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## NEBRASKA VARIETY AND HYBRID TESTS: SPRING SEED GUIDE - 2014

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### **WELCOME TO THE 2014 SPRING SEED GUIDE**

Corn, soybean, sunflower, pea and proso millet are included in this seed guide. This is the first time this publication will be available only in an electronic format. Individual plot data for regions is available on the web at http://cropwatch.unl.edu/web/varietytest/home. It is our hope that you will find this guide useful in making hybrid and variety selection for planting this spring. Please send any comment and suggestion to tregassa2@unl.edu.

Please visit our web site at http://cropwatch.unl.edu/web/varietytest/home for all the information you need on variety testing.

Teshome Regassa University of Nebraska-Lincoln

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# NEBRASKA VARIETY AND HYBRID TESTS SPRING SEED GUIDE – 2014

**NOVEMBER 2013** 

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Farmer furnished land for the experiments and this is highly acknowledged. The help of extension educators and others who assisted with the tests is acknowledged as well.

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## NEBRASKA CORN HYBRID TESTS - 2013 -

#### CROP PRODUCTION SUMMARY

According to the *National Agricultural Statistics Service*, there were 9.55 million acres of corn harvested in Nebraska in 2013 producing approximately 1.6 billion bushels of grain. The total average corn yield for Nebraska in 2013 was 169 bushels per acre (bu/a). Total corn yields from the previous 10 years are reported below.

### Average Nebraska Corn Yield (Last 10 Years)

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Yield (bu/a)	146	166	154	152	160	163	178	166	160	142	169

Source: NASS

The 2013 corn crop in Nebraska progress and condition closely followed the five year average. The irrigated crop yield was similar to production over the past five years. Timely rainfall in some areas allowed for high yields in many rainfed locations in eastern Nebraska hit hard by drought during the 2012 season. Central and western rainfed locations that received moisture did quite well, while some areas stayed dry during the summer. Detailed information regarding crop progress and history can be obtained from the National Agricultural Statistics Service available online at http://www.nass.usda.gov

#### **PROCEDURE**

Thirteen corn performance tests were planted throughout Nebraska and Nebraska-Wyoming border in 2013. Corn trials are conducted to provide yield and other information about corn hybrids available to corn growers in Nebraska. Fee from seed companies covers a portion of the cost of each test. Entry was on a voluntary basis and hybrids were selected by seed producers. At many locations, widely grown hybrids were entered by the Agronomy/Horticulture Department or the cooperator.

Individual plots are two rows wide and range from 15 to 35 feet long. Each test location had the same number of seed planted for all hybrids. The plant population represents the average harvested plant density. Grain yields are expressed on a 15.5% moisture basis. Yields shown are averages of four or more replicated plots at each location. Plots were machine harvested and grain moisture determinations (with the exception of the Wyoming site) were made with an electronic moisture meter or moisture sensors on the combine.

Variations in soil fertility, moisture conditions, and other factors are found in each test area. This makes it impossible to measure yielding ability of hybrids with absolute accuracy. For this reason, small yield differences have little meaning. A statistical measure of differences required for significance is given in each table (LSD). These differences are computed at the 5% level of significance. At the 5% level, a difference of that magnitude would be expected once in twenty trials through chance alone. Most fields have some degree of spatial variability. We make every effort to remove the variability by blocking and using other experimental design methods. We also use statistical procedures to remove a portion of the spatial variability.

In these experiments, many hybrids statistically had the same grain production. Performances of hybrids vary with seasonal conditions. Great care should be used in interpreting the results of a single year test. Earlier maturing hybrids are favored in some seasons while later ones perform best in other years. In addition, some hybrids are able to withstand unfavorable weather conditions better than others which may do well under ideal growing conditions. Performance over a period of years should give a much better measure of adaptation whenever available. Multi-season analysis is often difficult due to the annual turnover of hybrids entered for testing. Harvest moisture, stalk strength, and resistance to insect and disease also are factors which must be considered in selecting hybrids.

Relative hybrid performance often varies with locations within zones. In zone analysis, the hybrid by location mean square was used to calculate the differences required for significance shown in the tables. Moisture at harvest is an important consideration in hybrid selection as it does affect time of harvest and drying costs although this year the grain was all quite dry at harvest.

### **RESULTS AT INDIVIDUAL LOCATIONS**

#### **Southeast District:**

#### Rainfed tests were planted in Butler, Otoe, and Gage Counties.

- The Butler County rainfed test was planted on May 16<sup>th</sup> at an average population of 22,270 plants/acre. It was harvested on November 11<sup>th</sup>, with an average yield of 211 bu/a. There were 31 varieties entered in this rainfed test. Farmer entries were (1) Garst 83R38GT, (2) Garst 84U58GT.
- The Otoe County rainfed test was planted on May 15<sup>th</sup> at an average population of 22,990 plants/acre. It was harvested on October 25<sup>th</sup> with an average yield of 182 bu/a. There were 31 varieties entered in this rainfed test.
- The Gage County rainfed test was planted on May 15th at a population of 22,660 plants/acre. It was harvested on November 15th, with an average yield of 209 bu/a. There were 33 varieties entered in this rainfed test. Farmer entries consisted of (1) Dekalb 61-88, (2) Dekalb 62-97, (3) Dekalb 67-57, (4) Pioneer 1151.

#### Irrigated tests were planted in Hamilton, York, and Clay Counties

- The Hamilton County irrigated test was planted on May 14<sup>th</sup> at a population of 31,240 plants/acre. It was harvested on October 26<sup>th</sup>, with an average yield of 297 bu/a. There were 41 hybrids entered in this irrigated test.
- The York County irrigated test was planted on May 13<sup>th</sup> at a population of 29,960 plants/acre. It was harvested on November 12<sup>th</sup>, with an average yield of 278 bu/a. There were 41 varieties entered in this irrigated test. Farmer entries consisted of (1) Golden Harvest G07F32 3111, (2) Golden Harvest H-8969 3111, (3) Golden Harvest G09M49-GT/CB/LL.
- The Clay County irrigated test was planted on May 14<sup>th</sup>. Unfortunately this site was compromised due to a summer hail storm. Due to the lack of uniformity in the plots this site was not harvested.

#### **North/Northeast District:**

There was one rainfed test planted in Dixon County.

• The Dixon County, rainfed test was planted on May 13<sup>th</sup> at a population of 20160 plants/acre. It was harvested on November 8th with an average yield of 170 bu/a. There were 18 varieties entered at this test location.

#### Three irrigated tests were planted in Dixon, Holt, and Pierce Counties

- The Dixon County irrigated test was planted on May 15<sup>th</sup> at a population of 31,560 plants/acre. It was harvested on October 11<sup>th</sup>, with an average yield of 172 bu/a. There were 26 varieties entered in this irrigated test
- The Holt County irrigated test was planted on May 18<sup>th</sup> at a population of 31,070 plants/acre. It was harvested on October 31<sup>st</sup>, with an average yield of 185 bu/a. There were 40 varieties entered in this irrigated test. Very strong winds (up to 70 mph) before harvest knocked down a lot of plants. Wind damage was more severe for some hybrids than others. Please use the data cautiously as some hybrids may not be as bad as what the data show.
- The Pierce County irrigated test was planted on May 1<sup>st</sup> at a population of 30,030 plants/acre. It was harvested on October 30<sup>th</sup>, with an average yield of 152 bu/a. There were 24 varieties entered in this irrigated test. High winds on Oct 17 and 18 caused considerable stalk lodging. As a result lower yield in some plots may be attributed to poor harvesting conditions.

#### **West Central District:**

#### Two irrigated tests were planted in Red Willow and Phelps Counties

- The Red Willow County irrigated test was planted on May 3<sup>rd</sup> at a population of 28,430 plants/acre. It was harvested on October 31<sup>st</sup>, with an average yield of 251 bu/a. There were 20 varieties entered in this irrigated test. Farmer entries consisted of (1) Dekalb 65-90, (2) Garst 84U58, (3) Garst 83R38, (4) Pioneer P1690HR, and (5) Pioneer P1266YHR.
- The Phelps County irrigated test was planted on May 5<sup>th</sup> at a population of 28,460 plants/acre. It was harvested on September 27<sup>th</sup>, with an average yield of 239 bu/a. There were 22 varieties entered in this irrigated test. Farmer entries consisted of (1) Pioneer 33D47, (2) Pioneer P1168, (3) Pioneer P1498, (4) Pioneer P1690, and (5) Pioneer P1498.

#### **West District**:

#### There was one irrigated test planted in Goshen County, Wyoming

• The Goshen County, WY irrigated test was planted on May 14<sup>th</sup> at a population of 26,970 plants/acre. It was harvested with an average yield of 144 bu/a. There were 6 varieties entered at this test location.

#### **CULTURAL PRACTICES**

**Butler County:** Rainfed; Previous Crop: Soybean; No-till; Fertilizer: 130 lb NH3; 5 gal 9-18-9; Herbicide: 5 oz Corvus.

