 11/12/09

April 2011



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010		Corn (GH 89373000GT)		
<u>Variable</u>	<u>Low Pop</u>	<u>High Pop</u>	<u>Prob >F</u>	
Yield, bu/ac @ 15.5%	196	203	0.0036	***
Moisture, %	13.3	13.1	0.413	ns
Cost/ac	\$62.62	\$70.73		

Planting Date: 4/8/10 Harvesting Date: 10/20/10

Summary: In 2009, increasing the planting rate did not increase grain yield; however, the higher plant population resulted in wetter grain at harvest. In 2010, increased planting rate gave a higher grain yield with no change in grain moisture.

April 2011



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2009-2010
Title: Fungicide Treatment
Crop: Soybeans
NSFGPP Operator: Brad Williams, Saunders County
Private Industry Cooperator: Jerry Mulliken
Objective: To determine & document the influence of foliar fungicide on the profitability of producing soybeans.
Treatments: Check (no fungicide) vs. fungicide applied foliar
 6 oz. Headline applied 7/23/09 (Late R3 Stage)
 Harley 6 oz Headline applied 8/6/10
 Jessen 6 oz Headline applied 8/6/10



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL


Results: 2009	Soybeans (Pioneer 93M11)		
<u>Variable</u>	<u>Check</u>	<u>Headline</u>	<u>Prob >/T/</u>
Yield, bu/ac @ 13%	57	59	0.0162 **
Moisture, %	10.4	10.3	0.6352 ns
Cost/ac (Headline)	---	\$14.52	
Cost/ac (Application)	---	\$4.50	


Planting Date:

Harvesting Date:

April 2011



FINAL		Nebraska Soybean & Feed Grains Profitability Project		FINAL
Results: 2010 Soybeans				
<u>Variable</u>	<u>Check</u>	<u>Headline</u>	<u>Prob >/T/</u>	
<u>Harley (NK 39A3)</u>				
Yield, bu/ac @ 13%	63	74	<0.0001 ***	
Moisture, %	10.5	12.7	0.0003 ***	
Cost/ac (Headline)		\$10.22		
Cost/ac (Application)		\$5.29		
Planting Date: 5/3/10	Harvesting Date: 10/7/10			
<u>Jessen (Pioneer 93Y70)</u>				
Yield, bu/ac @ 13%	61	70	<0.0001 ***	
Moisture, %	9.1	9.7	<0.0001 ***	
Cost/ac (Headline)		\$10.22		
Cost/ac (Application)		\$5.29		
Planting Date: 5/3/10	Harvesting Date: 10/9/10			
<p>Summary: The foliar application of 6 oz/ac of Headline increased the seed yield of soybeans in 2009. In 2010, the application of 6 oz/ac Headline increased the seed yield and seed moisture at harvest of soybeans at both locations.</p>				
				<p>April 2011 </p>

FINAL		Nebraska Soybean & Feed Grains Profitability Project		FINAL
<p>UNIVERSITY OF Nebraska Lincoln EXTENSION Know how. Know now.</p>				
<h2>On-Farm Comparison Results Williams</h2>				
<p>Years: 2010</p>				
<p>Title: Fungicide Treatment</p>				
<p>Crop: Corn</p>				
<p>NSFGPP Operator: Brad Williams, Saunders County</p>				
<p>Private Industry Cooperator: Jerry Mulliken</p>				
<p>Objective: To determine & document the influence of foliar fungicide on the profitability of producing corn.</p>				
<p>Treatments: Check (no fungicide) vs. fungicide applied foliar 3 oz. Headline applied 6/27/10</p>				
				<p>April 2011 </p>

On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010 **Corn**

<u>Variable</u>	<u>Check</u>	<u>Headline</u>	<u>Prob >/T/</u>
<u>Johnny (GH 89373000GT)</u>			
Yield, bu/ac @ 15.5%	204	207	0.585 ns
Moisture, %	13.4	14.1	0.230 ns
Cost/ac (Headline)		\$5.11	
Cost/ac (Application)		\$5.29	
Planting Date: 4/12/10	Harvesting Date: 10/10/10		
<u>Lichtenberg (GH 89373000GT)</u>			
Yield, bu/ac @ 15.5%	207	215	0.0008 ***
Moisture, %	13.7	13.9	0.122 ns
Cost/ac (Headline)		\$5.11	
Cost/ac (Application)		\$5.29	
Planting Date: 4/12/10	Harvesting Date: 10/16/10		

