

# OKLAHOMA CORN PERFORMANCE TRIALS, 2012



## PRODUCTION TECHNOLOGY CROPS

OKLAHOMA COOPERATIVE EXTENSION SERVICE DEPARTMENT OF PLANT AND SOIL SCIENCES DIVISION OF AGRICULTURAL SCIENCES & NATURAL RESOURCES OKLAHOMA STATE UNIVERSITY

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#### TRIAL OBJECTIVES AND PROCEDURES

Each year the Oklahoma Cooperative Extension Service conducts corn performance trials in Oklahoma. These trials provide producers, extension educators, industry representatives, and researchers with information on corn hybrids marketed in Oklahoma. Company participation was voluntary, so some hybrids marketed in Oklahoma were not included in the test. Company or brand name, entry designation, plant characteristics, maturity information, and trial locations were provided by the companies and were not validated by OSU; therefore, we strongly recommend consulting company representatives for more detailed information regarding these traits and disease resistance ratings (Table 1).

Irrigated test plots were established at the Oklahoma Panhandle Research and Extension Center (OPREC) near Goodwell and the Joe Webb farm near Guymon. Three rainfed trials were planted in north central Oklahoma near Burlington, Enid, and Ponca City. Fertility levels, herbicide use, and soil series (when available) are listed with data. Individual plots were two 25-foot rows seeded at a target population also listed with the data. Plots were trimmed to 20 feet prior to being harvested to determine grain yield. A separate ensilage trial was planted with 10 feet of one row harvested to determine yield. Experimental design for all locations was a randomized complete block with four replications. Grain yield is reported consistent with U.S. No. 1 grade corn (56 lbs/bu and adjusted to moisture content of 15.5%). Corn ensilage was harvested at later than optimum in 2012 with an average moisture content of 45.6% and production is reported as tons/ac adjusted to 65% moisture.

#### **GROWING CONDITIONS**

Drought affected corn state-wide. Adequate soil moisture was available at planting for all locations (Fig. 1). Planting started in early March in the body of the state with short delays due to precipitation. In the panhandle planting started early and continued with interruptions due to precipitation until completed. Minimal pre-irrigation was required for irrigated corn in the panhandle for emergence due to rainfall from September 2011 until planting. Temperatures during the growing season were at or above long-term means, but were not as hot as in 2011. panhandle no day was like June 26, 2011, when for most of the high plains temperatures were above 110 degree F°

### **Highlights**

Drought affected corn yield in all of the state. Test weights were light for rainfed sites in north central Irrigated corn Oklahoma. vield with lower volumes was also reduced. The Ponca City location was harvested but yields were from 12 to 33 bu/ac and not reported here. Yields for the Enid and Joe Webb location were exceptional for the climate conditions of 2012

with wind speeds above 30 mph. In 2011 most of the damage and reduced yields to irrigated corn happened on this day. Irrigation well volume again was a critical factor for the yields in the region. Higher volume wells again had the highest yields, although unlike 2011 there were no complete failures in 2012. For the rainfed trials in north central Oklahoma, lack of precipitation limited yields at all locations, but the Ponca City location was the most severely affected. The trial at Ponca City was harvested but is not reported here. The trial received no precipitation during the months of May and June. Yields for the Trial at Burlington were affected by two hailstorms one in May and another

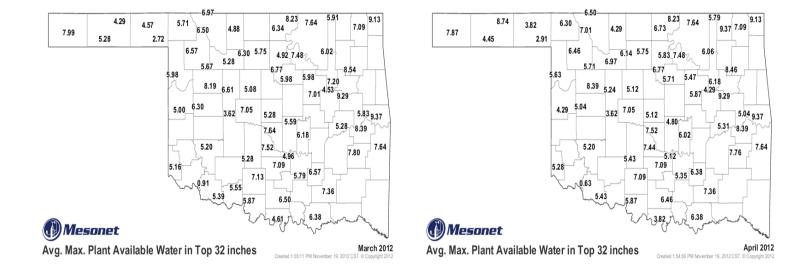
in June. Due to lack of precipitation in late June and July, test weights were severely affected at all north central locations as seen in result tables. With the lower test weights, some producers were not able to market their grain. Limited water and irrigation well problems reduced the yields of the trials at OPREC in 2012. Due to greater well volume, higher yields were obtained at the Joe Webb location (circle with approximately 5.75 gal/min/ac) compared to OPREC (approximately 4.5 gal/min/ac).