**Otoe County:** Rainfed; Previous Crop: Soybean; No-till; Fertilizer: 120 lb NH3; Herbicide: 3qt Lexar + 0.5 lb atrazine

**Gage County:** Rainfed; Previous crop: Soybean; No-till; Fertilizer: 110 lb N, 52 lb P2O5, 5 lb S, 0.5 lb Zn; Herbicide: 2.5 qt Lexar

**York County:** Pivot irrigated; Previous Crop: Soybean; No-till; Fertilizer: 140 lb NH3; 5 gal 10-34-0; Herbicide: Lexar

**Hamilton County:** Pivot irrigated; Previous Crop: Corn; Ridge till; Fertilizer: 5 gal 8-6-11-2 PRE, 180 lb 32-0-0 POST; Herbicide: 2.1qt CinchATZ; Fungicide: 10.5oz Quilt XL

**Dixon County (Irrigated):** Irrigated; Previous crop: Soybean; No-till; Fertilizer: 150 lb N; Herbicide: Glyphosate + 2.5 qt Lumax EZ POST

**Dixon County (Rainfed):** Rainfed; Previous crop: Soybean; No-till; Fertilizer: 150 lb N; Herbicide: Glyphosate + 2.5 qt Lumax EZ POST

**Pierce County:** Irrigated; Previous Crop: Soybean; No-till; Fertilizer: 205 lb N, 26 lb P, 90 lb K, 300lb lime; Herbicide: Harness Xtra, Roundup

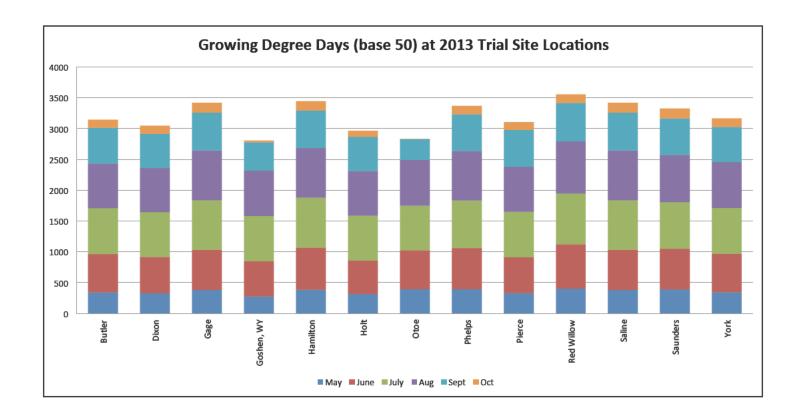
**Holt County:** Irrigated; Previous crop: Wheat; No-till; Fertilizer: 180 lb N, 25 lb P, 12 lb K, 28 lb S, 2.5 lb Mg; Herbicide: Touchdown, Rage D-Tech and Bicep followed by Touchdown and Callisto

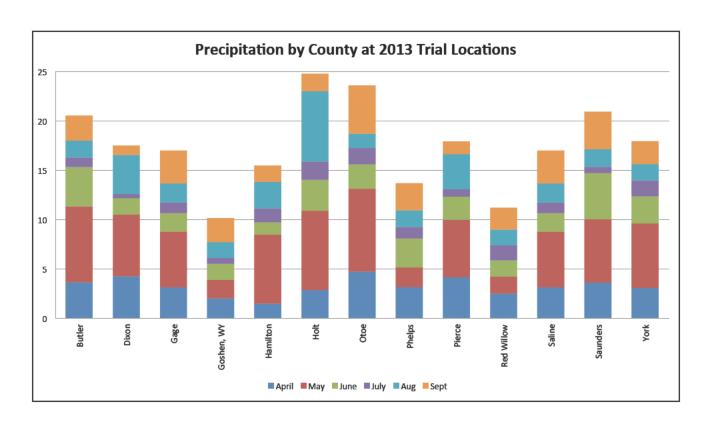
**Phelps County:** Irrigated; Previous crop: Corn; Ridge till; Fertilizer: 130 lb N as anhydrous ammonia PRE; 35 lb N with herbicide, 88 lb N as 32-0-0 POST; Herbicide: Corvus + atrazine; Approach at V5; Humec.

**Red Willow County:** Irrigated; Previous crop: Soybean; No-till; Fertilizer: 200 lb actual N PRE; 9 lb N and 8 lb P2O5 starter; Herbicide: Halex GT

**Goshen County, WY:** Irrigated; Previous Crop: Sugar Beets; Plow pack; Fertilizer: 185 lb N, 50 lb P2O5, 20 lb S; Herbicide: 1.5oz Option + 5oz Status







## Table A. Locations, Cooperators, Planting and Harvest Dates of Nebraska Corn Test Plots

Location	Cooperator	Condidtion	Planted	Harvested	Latitude	Longitude
Southeast						
Butler County	Jim Heins; Rising City, NE	Rainfed	5/16/2013	11/11/2013	41.17804	-97.21424
Otoe County	John James; Nebraska City, NE	Rainfed	5/15/2013	10/25/2013	40.75792	-95.93988
Gage County	Scott Kapke; Clatonia, NE	Rainfed	5/15/2013	11/15/2013	40.46499	-96.87986
Hamilton County	Mike Danhauer; Aurora, NE	Irrigated	5/14/2013	10/26/2013	40.95093	-98.01725
York County	Jerry Stahr; York, NE	Irrigated	5/13/2013	11/12/2013	40.88527	-97.57370
Clay County	UNL SCREC; Harvard, NE	Irrigated		Trial lost to I	nail damage	
West Central						
Red Willow County	Cappel Farms; McCook, NE	Irrigated	5/3/2013	10/31/2013	40.22023	-100.73053
Phelps County	Dennis Sand; Bertrand, NE	Irrigated	5/3/2013	9/27/2013	40.56095	-99.57950
North/Northeast						
Dixon County	Haskel Ag Lab; Concord, NE	Irrigated	5/13/2013	11/8/2013	42.38137	-96.95549
Dixon County	Haskel Ag Lab; Concord, NE	Rainfed	5/13/2013	11/8/2013	42.37731	-96.95496
Holt County	Jess Miner; O'Neill, NE	Irrigated	5/23/2013	11/30/2013	42.50481	-98.75397
Pierce County	Joel Carpenter; Pierce, NE	Irrigated	5/16/2013	11/4/2013	42.12119	-97.49548
West						
Goshen County, WY	SAREC, Lingle, WY	Irrigated	5/14/2013	11/20/2013	42.07890	-104.23731

### **Table B. Soil Type and Cultural Practices at Corn Trial Sites**

	1	,					•
Location	Production Practice	Soil Series	Tillage	Previous Crop	Fertilizer	Herbicide	Other
Southeast							
Butler County	Rainfed	Hastings silt loam	No till	Soybeans	130 lb NH3; 5 gal 9-18-9	5 oz Corvus	-
Otoe County	Rainfed	Aksarben silty clay loam	No till	Soybeans	120 lb N as anhydrous	3 qt Lexar + 0.5 qt atrazine	-
Gage County	Rainfed	Wymore silty clay loam	No till	Soybeans	110 lb N, 52 lb P2O5, 5 lb S, 0.5 lb Zn	2.5 qt Lexar	-
Hamilton County	Irrigated	Hastings silt loam	Ridge till	Corn	5 gal 8-6-11-2 PRE; 180 lb 32-0-0 POST;	2.1 qt Cinch ATZ	10.5 oz Quilt XL
York County	Irrigated	Hastings silt loam	No till	Soybeans	5 gal 10-34-0; 140 lb NH3; 6 gal 32-0-0	Lexar	-
North/Northeast							
Dixon County	Irrigated	Alcester silt loam	No till	Corn	200 lb 46-0-0	1.5pt Sure Start; 29oz Durango; 25oz Durango	-
Dixon County	Rainfed	Alcester silt loam	No till	Corn	200 lb 46-0-0	1.5pt Sure Start; 29oz Durango; 25oz Durango	-
Holt County	Irrigated	Anselmo fine sandy loam	No till	Wheat	Unknown	32oz Durango; 12oz FusiladeDX AMS INIS	-
Pierce County	Irrigated	Valentine fine sand	No till	Corn	240 lb N; 125 lb P2O5; 100 lb K2O	Harness Extra + Round Up Ultra	-
West Central							
Phelps County	Irrigated	Holdrege silt loam	Ridge till	Corn	130 lb N as anhydrous ammonia PRE; 35 lb N with herbicide; 88 lb N as 32-0-0 POST	Corvus + Atrazine	Approach at V5; Humec
Red Willow County	Irrigated	Hord silt loam	No till	Soybeans	200 lb actual N PRE; 9 lb N and 8 lb P2O5 starter	Halex GT (Early POST)	-
West							
Goshen County, WY	Irrigated	Haverson loam	Plow pack	Sugar beet	185 N, 50 P2O5, 20 S broadcast	1.5oz Option + 5oz Status	-