April 2011



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010 **Corn (Pioneer 33D49)**

<u>Variable</u>	<u>Check</u>	<u>Headline</u>	<u>Prob >/T/</u>
<u>Virka (Hybrid)</u>			
Yield, bu/ac @ 15.5%	223	232	0.0001 ***
Moisture, %	14.2	15.0	<0.0001 ***
Cost/ac (Headline)		\$5.11	
Cost/ac (Application)		\$5.29	
Planting Date:	Harvesting Date:		

Summary: At Johnny's site, the application of Headline had no effect on corn growth. At the Lichtenberg and Virka sites, grain yield was increased by Headline. Moisture at harvest was increased at the Virka site.

April 2011



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Years: 2010
Title: Insecticide Study
Crop: Corn
NSFGPP Operator: Brad Williams, Saunders County
Private Industry Cooperator: Jerry Mulliken
Objective: To determine & document the influence of Force on the profitability of producing corn.
Treatments: Check vs Force CS applied at planting.
 Corn/Soybean Rotation

April 2011



On-Farm Comparison Results Williams

FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010		Corn		
Variable	Check	Force	Prob >/T/	
<u>Harley (DK 61-69)</u>				
Yield, bu/ac @ 15.5%	222	222	0.866	ns
Moisture, %	11.5	11.5	0.574	ns
Cost/ac (Force)		\$17.66		
Cost/ac (Application)		\$1.00		
Planting Date: 4/15/10		Harvesting Date: 10/10/10		
<u>Johnny (GH 89373000GT)</u>				
Yield, bu/ac @ 15.5%	210	209	0.764	ns
Moisture, %	13.9	13.8	0.396	ns
Cost/ac (Force)		\$17.66		
Cost/ac (Application)		\$1.00		
Planting Date: 4/12/10		Harvesting Date: 10/16/10		

April 2011



On-Farm Comparison Results Williams

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Nebraska Soybean & Feed Grains Profitability Project

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Results: 2010		Corn	
<u>Variable</u>	<u>Check</u>	<u>Force</u>	<u>Prob >/T/</u>
<u>Johnson (GH 9180GTCB)</u>			
Yield, bu/ac @ 15.5%	224	227	0.0003 ***
Moisture, %	14.0	13.9	0.0467 **
Cost/ac (Force)		\$17.66	
Cost/ac (Application)		\$1.00	
Planting Date: 4/10/10	Harvesting Date: 11/7/10		

Summary: Growth of corn was not influenced by applied Force CS at planting at the Harley and Johnny sites. Force CS applied at planting at the Johnson site resulted in a slight increase in yield and a small reduction in grain moisture at harvest.

April 2011



On-Farm Comparison Results Williams

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Nebraska Soybean & Feed Grains Profitability Project

FINAL

Years:	2010
Title:	Insecticide Study
Crop:	Soybeans
NSFGPP Operator:	Brad Williams, Saunders County
Private Industry Cooperator:	Jerry Mulliken
Objective:	To determine & document the influence of insecticide on the profitability of producing soybeans.
Treatments:	Gauche vs Gauche with Optimize 200. Same treatments with Headline over entire area.

April 2011



FINAL **Nebraska Soybean & Feed Grains Profitability Project** FINAL

Results: 2010 Soybeans (Pioneer 93Y70)

<u>Variable</u>	<u>Gauche</u>		<u>Prob >/T/</u>
	<u>Gauche</u>	<u>w/Optomize</u>	
Yield, bu/ac @ 13%	59	58	0.475 ns
Moisture, %	8.6	8.7	0.399 ns
Cost/ac		\$2.20	
Planting Date: 5/3/10	Harvesting Date: 10/9/10		

With Headline R4 Stage on the seed treatments

<u>Variable</u>	<u>Gauche</u>		<u>Prob >/T/</u>
	<u>Gauche</u>	<u>w/Optomize</u>	
Yield, bu/ac @ 13%	72	70	0.175 ns
Moisture, %	9.3	9.2	0.189 ns
Cost/ac		\$2.20	
Planting Date: 5/3/10	Harvesting Date: 10/9/10		

Summary: Soybean yields and seed moistures at harvest were not affected by treatment in these two studies.

April 2011