#### RESULTS

Grain yield, test weight, harvest moisture, and plant populations for are presented in tables 2 - 6. Least Significant Differences (L.S.D.) are shown at the bottom of each table. Unless two entries differ by at least the L.S.D. shown, little confidence can be placed in one being superior to another. The coefficient of variation (C.V.) is provided as an estimate of the precision of the data with respect to the mean. To provide some indication of yield stability, 2-year means are also provided in tables. Producers interested in comparing hybrids for consistency of yield should consult these.

The following people have contributed to this report by assisting in crop production, data collection, and publication; Roger Gribble, Jeff Bedwell, Tommy Puffinbarger, Donna George, Lawrence Bohl, Jake Baker, Cori Woelk, Cameron Murley, and Craig Chesnut. Their efforts are greatly appreciated.

Figure 1. Average inches of plant available water in Oklahoma for March and April 2012.



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Table 1. Characteristics of Corn Hybrids in Oklahoma Corn Performance Trials, 2012.

Company		Plant Characteristics				Maturity	Trial
Brand Name	Hybrid	SV	SS	SG	EP	Days	Locations
Terral Seed, Inc	Rev <sup>™</sup> 21HR33 <sup>™</sup>	NA	NA	NA	NA	115	All
Terral Seed, Inc	Rev <sup>™</sup> 22BHR43 <sup>™</sup>	NA	NA	NA	NA	115	All
Terral Seed, Inc	Rev <sup>™</sup> 28HR20 <sup>™</sup>	7	7	7	МН	118	All
Terral Seed, Inc	Rev <sup>™</sup> 23RE73 <sup>™</sup>	NA	NA	NA	NA	116	All
Terral Seed, Inc	Rev <sup>®</sup> 28R10 <sup>™</sup>	7	7	7	МН	118	All
Terral Seed, Inc	Rev <sup>®</sup> 25BHR63 <sup>™</sup>	NA	NA	NA	NA	116	All
Terral Seed, Inc	Rev® 26HR50™	3	3	3	MH	116	All
Terral Seed, Inc	Rev® 27HR52™	NA	NA	NA	NA	117	All
Terral Seed, Inc	Rev® 26HR23™	NA	NA	NA	NA	116	All
Terral Seed, Inc	Rev® 27HR83™	NA	NA	NA	NA	117	All
Terral Seed, Inc	Rev® 29HR13™	NA	NA	NA	NA	119	All
Terral Seed, Inc	Rev® 24BHR93™	NA	NA	NA	NA	114	All
Terral Seed, Inc	Rev® 26R60™	7	6	7	M	116	All
Triumph Seed Co. Inc.	1217S	2	3	3	M	112	All
Triumph Seed Co. Inc.	1157X	2	4	3	M	111	All
Triumph Seed Co. Inc.	1725H	3	2	2	MH	117	Pan. Only
Triumph Seed Co. Inc.	7514S	3	3	3	M	114	Pan. Only
Triumph Seed Co. Inc.	1801H	2	2	2	Н	118	Pan. Only
Triumph Seed Co. Inc.	TRX21366H	3	3	3	M	113	Pan. Only
Triumph Seed Co. Inc.	1358H	2	3	2	Н	113	Pan. Only
Triumph Seed Co. Inc.	1329H	3	3	3	M	113	Pan. Only
Triumph Seed Co. Inc.	2288H	3	2	1	Н	122	Pan. Only
CPS Dyna-Gro	D43QV30	1	2	2	M	103	NC only
CPS Dyna-Gro	D48VP93	3	3	4	M	108	NC only
CPS Dyna-Gro	D49VC59	2	2	4	M	109	NC only
CPS Dyna-Gro	D54VP81	3	3	2	M	114	NC only
Hoegemeyer	7644 Hx/LL/RR	5	5	4	M	106	All
Hoegemeyer	7876 Hx/LL/RR/CB	5	4	5	M	108	All
Hoegemeyer	7422 Rw/LL/GT/CB	3	4	3	M	104	All
Hoegemeyer	8389 HXT/LL/RR	5	4	3	Н	113	All
Hoegemeyer	8122 HX/LL/RR	5	4	3	M	110	All