## **Table C. Average Performance Summary**

Location	Condidtion	Entries	Yield LSD	Yield (bu/a, 15.5%)	Harvest Moisture (%)	Bushel Weight (lb/bu)	Plant Population	EPV (\$)
Southeast								
Butler County	Rainfed	31	26	211	15	57	22,270	\$1,326
Otoe County	Rainfed	31	26	182	14	59	22,990	\$1,148
Gage County	Rainfed	33	22	209	16	59	22,660	\$1,304
York County	Irrigated	41	37	278	15.3	59	29,960	\$1,740
Hamilton County	Irrigated	41	31	297	18	57	31,240	\$1,817
North/Northeast								
Dixon County	Irrigated	16	NS	197	23	59	29,750	\$1,160
Dixon County	Rainfed	18	NS	170	22	55	20,160	\$1,004
Holt County	Irrigated	24	NS	232	14	62	31,070	\$1,466
Pierce County	Irrigated	18	NS	227	19	56	-	\$1,383
West Central								
Phelps County	Irrigated	22	24	239	25	54	28,460	\$1,386
Red Willow County	Irrigated	20	27	251	15	59	28,430	\$1,576
West								
Goshen County, WY	Irrigated	6	16	144	20	50	26,970	\$872

## **Table D. Corn Entrant Brand and Hybrids Overview 2013**

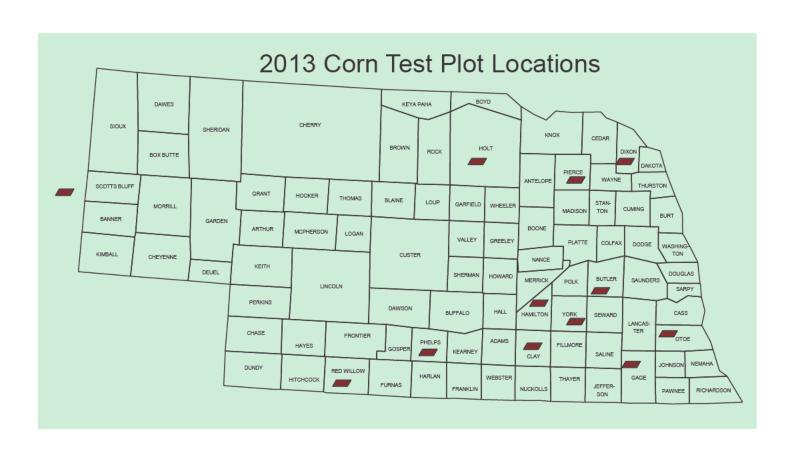
Brand	Hybrids Entered
	•
Fontanelle	06V563, 07A573, 09V623, 6A327RBC, 7A778RBC, 7D112RBC, 7V559RBC
Integrity Hybrids	7752, 7854
Kruger Seeds	KR-4810
LG Seeds	LG2602VT3PRIB, LG2620VT3PRIB, LG5524VT3PRIB
Masters Choice	MCT 5373, MCT 5663, MCT 6153, MCT 6583
Midland Genetics	344PRW, 534PRW, 573PRW, 583PRW, 622PRW, 624PRW, 653PRW, 714PRW
NuTech	5B-410
NuTech/G2 Genetics	3F-513, 3F-515, 5F-008, 5F-811, 5H-202, 5H-216, 5H-502, 5H-610, 5H-707, 5H-805, 5H-806, 5H-903, 5H-905, 5X-411, 5Z-109, 5Z-113, 5Z-612, 5Z-709
Phillips Seed Farms	789 AG, PSF082, PSF112, PSF121, PSF122, PSF141, PSF143
Pioneer Hybrid	P0302CHR, P0365XHR, P0591HR, P0987AM, P1151
Titan Pro	2M07-SS, 2M13-2P, 2M14-SS, 81A10, 82A13GLV, TP 36-12 2P, TP 37-06 SS, TP 39-09 SS, TP 39-11 SS

## Table E. Corn Entrant Brand and Variety Details

	variety Details							
Brand	Hybrid	Growing Degree Days	Days to Maturity	Technology/Trait				
Integrity Hybrids	7752		110	NA/NA/Poncho 500, Maxim, Apron				
Integrity Hybrids	7854		114	NA/NA/Poncho 500, Maxim, Apron				
LG Seeds	LG2602VT3PRIB	2700	112	VT3PRORIB/PONCHO-VOTIVO				
LG Seeds	LG2620VT3PRIB	2700	113	VT3PRORIB/PONCHO-VOTIVO				
LG Seeds	LG5524VT3PRIB	2540	107	VT3PRORIB/PONCHO-VOTIVO				
Masters Choice	MCT 5373		103	3000GT/C250				
Masters Choice	MCT 5663		106	3000GT/C250				
Masters Choice	MCT 6153		111	3000GT/C250				
Masters Choice	MCT 6583		115	3000GT/C250				
Midland	344PRW	2620	108	VT3Pro				
Midland	534PRW	2810	112	VT3Pro				
Midland	573PRW	2800	112	VT3Pro				
Midland	583PRW	2760	112	VT3Pro				
Midland	622PRW	2755	113	VT3Pro				
Midland	624PRW	2950	114	VT3Pro				
Midland	653PRW	2800	113	VT3Pro				
Midland	714PRW	2950	115	VT3Pro				
Nutech	5B-410™		110	GT/CB/LL, Maxim Quattro				
NuTech/G2 Genetics	3F-513™		115	AM/RR2, Maxim Quattro				
NuTech/G2 Genetics	3F-515™		115	AM/RR2, Maxim Quattro				
NuTech/G2 Genetics	5F-008™		108	AM/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5F-811™		111	AM/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5H-202™		102	HX1/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5H-216™		116	HX1/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5H-502™		102	HX1/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5H-610™		110	HX1/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5H-707™		107	HX1/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5H-805™		105	HX1/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5H-806™		106	HX1/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5H-903™		103	HX1/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5H-905™		105	HX1/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5X-411™		111	HXT/LL/RR2, Maxim Quattro				
NuTech/G2 Genetics	5Z-109™		109	HX1/YG/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5Z-113™		113	HX1/YG/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5Z-612™		112	HX1/YG/LL/RR2, Poncho 1250/VOTiVO				
NuTech/G2 Genetics	5Z-709™		109	HX1/YG/LL/RR2, Poncho 1250/VOTiVO				
Phillips Seed	789 AG	2680	113	Agrisure 3000GT				
Phillips Seed	PSF082 VT2Pro	2766	108	Genuity VT Double Pro				
Phillips Seed	PSF112 VT3Pro	2737	112	Genuity VT Triple Pro				
Phillips Seed	PSF121 VT3Pro	2754	112	Genuity VT Triple Pro				
Phillips Seed	PSF122 VT3Pro	2662	113	Genuity VT Triple Pro				
Phillips Seed	PSF141 SS	2825	114	Genuity SmartStax				
Phillips Seed	PSF143 VT2Pro	2825	114	Genuity VT Double Pro				
Titan Pro	2M07-SS	2023	107	Sstax/ Acceloron 500/Poncho				
Titan Pro	2M13-2P		113	VT2P / Acceleron 250				
Titan Pro	2M14-SS		114	Sstax/ Acceloron 500/Poncho				
Titan Pro	81A10		110	3000GT / Cruiser 250				
Titan Pro	82A13GLV		113	Viptera 3111 / Cruiser 250				
Titan Pro	TP 36-12 2P		112	VT2P / Acceleron 250				
Titan Pro	TP 37-06 SS		106	Sstax/ Acceloron 500/Poncho				
Titan Pro	TP 39-09 SS		108	Sstax/ Acceloron 500/Poncho				
Titan Pro	TP 39-09 33		111	Sstax/ Acceloron 500/Poncho				
Titali i i o	55 11 55		111	Stary received Sour Official				

### Table F. Nebraska Corn Test Entrants

Entrant	Address	Contact	Phone	Website
G2 Genetics	2321 North Loop Dr, Suite 230 Ames, IA 50010	Gene Kassmeyer	515-233-1997	nutechseed.com
Integrity Hybrids	27089 Timber Road Kelley, IA 50134	Stuart Grim	515-460-2169	crdadvise.com
Kruger Seeds	PO Box A Dike, IA 50624	Dan Johnson	319-989-2849	krugerseed.com
LG Seeds	22827 Shissler Rd Elmwood, IL 61529	Lenard Luebker	402-562-3473	lgseeds.com
Masters Choice	3010 State Rt 146 E Anna, IL 62906	Kevin Koone	618-833-6552	seedcorn.com
Midland Genetics	1906 Kingman Road Ottawa, KS 66067	Clyde Sylvester	785-242-3598	midlandgenetics.com
NuTech Seeds	2321 North Loop Dr, Suite 230 Ames, IA 50010	Gene Kassmeyer	515-233-1997	nutechseed.com
Phillips Seed Farms	980 Hwy 15 Hope, KS 67451	Matt Wilber	785-844-2171	phillipsseed.com
Pioneer Hi-Bred	P.O. Box 13 Inman, NE 68742	Lou Lechtenberg	402-961-0128	pioneer.com
Stine Seed Company	22255 Laredo Trail Adel, IA 50003	Chad Kuehl	308-737-8105	stineseed.com



## Southeast Rainfed Corn Hybrid Tests Butler, Otoe, and Gage Counties - 2013

BRAND	HYBRID	Average Yield (bu/a)	Butler (bu/a)	Otoe (bu/a)	Gage (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
Midland	714PRW	221	225	194	245	16	57
Midland	653PRW	218	221	208	225	16	58
NuTech/G2 Genetics	5Z-709™	217	219	194	237	15	57
Titan Pro SCI	2M14-SS	217	231	197	223	16	59
Midland	534PRW	213	229	182	227	15	59
NuTech/G2 Genetics	5F-811™	212	235	177	224	15	60
NuTech/G2 Genetics	5Z-109™	210	211	203	217	15	59
Midland	573PRW	210	212	193	224	16	60
Midland	622PRW	210	211	206	213	15	59
Titan Pro SCI	82A13GLV	209	223	192	212	14	56
Phillips Seed	PSF141 SS	208	237	180	207	16	59
NuTech/G2 Genetics	5F-008™	206	220	181	216	14	58
Phillips Seed	PSF121 VT3Pro	205	220	178	217	15	59
Midland	624PRW	202	193	194	220	16	58
Titan Pro SCI	TP 36-12 2P	201	205	180	218	16	60
Phillips Seed	PSF082 VT2Pro	200	211	175	215	14	58
Titan Pro SCI	TP 39-11 SS	200	206	186	207	15	57
Midland	344PRW	197	211	192	189	14	58
Phillips Seed	789 AG	196	211	177	200	15	56
NuTech/G2 Genetics	5H-905™	192	217	170	190	14	57
Midland	583PRW	192	196	169	210	16	60
NuTech/G2 Genetics	5H-707™	190	196	175	200	14	57
Stine Seed Company	9739VT3PRO	190	202	158	209	15	56
Titan Pro SCI	2M13-2P	189	188	179	201	15	58
NuTech/G2 Genetics	5X-411™	188	203	173	187	15	60
Stine Seed Company	9631VT3PRO	187	189	174	199	14	57
Phillips Seed	PSF112 VT3Pro	186	208	176	174	16	58
Titan Pro SCI	81A10	174	-	183	164	15	58
Stine Seed Company	9732VT3PRO	173	204	148	167	15	57
Average		200	212	183	208	15	58
Difference required fo	r significance (p≤05)	19	26	26	22	1	1

## **Southeast Irrigated Corn Hybrid Tests York and Hamilton Counties - 2013**

BRAND	HYBRID	Average Yield (bu/a)	York (bu/a)	Hamilton (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
NuTech/G2 Genetics	5F-811™	326	330	322	17	58
NuTech/G2 Genetics	3F-515™	323	327	319	18	58
Midland	714PRW	321	333	309	17	57
NuTech/G2 Genetics	5Z-612™	316	316	315	16	57
NuTech/G2 Genetics	5H-216™	314	323	305	17	57
NuTech/G2 Genetics	3F-513™	309	315	303	17	58
NuTech/G2 Genetics	5X-411™	309	298	320	16	59
Midland	534PRW	308	301	315	16	59
NuTech/G2 Genetics	5H-610™	306	303	308	17	57
NuTech/G2 Genetics	5Z-709™	301	291	311	16	58
Midland	653PRW	301	284	318	17	59
Titan Pro SCI	81A10	300	279	321	17	59
Titan Pro SCI	2M14-SS	297	283	310	17	58
Phillips Seed	PSF082 VT2Pro	296	296	296	17	58
Midland	583PRW	296	278	313	17	58
Titan Pro SCI	TP 36-12 2P	291	286	295	16	59
NuTech/G2 Genetics	5Z-113™	290	294	285	17	59
NuTech/G2 Genetics	5Z-109™	288	276	300	17	59
Phillips Seed	PSF141 SS	288	265	310	17	58
Phillips Seed	PSF143 VT2Pro	287	278	296	18	58
Titan Pro SCI	82A13GLV	285	269	301	16	57
Phillips Seed	789 AG	283	280	285	16	58
Titan Pro SCI	TP 39-11 SS	283	273	293	17	57
Titan Pro SCI	2M13-2P	282	256	307	17	57
Phillips Seed	PSF122 VT3Pro	280	263	297	17	58
Midland	344PRW	279	272	285	16	58
Integrity Hybrids	7752	277	249	304	16	59
Stine Seed Company	9631VT3PRO	275	250	300	16	56
Masters Choice	MCT 6583	274	267	280	17	58
Midland	622PRW	274	260	288	16	59
Stine Seed Company	9739VT3PRO	274	259	289	17	56
Phillips Seed	PSF112 VT3Pro	273	262	284	17	59
NuTech	5B-410™	270	261	279	17	58
Midland	624PRW	268	234	302	17	58
Midland	573PRW	266	241	291	17	58
Masters Choice	MCT 5663	263	267	258	16	57
Stine Seed Company	9732VT3PRO	255	244	266	16	57
Integrity Hybrids	7854	244 <b>289</b>	251 <b>279</b>	237	16	58
Average				298	17	58
Difference required for sig	gnificance (p≤05)	32	37	31	NS	NS

## Northeast Rainfed Corn Hybrid Tests Dixon County - 2013

BRAND	HYBRID	Average Yield (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
NuTech/G2 Genetics	5H-707™	187	21	55
Titan Pro SCI	81A10	179	19	55
NuTech/G2 Genetics	5F-008™	177	21	53
NuTech/G2 Genetics	5H-905™	174	24	54
Titan Pro SCI	2M07-SS	174	22	55
Masters Choice	MCT 5373	173	22	54
NuTech/G2 Genetics	5F-811™	170	23	56
LG Seeds	LG2602VT3PRIB	170	19	54
Masters Choice	MCT 5663	170	22	55
NuTech/G2 Genetics	5X-411™	169	24	57
Titan Pro SCI	TP 39-11 SS	168	23	53
Titan Pro SCI	TP 36-12 2P	165	23	55
Titan Pro SCI	TP 37-06 SS	163	21	56
Titan Pro SCI	TP 39-09 SS	158	23	53
NuTech/G2 Genetics	5Z-709™	152	22	55
NuTech/G2 Genetics	5Z-109™	149	21	54
Average Difference required for sign	ificance (p≤05)	169 NS	22 NS	55 NS

## Northeast Irrigated Corn Hybrid Tests Dixon County - 2013

BRAND	HYBRID	Average Yield (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
Titan Pro SCI	2M07-SS	227	26	60
Titan Pro SCI	TP 37-06 SS	216	25	60
LG Seeds	LG2620VT3PRIB	207	24	57
NuTech/G2 Genetics	5H-806™	200	25	60
NuTech/G2 Genetics	5H-905™	200	24	60
NuTech/G2 Genetics	5H-502™	199	24	60
NuTech/G2 Genetics	5H-903™	197	25	58
NuTech/G2 Genetics	5H-202™	196	20	58
Masters Choice	MCT 5663	196	24	61
Titan Pro SCI	TP 39-11 SS	196	23	60
NuTech/G2 Genetics	5H-805™	192	22	61
Titan Pro SCI	TP 39-09 SS	190	24	57
Masters Choice	MCT 5373	188	23	60
Titan Pro SCI	TP 36-12 2P	185	23	60
Average		199	24	59
Difference required for sign	gnificance (p≤05)	NS	NS	NS

## Northeast Irrigated Corn Hybrid Tests Pierce County - 2013

BRAND	HYBRID	Average Yield (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
Titan Pro SCI	2M07-SS	251	18	57
Titan Pro SCI	TP 39-09 SS	243	19	57
Titan Pro SCI	81A10	238	20	55
NuTech/G2 Genetics	5H-903™	231	19	56
Titan Pro SCI	TP 36-12 2P	230	19	56
Titan Pro SCI	2M11-SS	228	21	56
LG Seeds	LG5524VT3Pro	227	17	55
NuTech/G2 Genetics	5H-202™	226	20	55
NuTech/G2 Genetics	5H-806™	226	19	56
Integrity Hybrids	7752	226	20	57
NuTech/G2 Genetics	5H-502™	224	19	57
NuTech/G2 Genetics	5H-805™	223	19	57
NuTech/G2 Genetics	5H-905™	219	18	58
Titan Pro SCI TP 37-06 SS		218	19	57
Average		229	19	56
Difference required for sig	gnificance (p≤05)	NS	NS	NS