<sup>\*</sup> Plant Characteristics: SV - Seedling Vigor; SS - stalk strength; SG - stay green; EP - ear placement (Low, Medium, High)
Rating scale for above characteristics except ear placement 1 = excellent - 9 = poor

Trial locations: All; all trial locations, Pan.only; Panhandle trials only; NC only; North Central locations only

Table 3. Grain Yield and Harvest Parameters for the Alfalfa county location (Burlington), Oklahoma Corn

Performance Trials, 2012.

Company Brand Name	Hybrid	Maturity	Grain Yield bu/ac	Test Weight lb/bu	Harvest Moisture	Plant Population plants/ac
Hoegemeyer	7644 Hx/LL/RR	106	55	47.2	10.6	26,100
CPS Dyna-Gro	D48VP93	108	52	47.0	6.5	27,700
CPS Dyna-Gro	D49VC59	109	48	47.8	6.7	22,700
CPS Dyna-Gro	D54VP81	114	48	48.8	10.2	26,200
Hoegemeyer	7876 Hx/LL/RR/CB	108	48	48.7	8.9	24,800
Triumph Seed Co. Inc.	1157X	111	45	47.2	6.9	25,400
CPS Dyna-Gro	D43QV30	103	45	46.7	8.7	23,600
Terral Seed, Inc	Rev <sup>™</sup> 22BHR43 <sup>™</sup>	115	44	51.2	11.5	25,200
Hoegemeyer	7422 Rw/LL/GT/CB	104	39	47.4	8.3	19,900
Terral Seed, Inc	Rev <sup>™</sup> 21HR33 <sup>™</sup>	115	34	48.0	8.7	24,900
Terral Seed, Inc	Rev® 25BHR63 <sup>™</sup>	116	31	48.7	10.9	25,200
Triumph Seed Co. Inc.	1217S	112	31	45.6	9.4	24,200
Hoegemeyer	8389 HXT/LL/RR	113	31	50.9	18.1	25,800
Terral Seed, Inc	Rev® 26R60™	116	30	46.9	13.4	26,100
Terral Seed, Inc	Rev® 24BHR93™	114	29	48.9	21.8	23,300
Hoegemeyer	8122 HX/LL/RR	110	29	48.7	14.4	26,100
Terral Seed, Inc	Rev® 27HR52™	117	27	47.5	16.4	25,300
Terral Seed, Inc	Rev® 26HR50™	116	24	45.1	17.4	24,700
Terral Seed, Inc	Rev® 27HR83™	117	24	50.3	15.0	23,000
Terral Seed, Inc	Rev® 26HR23™	116	21	46.9	19.6	28,300
Terral Seed, Inc	Rev <sup>™</sup> 28HR20 <sup>™</sup>	118	20	49.0	19.7	27,400
Terral Seed, Inc	Rev® 28R10 <sup>™</sup>	118	20	47.9	22.3	30,700
Terral Seed, Inc	Rev® 29HR13™	119	18	46.4	7.3	25,200
		Mean	34.4	48.0	12.7	25,300
		CV %	24.9	2.2	20.6	9.1
		L.S.D.	12	1.5	3.7	3,200

Cooperator: Schupbach Farms Soil Series: Pond Creek Silt Loam

No-till: Following soybean in 2011 Soil Test: N: 91 P: 139 K: 831 pH: 6.0

Fertilizer: N: 44 lbs/ac, P: 0, K: 0, 5 gal 10-34-0 in row with planter

Herbicide: 2 qt/ac Cinch ATZ Lite (Preemergence)

Target population: 25,000 plants/ac Planting Date: March 30, 2012 Harvest Date: July 31, 2012

Monthly Rainfall (in.) Apr. May June July **Total** 

2012: 2.88 0.96 2.18 0.65 **6.67** Long term mean: 2.99 4.79 3.83 2.23 **13.81** 

Table 3. Grain Yield and Harvest Parameters for the Grant/Garfield county location (Enid), Oklahoma Corn

Performance Trials, 2012.