## Northeast Irrigated Corn Hybrid Tests Holt County - 2013

BRAND	HYBRID	Average Yield (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
Fontanelle	7D112RBC	256	14	63
Fontanelle	06V563	248	14	61
NuTech/G2 Genetics	5H-805™	241	13	62
Kruger Seed	KR-4810	240	15	63
Pioneer	P1151	239	15	63
NuTech/G2 Genetics	5H-806™	238	14	62
Fontanelle	09V623	237	14	62
NuTech/G2 Genetics	5H-905™	236	13	63
Fontanelle	7A778RBC	236	14	62
NuTech/G2 Genetics	5H-202™	235	13	64
Fontanelle	7V559RBC	233	15	62
Fontanelle	07A573	230	14	62
Pioneer	P0987AM	230	15	63
Pioneer	P0302CHR	225	14	64
Pioneer	P0365XHR	225	13	63
LG Seeds	LG5524VT3Pro	219	13	61
NuTech/G2 Genetics	5H-903™	217	12	61
Pioneer	P0591HR	216	13	61
NuTech/G2 Genetics	5H-502™	209	13	64
Fontanelle	6A327RBC	207	14	63
Average		231	14	62
Difference required for sig	nificance (p≤05)	NS	1	2

## West Central Irrigated Corn Hybrid Tests Phelps and Red Willow Counties - 2013

BRAND	HYBRID	Average Yield (bu/a)	Phelps (bu/a)	Red Willow (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
NuTech/G2 Genetics	3F-515™	271	246	296	23	56
NuTech/G2 Genetics	5H-216™	266	253	279	22	56
NuTech/G2 Genetics	5Z-709™	261	248	273	19	57
NuTech/G2 Genetics	3F-513™	259	246	272	22	56
NuTech/G2 Genetics	5H-610™	256	265	246	19	57
NuTech/G2 Genetics	5Z-612™	255	265	245	20	57
NuTech/G2 Genetics	5Z-109™	253	249	257	20	57
NuTech/G2 Genetics	5F-811™	252	261	243	21	56
Integrity Hybrids	7752	240	240	-	20	54
Masters Choice	MCT 5663	236	234	237	17	57
NuTech	5B-410™	233	219	247	20	56
NuTech/G2 Genetics	5X-411™	231	230	231	20	57
NuTech/G2 Genetics	5Z-113™	228	212	244	20	56
Stine Seed Company	9739VT3PRO	219	208	229	20	56
Stine Seed Company	9732VT3PRO	218	212	223	20	57
Stine Seed Company	e Seed Company 9631VT3PRO		210	224	18	57
Average		243	237	250	20	56
Difference required for significant	ce (p≤05)	29	24	27	3	1

## West Irrigated Corn Hybrid Tests Goshen County (WY) - 2013

BRAND	HYBRID	Average Yield (bu/a)	Harvest Moisture (%)	Bushel Weight (lb/bu)
NuTech/G2 Genetics	5H-202™	188	17	58
NuTech/G2 Genetics	5H-903™	180	17	51
NuTech/G2 Genetics	5H-905™	153	19	49
NuTech/G2 Genetics	5H-502™	151	17	56
NuTech/G2 Genetics	5H-805™	150	16	55
NuTech/G2 Genetics	5H-806™	144	20	50
Average		161	18	53
Difference required for signific	cance (p≤05)	16.4	1.6	2.3

## NEBRASKA SOYBEAN VARIETY TESTS - 2013 -

#### **CROP PRODUCTION SUMMARY**

According to the *National Agricultural Statistics Service*, there were 4.8 million acres of soybeans planted in Nebraska in 2013. 4.75 million acres were harvested producing around 247 million bushels. The average soybean yield for all production practices in Nebraska for 2013 was 52 bushels per acre (bu/a). Soybean yields from the previous 10 years are reported below.

### Average Nebraska Soybean Yield (Last 10 Years)

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Yield (bu/a)	40.5	46	50.5	50	51	46.5	54.5	53	53	41	52

Source: National Agricultural Statistics Service (http://www.nass.usda.gov)

Detailed information regarding crop progress and history can be obtained from the *National Agricultural Statistics Service* available online at <a href="http://www.nass.usda.gov">http://www.nass.usda.gov</a>.

#### **PROCEDURE**

Eight soybean yield trials were planted at 4 locations in spring of 2013. All entries were privately developed varieties entered by industry representative. Farm entries were selected by the cooperating farmer. Soil type of testing sites and cultural practices applied are shown in Table B. At three locations entries were divided into early and late maturing varieties for convenience in handling. Average performances of entries for key agronomic and quality characteristics are shown in Table C. A list of entries by brand name is shown in Table D, while details about each hybrid are shown on Table E. Names and addresses of entrants and corresponding contact addresses are listed in Table F.

Entries were planted in four-row plots 15 to 35 feet long. Plots were replicated four times in a randomized complete block design. A planting rate of 8.5 seeds per foot in 30-inch rows (148,100 seeds per acre) was used.

Two center rows 10 to 30 feet long were threshed for yield. Reported yields are corrected to 13% moisture. Plots were rated mature when 95% of the pods had reached their mature pod color when maturity is taken. Most often, five to ten days of drying weather are required after "maturity" before the soybeans have less than 15% moisture.

Protein and oil content is reported on a 13% moisture basis and will appear lower than many reported figures. Conversions can be made to 0% by multiplying the protein or oil by 1.13. Estimated Processed Value (EPV) is calculated from the protein and oil content from the Chicago Board of Trade prices for soybean oil (\$0.519/lb) and 48% protein soybean meal (\$0.16/lb). EPV is calculated on an acre basis by multiplying the yield (bu/acre) by the EPV/bu.

#### **PERFORMANCE**

Performance of entries cannot be measured with absolute accuracy in one season because of variations in moisture, soil fertility and other factors. Also, most fields contain some spatial

variability. Because of the many sources of variability, small yield differences have little significance. Differences required for significance are shown in each table at the 5% level. This means that differences this great would be expected through chance alone in 1 of 20 trials. A simple way of thinking of these differences is that if all the plots had been the same variety that would be the difference that would have been measured. Many soybean varieties have similar yield potentials. Early maturing varieties are favored in some seasons and later maturing varieties in others. Zone averages and period-of-years averages provide a measure of performance over a range of environmental conditions.

Period-of-years data for varieties include two, and three-year averages. It should be noted that with the rapid development and turnover of varieties, very few varieties have more than one year averages. We encourage you to use data from many sources in comparing soybean varieties. The Nebraska Cooperative Extension has developed two NebGuides to assist you in choosing new soybean varieties. The titles are *Using Variety Test Data to Choose Soybean Varieties Part 1 and Part 2*. These are available at your local Extension office.

#### RESULTS AND MANAGEMENT AT INDIVIDUAL LOCATIONS

#### **East/South Central District**:

Four tests (two sets of early and late varieties) were planted at two locations in Clay, Furnas, and Saunders Counties:

- The Clay County irrigated early and late tests were planted on May 21<sup>st</sup>. This site was abandoned due to hail damage and was not harvested.
- The Saunders County irrigated tests were planted on May 22<sup>nd</sup> into a conventionally tilled field. On April 27<sup>th</sup> Authority First was applied to the trial site. On June 7<sup>th</sup> Roundup was applied for weed control. No fertilizer was applied. This test was harvested October 8<sup>th</sup> with the 5 early maturing entries averaging 70 bu/a and the 15 late maturing entries averaging 71 bu/a.

#### **Southeast District:**

There were two tests (early set and late set) at one locations in Saline:

• The Saline County rainfed test was planted May 23<sup>rd</sup> and harvested October 8<sup>th</sup>. This site utilized a no-till system and was planted into corn residue. The early maturing test had 9 entries and averaged 53 bushels per acre. The late maturing test had 12 entries and averaged 54 bushels per acre. There was no fertilizer applied to this field. Herbicide applications consisted of Authority PRE, Roundup+2,4-D burn down, and Roundup POST.

#### **Northeast District:**

Two tests were planted Dixon County.

- The Dixon County rainfed late set test was planted May 28<sup>th</sup> and harvested on October 28<sup>th</sup> with an average yield of 29 bu/a for 6 early entries and 50 bu/a. There was no fertilizer applied to this field. Herbicide applications consisted of 25 oz Durango 5.4 and 8 oz Targa.
- The Dixon County irrigated late set test was planted May 29<sup>th</sup> and harvested on November 5<sup>th</sup> with an average yield of 51 bu/a. There was no fertilizer applied to this field. Herbicide applications consisted of 32 oz Durango and 12 oz FusiladeDx AMS INIS.

## Table A. Locations, Cooperators, Planting and Harvest Dates of Nebraska Soybean Test Plots

1 4:	continu Congretor Condition Meturity		D	ate	1 -4!41-	Longitudo		
Location	Cooperator	Condition	Maturity	Planted	Harvested	Latitude	Longitude	
East / South Central								
Clay County	UNL South Central Res & Ext Center; Harvard, NE	Irrigated	Early and Late		Data lost due	e to hail damag	re	
Saunders County	UNL Agricultural Res & Dev Center; Ithica, NE	Irrigated	Early and Late	5/22/2013	10/18/2013	41.16276	-96.41133	
Southeast District								
Saline County	Dennis Broz; Wilber, NE	Rainfed	Early and Late	5/23/2013 10/8/2013		40.43695	-97.05066	
Northeast District								
Dixon County	Haskell Ag Lab; Concord, NE	Rainfed	Early and Late	5/28/2013	10/28/2013	42.37990	-96.95516	
Dixon County	Haskell Ag Lab; Concord, NE	Irrigated	Early and Late	5/29/2013	11/5/2013	42.38964	-96.95371	

## Table B. Soil Type and Cultural Practices at Soybean Trial Sites

Location	Condition	Soil Type	Tillage	Previous Crop	Fertilizer	Herbicide
East / South Central						
Saunders County	Irrigated	Tomek silt loam	Conventional	Wheat	None	Authority First; Round-up
Southeast District						
Saline County	Rainfed	Crete silt loam	No-till	Corn	None	Authority PRE; Round-up+2,4- D Burndown; Roundup POST
Northeast District						
Dixon County	Rainfed	Alcester silt loam	No-till	Corn	None	25oz Durango 5.4; 8oz Targa
Dixon County	Irrigated	Alcester silt loam	No-till	Corn	None	32oz Durango; 12oz FusiladeDX AMS INIS

## Table C. Average Performance of Soybean Entries at Each Test Location

Test	Entries	Yield (bu/a)	Bushel Weight (lb/bu)	Plant height (inch)	Seed size (grain/lb)	Grain Protein (%)	Grain Oil (%)	EPV (\$/bu)
East/South Central								
Saunders Early (Irrigated)	5	70	54	38	2966	34.0	21.0	14
Saunders Late (Irrigated)	15	71	55	41	3064	34.0	19.0	14
Southeast District								
Saline Early (Rainfed)	9	53	55	32	3205	34.7	19.6	13.6
Saline Late (Rainfed)	12	54	55	36	3602	34.6	19	13.5
Northeast District								
Dixon Rainfed	7	50	66	39	2945	35.9	18.4	12.7
Dixon Irrigated	8	51	64	39				

## Table D. Soybean Entrant Brand and Hybrids **Overview 2013**

Brand	Hybrids Entered
Midland Genetics	06V563, 07A573, 09V623, 6A327RBC, 7A778RBC, 7D112RBC, 7V559RBC
Phillips Seed Farms	7752, 7854
Stine Seed Company	24RD03, 26RD02, 29RD22, 32RE02
Titan Pro SCI	27M32, 29M23, 31M23, 33M22, 35M12, 37M21
Willcross	RY2321N, RY2373N, RY2393N

## Table E. Soybean Entry Brand, Hybrid, and Technology Details

Brand	Variety		Colo	r		Maturity	Phyto Gene	SCN
Brana	Varioty	Flower	Pubesc	Pod	Hilum	Group	i nyto ocno	00.11
Midland	2983NR2					2.9		R3, MR14
Midland	3423NR2					3.4		R3, MR14
Midland	3633NR2					3.6		R3, MR14
Midland	3824NRS2					3.8		R3, MR14
Midland	3884NR2					3.8		R3, R14
Midland	3983NR2					3.9		R3, MR14
Phillips Seed	321 NR2Y	Р	G	BR	IB	3.2	Rps 1c 9	R2Y, SCN
Phillips Seed	322 NR2Y	Р	G	BR	IB	3.2	HRps3a/1k9	R2Y, SCN
Phillips Seed	345 NR2Y	Р	G	BR	BL	3.4	Rps 1c 8	R2Y, SCN
Phillips Seed	354 RS	Р	G	BR	IB	3.5	Rps 1c 8	RR,STS
Phillips Seed	365 NR2Y	Р	G	BR	IB/BU	3.6	NG 9	R2Y, SCN
Phillips Seed	369 NRS	Р	G	BR	IB	3.6	Rps 1c 9	RR,STS,SCN
Phillips Seed	388 NR2Y	Р	LT	BR	BL	3.8	Rps 1c 8	R2Y, SCN
Stine Seed	24RD03	Р	LT		BR	2.4		
Stine Seed	26RD02	Р	G		BF	2.6		
Stine Seed	29RD22	Р	LT		BL	2.9		Resistant
Stine Seed	32RE02	Р	G		IB	3.2	Rps 1k	Resistant
Titan Pro SCI	27M32	W	G	BR	BU	2.7	1c	
Titan Pro SCI	29M23	Р	G	BR	IB	2.9	1c	
Titan Pro SCI	31M23	Р	G	BR	IB	3.1	1c	
Titan Pro SCI	33M22	Р	Т	BR	BL	3.3	1k	
Titan Pro SCI	35M12	Р	G	BR	IB	3.5	1c	
Titan Pro SCI	37M21	Р	G	BR	IB	3.7	1c	
Willcross	RY2321N	Р	G			3.2	c 1.5	PI88788
Willcross	RY2373N	Р	T			3.7	c 2.4	PI88788
Willcross	RY2393N	Р	LT			3.9	a 1.8	PI88788

### KEY:

SCN = Soybean Cyst Nematode
PRR = Phytophthora root rot
NG = no gene
l
Hilum Color
BL = black
IB = imperfect black
BU = buff
BR = brown
Y = yellow
G = gray
M = mixed
Flower Color
P = purple
W = white
M = mixed
Pubescense Color
G = gray
o ,
T = tawny
LT = light tawny

## Table F. Nebraska Soybean Performance **Tests Entrants**

Brand	Address	Contact	Phone	Website
Midland Genetics	Sylvester Ranch Inc. 1906 Kingman Rd Ottawa, KS 66067	Clyde Sylvester	800-819-7333	midlandgenetics.com
Phillips Seed	980 Hwy 15 Hope KS 67451	Matt Wilber	785-844-2171	phillipsseed.com
Stine Seed Company	22255 Laredo Trail Adel, IA 50003	Chad Kuehl	308-737-8105	stineseed.com
Titan Pro SCI	1301 South 24th St Clear Lake, IA 50428	Marc Neuman	641-529-6101	titanprosci.com
Willcross Seed	P.O.Box 667 4564 US Hwy 169 King City, MO 64463	Jennifer Hass	660-853-8105	willcrossseed.com



## Southeast Early Maturing Soybean Variety Test 2013 - Saline County

Brand	Variety	Yield (bu/a)	Bushel Weight (lb/bu)	Seed size (grain/lb)	Grain Protein (%)	Grain Oil (%)	Plant height (inch)
Titan Pro SCI	TP-31R13	61	55	3160	34.5	20.0	30
Titan Pro SCI	TP-29R03	56	55	3150	34.1	20.1	33
Midland	2983NR2	55	55	2900	36.2	18.9	31
Phillips Seed	322 NR2Y	53	55	3110	33.9	19.7	33
Titan Pro SCI	33M22	53	55	3240	34.0	19.3	34
Phillips Seed	321 NR2Y	52	55	3410	35.5	19.2	34
Midland	3423NR2	51	56	3870	34.2	19.0	34
Titan Pro SCI	27M32	41	53	2940	35.0	20.8	27
Average of All Entries		53	55	3223	35	20	32
Difference required for sig	nificance 5%	9	0.4	493	0.9	2.3	1
			Two	year averag	e 2012-2013		
Phillips Seed	322 NR2Y	55	55	3110	34.1	19.6	
Phillips Seed	321 NR2Y	53	55	3410	35.3	18.7	
Average		54	55	3260	35	19	