Company Brand Name	Hybrid	Maturity	Grain Yield bu/ac	Test Weight lb/bu	Harvest Moisture	Plant Population plants/ac
CPS Dyna-Gro	D54VP81	114	103	51.6	7.3	26,500
Triumph Seed Co. Inc.	1217S	112	101	48.8	6.1	27,600
CPS Dyna-Gro	D43QV30	103	100	48.8	6.3	28,200
Hoegemeyer	7422 Rw/LL/GT/CB	104	100	49.5	6.5	24,300
Terral Seed, Inc	Rev <sup>™</sup> 22BHR43 <sup>™</sup>	115	98	53.6	8.3	25,400
Triumph Seed Co. Inc.	1157X	111	98	48.5	6.3	27,300
CPS Dyna-Gro	D49VC59	109	98	50.4	7.2	28,900
Terral Seed, Inc	Rev <sup>™</sup> 21HR33 <sup>™</sup>	115	95	49.6	6.1	26,400
Hoegemeyer	7876 Hx/LL/RR/CB	108	94	51.5	7.0	24,300
CPS Dyna-Gro	D48VP93	108	93	50.2	6.7	28,400
Hoegemeyer	7644 Hx/LL/RR	106	92	49.7	6.6	27,100
Terral Seed, Inc	Rev® 26R60™	116	91	49.9	12.3	26,700
Hoegemeyer	8389 HXT/LL/RR	113	89	52.8	12.0	24,700
Terral Seed, Inc	Rev® 25BHR63 <sup>™</sup>	116	82	51.1	7.9	24,600
Terral Seed, Inc	Rev <sup>®</sup> 26HR23™	116	82	53.1	13.3	28,500
Terral Seed, Inc	Rev® 27HR83™	117	82	51.0	8.6	26,200
Terral Seed, Inc	Rev® 24BHR93™	114	81	50.9	10.2	26,900
Terral Seed, Inc	Rev <sup>®</sup> 26HR50™	116	80	51.2	12.1	26,100
Hoegemeyer	8122 HX/LL/RR	110	80	51.3	8.3	24,900
Terral Seed, Inc	Rev <sup>®</sup> 28R10 <sup>™</sup>	118	78	52.0	11.2	30,300
Terral Seed, Inc	Rev® 29HR13™	119	78	49.8	9.3	25,800
Terral Seed, Inc	Rev <sup>™</sup> 28HR20 <sup>™</sup>	118	74	51.7	11.9	28,100
Terral Seed, Inc	Rev® 27HR52™	117	73	47.6	8.8	25,900
		Mean	89	50.6	8.7	26,700
		CV %	13.5	2.2	26.3	8.7
		L.S.D.	17	1.6	3.2	3,300

Cooperator: Ed Regier Soil Series: Dale Silt Loam

Strip-Till: Following soybean in 2011 Soil Test: N: 13 P: 58 K: 492 pH: 7.5

Fertilizer: N: 130 lbs/ac, P: 50 lbs P2O5/ac, K: 0, 5 gal 10-34-0 in row with planter

Herbicide: 2 qt/ac Cinch ATZ Lite (Preemergence) +

Target population: 25,000 plants/ac Planting Date: March 30, 2012 Harvest Date: July 31, 2012

Monthly Rainfall (in.) Apr. May June July **Total** 

2012: 7.06 0.36 3.40 0.13 **6.67** 

Long term mean: 2.99 4.86 4.26 2.89 **15.00** 

Table 4. Grain Yield and Harvest Parameters for the Joe Webb location, Oklahoma Corn Performance Trials, 2012.