Southeast Late Maturing Soybean Variety Test 2013 - Saline County

			•			
Varioty	Yield	Bushel	Seed size	Grain	Grain	Plant
variety	(bu/a)	Weight	(grain/lb)	Protein (%)	Oil (%)	height
3884NR2	62	55	3810	33.0	19.8	33
365 NR2Y	57	55	3840	35.3	18.8	40
35M12	57	55	3410	35.3	19.0	35
3633NR2	56	55	3880	34.8	18.6	34
RY2393N	53	56	4010	35.5	17.8	36
37M21	53	56	3220	35.0	18.6	36
3983NR2	52	55	3730	33.4	19.9	38
3824NRS2	52	55	3450	36.1	18.5	36
RY2373N	51	55	3280	33.1	19.9	34
354 RS	50	56	3570	35.0	18.5	39
345 NR2Y	49	55	3370	34.8	18.8	34
	54	55	3597	35	19	36
significance 5%	6	1	425	0.7	0.9	1
		Two	year averag	e 2012-2013		
365 NR2Y	56	57	3840	35	18.9	
	365 NR2Y 35M12 3633NR2 RY2393N 37M21 3983NR2 3824NRS2 RY2373N 354 RS 345 NR2Y	Variety         (bu/a)           3884NR2         62           365 NR2Y         57           35M12         57           3633NR2         56           RY2393N         53           37M21         53           3983NR2         52           3824NRS2         52           RY2373N         51           354 RS         50           345 NR2Y         49           significance 5%         6	Variety         (bu/a)         Weight           3884NR2         62         55           365 NR2Y         57         55           35M12         57         55           3633NR2         56         55           RY2393N         53         56           37M21         53         56           3983NR2         52         55           3824NRS2         52         55           RY2373N         51         55           354 RS         50         56           345 NR2Y         49         55           significance 5%         6         1	Variety         Yield (bu/a)         Bushel Weight (grain/lb)         Seed size Weight (grain/lb)           3884NR2         62         55         3810           365 NR2Y         57         55         3840           35M12         57         55         3410           3633NR2         56         55         3880           RY2393N         53         56         4010           37M21         53         56         3220           3983NR2         52         55         3730           3824NRS2         52         55         3450           RY2373N         51         55         3280           354 RS         50         56         3570           345 NR2Y         49         55         3370           54         55         3597           significance 5%         6         1         425	Variety         Yield (bu/a)         Bushel (grain/lb)         Seed size (grain/lb)         Grain (%)           3884NR2         62         55         3810         33.0           365 NR2Y         57         55         3840         35.3           35M12         57         55         3410         35.3           3633NR2         56         55         3880         34.8           RY2393N         53         56         4010         35.5           37M21         53         56         3220         35.0           3983NR2         52         55         3730         33.4           3824NRS2         52         55         3450         36.1           RY2373N         51         55         3280         33.1           354 RS         50         56         3570         35.0           345 NR2Y         49         55         3370         34.8           54         55         3597         35           significance 5%         6         1         425         0.7	Variety         Yield (bu/a)         Bushel (bu/a)         Seed size (grain/lb)         Grain (Protein (%))         Grain (%)           3884NR2         62         55         3810         33.0         19.8           365 NR2Y         57         55         3840         35.3         18.8           35M12         57         55         3410         35.3         19.0           3633NR2         56         55         3880         34.8         18.6           RY2393N         53         56         4010         35.5         17.8           37M21         53         56         3220         35.0         18.6           3983NR2         52         55         3730         33.4         19.9           3824NRS2         52         55         3450         36.1         18.5           RY2373N         51         55         3280         33.1         19.9           354 RS         50         56         3570         35.0         18.5           345 NR2Y         49         55         3370         34.8         18.8           54         55         3597         35         19           significance 5%         6



## East Central Early Maturing Irrigated Soybean Variety Test 2013 - Saunders County

Brand	Variety	Yield	Bushel	Seed size	Grain	Grain Oil	Plant
Bianu	variety	(bu/a)	1 / 0 (0 /		Protein	(%)	height
Stine Seed Company	26RD02	72	54	2930	34.0	20.5	38
Stine Seed Company	24RD03	70	54	2960	34.4	19.4	36
Titan Pro SCI	27M32	69	54	2890	34.0	20.7	35
Titan Pro SCI	TP-29R03	69	55	2880	34.6	19.6	42
Stine Seed Company	29RD22	69	54	3170	34.3	20.2	39
Average of All Entries		70	54	2966	34	20	38
Difference required for signif	icance 5%	NS	0.6	NS	NS	0.6	4

## East Central Late Maturing Irrigated Soybean Variety Test 2013 - Saunders County

Brand	Variety	Yield (bu/a)	Weight (lb/bu)	Seed size (grain/lb)	Protein (%)	Grain Oil (%)	height (inch)
Stine Seed Company	32RE02	81	56	3880	33.6	20.0	32
Titan Pro SCI	TP-31R13	76	55	3110	34.6	19.4	40
Titan Pro SCI	35M12	72	55	2950	34.6	19.4	44
Phillips Seed	322 NR2Y	72	55	2970	34.6	19.7	39
Phillips Seed	363 NR2YSE	71	56	2780	33.4	20.0	44
Phillips Seed	369 NRS	71	55	2950	34.2	20.2	40
Titan Pro SCI	37M21	71	55	2760	34.4	19.3	44
Phillips Seed	345 NR2Y	71	55	2920	34.2	19.3	42
Phillips Seed	321 NR2Y	70	56	3140	34.9	18.7	43
Midland	3423NR2	70	55	3130	34.1	19.2	42
Midland	3884NR2	69	55	3160	33.3	19.9	39
Willcross	RY2321N	68	55	3150	34.9	18.6	42
Midland	3824NRS2	68	56	3060	35.3	18.8	43
Titan Pro SCI	33M22	66	55	2960	34.6	18.9	44
Midland	3633NR2	65	55	3030	34.0	19.6	42
Average of All Entries		71	55	3063	34	19	41
Difference required for signi	ficance 5%	11	1	468	0.4	0.4	3
			Two	o years avera	ge 2012-20	13	
Phillips Seed	322 NR2Y	71	55.4	2970	34.9	19.2	
Phillips Seed	321 NR2Y	69	55.9	3140	35.3	18.1	
Phillips Seed	345 NR2Y	69	55.1	2920	34.6	18.8	
Average		69	55	3010	34.9	18.7	

## Northeast Late Maturing Soybean Variety Test 2013 - Dixon County

Brand	Variety	Yield (bu/a)			Bushel Weight	Seed size	Grain Protein	Grain	Plant height
Diana	varioty	Average	Rainfed	Irrigated	(lb/bu)	(grain/lb)	(%) O	Oil (%)	(inch)
Titan Pro SCI	TP-31R13	55	57	54	66	2960	36.0	18.5	39
Titan Pro SCI	27M32	54	53	55	65	3040	35.8	19.0	35
Titan Pro SCI	33M22	52	49	56	66	3010	36.0	18.4	41
Titan Pro SCI	35M12	51	51	50	65	2890	35.8	18.4	41
Titan Pro SCI	TP-29R03	48	47	48	64	2950	36.0	18.3	42
Titan Pro SCI	37M21	45	44	46	64	2910	35.5	18.1	42
Average of All Entries		51	50	51	65	2960	35.9	18.4	40
Difference required for	significance 5%	5	6	6	NS	NS	NS	NS	2.4

## Western Nebraska Sunflower Variety (Confection) Test – 2013 Cheyenne County Dryland

Brand	Hybrid	Yield* (lbs/a)	Bushel Weight (lbs/bu)	Flowering in August	Plant Height (inches)	Seed Size >22/64 %	Seed Size >20/64 %
Nuseed Global	NHW 12731	1026	22	17	70	12%	39%
Nuseed Global	NHW 735	984	21	17	70	11%	42%
Nuseed Global	NHW 12703	970	21	17	70	9%	47%
Nuseed Global	5009	896	20	17	69	15%	28%
Nuseed Global	X98578	842	20	17	70	9%	39%
Nuseed Global	NHW734	764	21	17	70	8%	40%
Nuseed Global	NHW 12806	750	20	17	69	12%	26%
Nuseed Global	NHW 12774	708	20	17	69	12%	40%
Nuseed Global	NHW 12810	684	21	17	70	13%	39%
Ave	erages of All Entries	847	213	17	70	11.5	38
Difference req	uired for sig. at 5%	128	0.7	NS	1.7	9	10

<sup>\*</sup>Adjusted for 10% moisture

Site: High Plains Ag. Lab (near Sidney, NE)

Planted: 6/10/2013 Harvested: 11/20/2013 Previous crop: Wheat Fertilizer: 40 lbs N

**Herbicide:** 2 Pints Prowl H2O, 2.5 oz Spartan Pre Plant



## Western Nebraska Sunflower Variety (Oil) Test – 2013 Cheyenne County Dryland

Brand	Hybrid	Oil Type*	Yield** (lbs/a)	Bushel Weight (lbs/a)	O	Plant Height (inches)
Syngenta	3845	НО	1530	24	8	67
Mycogen	8N668S	NS	1477	25	8	67
Seeds 2000	Torino X9978	NS	1379	25	8	66
Seeds 2000	NHK12M010	НО	1379	23	8	67
Syngenta	3158 NS/CL/DM	NS	1361	24	8	67
Winfield	548CL	NS	1308	24	8	67
Mycogen	8H449CLDM	НО	1249	25	8	68
Mycogen	8N510	NS	1133	25	8	69
Winfield	13-86E	NS	1119	24	8	69
Winfield	13-652CL	НО	1118	23	8	68
Winfield	13-59CL	NS	1111	23	8	68
Mycogen	8N421CLDM	NS	1067	21	8	68
Seeds 2000	NLK12M008	NS	1057	23	8	67
Winfield	460E	NS	1055	25	8	67
Winfield	13-52E	NS	1047	23	7	69
Syngenta	3733 NS/DM	NS	1036	24	8	69
Winfield	559CL	NS	1017	25	8	68
Winfield	13-08CL	НО	936	23	8	68
Winfield	432E	NS	695	24	8	68
Av	verages of All Entries		1162	24	8	68
Difference re	quired for sig. at 5%		207	1	1	2

<sup>\*</sup>C=Confection; NS = NuSun; HO - High Oleic; T = Traditional

Site: High Plains Ag. Lab (near Sidney, NE)

Planted: 6/20/2013 Harvested: 10/30/2013 Previous crop: Wheat Fertilizer: 45 lbs N

**Herbicide:** 2 Pints Prowl H2O, 2.5 oz Spartan Pre Plant

<sup>\*\*</sup>Adjusted for 10% moisture

## Western Nebraska Sunflower Variety (Confection) Test – 2013 Cheyenne County Irrigated

Brand	Hybrid	Yield* (lbs/a)	Bushel Weight (lbs/bu)	Flowering in August	Height (inches)	Seed Size >22/64 %	Seed Size >20/64 %
Nuseed Global	NHW734	1660	22	10	70	14%	48%
Sunopta/Dahlgren	9592CL+	1658	22	12	70	14%	48%
Nuseed Global	X98578	1657	20	8	70	10%	49%
Nuseed Global	NHW 735	1657	23	10	70	13%	48%
Seeds 2000	NSK12M048	1657	21	8	70	15%	47%
Seeds 2000	Jaguar	1656	21	8	70	11%	46%
Sunopta/Dahlgren	9521	1656	21	10	70	14%	46%
Sunopta/Dahlgren	9579	1656	21	8	70	23%	47%
Nuseed Global	5009	1655	21	10	70	11%	46%
Seeds 2000	X4334	1652	21	8	70	13%	49%
Seeds 2000	Jagaur II	1501	22	12	70	18%	45%
Sunopta/Dahlgren	9530CL	1501	22	10	69	23%	47%
Nuseed Global	NHW 12731	1497	22	8	69	8%	45%
Nuseed Global	NHW 12806	1344	21	8	69	16%	48%
Nuseed Global	NHW 12774	1339	21	8	71	14%	45%
Nuseed Global	NHW 12810	1339	22	8	70	16%	49%
Nuseed Global	NHW 12703	1337	22	12	69	15%	48%
Seeds 2000	Jaguar XL	1337	22	9	70	15%	47%
Sunopta/Dahlgren	9599	1336	22	8	70	24%	50%
Averages	s of All Entries	1531	21	9	70	16	47
Differences required		105	1	1	2	15	4

<sup>\*</sup>Adjusted for 10% moisture

Site: High Plains Ag. Lab (near Sidney, NE)

Planted: 6/10/2013 Harvested: 11/24/2013 Previous crop: Wheat Fertilizer: 40 lbs N

**Herbicide:** 2 Pints Prowl H2O, 2.5 oz Spartan Pre Plant



## Western Nebraska Sunflower Variety (Oil) Test – 2013 Cheyenne County Irrigated

Brand	Hybrid	Oil Type*	Yield** (lbs/a)	Bushel Weight (lbs/bu)	Flowering in August	Plant Height (inches)
Syngenta	3733 NS/DM	NS	1947	24	16	71
Seeds 2000	NLK12M008	NS	1924	23	15	70
Seeds 2000	CamaroII X6878	NS	1897	23	15	70
Seeds 2000	Falcon	NS	1874	24	16	69
Seeds 2001	Torino X9978	NS	1866	23	14	17
Winfield	13-652CL	НО	1860	23	14	60
Winfield	13-86E	NS	1859	23	16	75
Syngenta	3845	НО	1839	23	14	70
Winfield	432E	NS	1629	23	14	70
Mycogen	8N510	NS	1610	24	16	70
Winfield	548CL	NS	1581	24	16	72
Mycogen	8H449CLDM	НО	1572	23	17	70
Winfield	13-59CL	NS	1570	24	15	70
Seeds 2000	CobaltII X6822	НО	1568	24	16	71
Mycogen	8N421CLDM	NS	1565	23	14	70
Winfield	13-52E	NS	1565	24	14	68
Mycogen	8N668S	NS	1556	24	14	70
Winfield	559CL	NS	1553	23	14	70
Syngenta	3158 NS/CL/DM	NS	1542	23	17	70
Seeds 2000	NHK12M010	НО	1537	24	14	70
Winfield	13-08CL	НО	1520	23	15	71
Winfield	460E	NS	1504	22	16	70
	<b>Averages of All Entries</b>		1679	23	15	70
Differences	required for sig. at 5%		100	1	3	1

<sup>\*</sup>C=Confection; NS = NuSun; HO - High Oleic; T = Traditional

Site: High Plains Ag. Lab (near Sidney, NE)

Planted: 6/14/2013 Harvested: 11/7/2013 Previous crop: Wheat Fertilizer: 45 lbs N

**Herbicide:** 2 Pints Prowl H2O, 2.5 oz Sparton Pre Plant

<sup>\*\*</sup>Adjusted for 10% moisture

## Western Nebraska Sunflower Variety (Oil) Test – 2013 Cheyenne County Dryland

Name	Hybrid	Oil Type*	Yield** (lbs/a)	Bushel Weight (lbs/bu)
Winfield	548CL	NS	1172	20
Mycogen	8N668S	NS	1167	21
Winfield	432E	NS	1166	20
Syngenta	3158 NS/CL/DM	NS	1164	20
Seeds 2000	NLK12M008	NS	1153	20
Syngenta	3845	НО	1150	21
Seeds 2000	NHK12M010	НО	1138	20
Winfield	13-652CL	НО	1115	20
Winfield	559CL	NS	1079	21
Seeds 2001	Torino X9978	NS	1056	22
Winfield	13-08CL	НО	907	21
Winfield	13-59CL	NS	898	20
Winfield	460E	NS	892	21
Mycogen	8N510	NS	891	21
Mycogen	8N421CLDM	NS	890	20
Syngenta	3733 NS/DM	NS	877	21
Winfield	13-86E	NS	870	21
Winfield	13-52E	NS	859	22
Mycogen	8H449CLDM	НО	847	20
-	<b>Averages of All Entries</b>		1015	21
Difference	e required for sig. at 5%		104	1

<sup>\*</sup>C=Confection; NS = NuSun; HO - High Oleic; T = Traditional

**Site:** Farmers Field at Grant, NE

Planted: 6/20/2013 Harvested: 11/26/2013 Previous crop: Wheat

**Previous crop:** Whea **Fertilizer:** None

**Herbicide:** 2 Pints Prowl H2O, 2.5 oz Spartan Pre Plant

<sup>\*\*</sup>Adjusted for 10% moisture

## Western Nebraska Pea Variety Test – 2013 Cheyenne County

Brand	Variety	Yield* (lbs/a)	Bushel Weight (lb/bu)	Flowering Date (June)	Plant height (inch)
Meridian Seeds, ND	Agassiz	1852	60	14	19
Pulse USA, ND	DS Admiral	1846	61	14	18
USDA-ARS, Pullman	PS08101004	1779	58	14	18
USDA-ARS, Pullman	Universal	1707	59	15	18
Northern Great Ag.	Salamanca	1690	59	15	18
USDA-ARS, Pullman	PS07100925	1681	59	15	14
USDA-ARS, Pullman	PS08101022	1613	61	15	15
Meridian Seeds, ND	Jetset	1579	60	14	19
Pulse USA, ND	SW Midas	1558	60	14	17
Pulse USA, ND	Nette	1554	61	15	19
Legume Logic, ND	Spider	1552	60	15	20
Meridian Seeds, ND	Thunderbird	1547	60	15	20
Northern Great Ag.	K2	1513	58	14	18
USDA-ARS, Pullman	Carousel	1470	58	14	17
USDA-ARS, Pullman	PS03101822	1443	58	17	15
Legume Logic, ND	Bridger	1392	59	14	17
Pulse USA, ND	Korando	1365	61	14	16
Northern Great Ag.	Navarro	1287	51	14	17
A	Averages of All Entries	1579	59	15	18
Difference required	for significance at 5%	300	5	1	3

## Nebraska Panhandle Proso Millet Variety Test – 2013 Cheyenne County

Variety	Yield* (lbs/a)	Bushel Weight (lbs/bu)	Mositure at harvest (%)
177-9-13	1883	52	14
182-5-18	1801	52	14
5029	1369	51	14
Earlybird	1332	52	14
Dawn	1325	53	14
Sunrise	1313	50	14
5106wx	1289	52	14
172-2-B	1278	53	14
5045wx	1236	52	14
174-7-13	1205	52	14
5094	1203	50	14
177-3-13	1165	54	14
Plateau	1155	53	14
182-4-24	1130	52	14
Horizon	1116	52	14
5034wx	1105	51	14
5095wx	1091	51	15
5059wx	1038	52	14
Ames 12696	1032	52	14
5016	1031	52	14
Sunup	1030	52	14
5011wx	1022	51	14
5014	1018	52	14
5086	1017	52	14
5002wx	982	51	14
5061wx	933	51	14
177-8	932	52	14
Huntsman	923	51	14
5087wx	915	51	14
5100	915	53	14
5104wx	896	51	15
Averages of All Entries	1151	52	14
Difference required for sig. at 5%	49	2	1

<sup>\*</sup>Adjusted for 12% moisture