Company Brand Name	Hybrid	Grain Yield bu/ac	Test Weight lb/bu	Harvest Moisture	Plant Population plants/ac
Triumph Seed Co. Inc.	1358H	288	51.5	17.3	35,000
Terral Seed, Inc	Rev® 26HR23TM	270	60.1	15.5	35,300
Triumph Seed Co. Inc.	1801H	264	53.5	18.8	32,900
Triumph Seed Co. Inc.	1725H	263	54.1	18.2	33,700
Terral Seed, Inc	Rev® 27HR83 <sup>TM</sup>	262	59.5	16.2	32,900
Terral Seed, Inc	Rev <sup>TM</sup> 28HR20 <sup>TM</sup>	260	59.0	17.1	34,500
Hoegemeyer	8389 HXT/LL/RR	259	59.7	16.9	36,400
Hoegemeyer	8122 HX/LL/RR	259	59.3	16.5	33,000
Terral Seed, Inc	Rev <sup>TM</sup> 23RE73 <sup>TM</sup>	256	60.4	16.0	34,400
Terral Seed, Inc	Rev® 24BHR93™	253	58.9	15.3	35,400
Terral Seed, Inc	Rev® 25BHR63 <sup>TM</sup>	250	59.8	16.7	32,900
Terral Seed, Inc	Rev® 29HR13™	248	58.5	16.3	34,300
Triumph Seed Co. Inc.	1329Н	246	54.7	16.4	32,000
Terral Seed, Inc	Rev <sup>TM</sup> 22BHR43 <sup>TM</sup>	243	61.1	15.2	32,300
Terral Seed, Inc	Rev <sup>TM</sup> 21HR33 <sup>TM</sup>	240	58.8	15.1	32,700
Triumph Seed Co. Inc.	7514S	240	56.6	17.3	34,500
Terral Seed, Inc	Rev® 26R60 <sup>TM</sup>	240	59.1	15.8	33,000
Triumph Seed Co. Inc.	2288H	239	56.0	21.5	32,800
Terral Seed, Inc	Rev® 27HR52™	233	57.0	17.1	33,800
Triumph Seed Co. Inc.	1217S	233	57.8	15.2	32,100
Triumph Seed Co. Inc.	TRX21366H	229	57.1	16.2	31,100
Terral Seed, Inc	Rev® 26HR50™	220	59.3	17.4	31,800
Hoegemeyer	7644 Hx/LL/RR	212	59.3	13.2	34,700
Triumph Seed Co. Inc.	1157X	209	56.5	14.9	27,400
Hoegemeyer	7876 Hx/LL/RR/CB	207	60.1	13.8	31,300
Terral Seed, Inc	Rev® 28R10 <sup>TM</sup>	204	59.5	16.1	29,800
Hoegemeyer	7422 Rw/LL/GT/CB	163	57.8	12.3	28,400
	Mean	240	58.0	16.2	32,900
	CV %	9.9	0.9	4.2	8.2
	L.S.D.	34	0.8	1.0	3,800

Cooperator: Joe Webb Soil Series: Pullman Clay Loam

Strip-Till: Following corn in 2011 Soil Test: N: NA P: NA K: NA pH: NA

Fertilizer: N: 225 lbs/ac, P: 40 lbs P2O5/ac, K: 0, 5 gal 10-34-0 in row with planter

Herbicide: 5 oz/ac Balance Flex + 24 oz Traxion + 1 oz Distinct (Preemergence) and 28 oz RT3 + 2 oz Distinct POST

Target population: 28,000 plants/ac for grain and 32,000 plants/ac for ensilage

Planting Date: April 23, 2012 Harvest Date: September 19, 2012

Monthly Rainfall (in.) Apr. May June July Aug **Total** 

2012: 2.28 0.88 2.33 1.95 0.85 **8.29** Long term mean: 1.33 3.25 2.86 2.58 2.28 **12.30** 

Irrigation: 1.50 3.00 9.00 9.00 3.00

Table 5. Grain Yield and Harvest Parameters for the OPREC location, Oklahoma Corn Performance Trials, 2012.

Company Brand Name	Hybrid	Grain Yield bu/ac	Test Weight lb/bu	Harvest Moisture	Plant Population plants/ac
Triumph Seed Co. Inc.	1217S	145	56.9	11.1	24,600
Terral Seed, Inc	Rev® 24BHR93™	142	57.9	12.0	26,700
Terral Seed, Inc	Rev® 27HR83™	141	59.5	14.4	27,900
Hoegemeyer	7644 Hx/LL/RR	138	57.3	11.4	28,300
Terral Seed, Inc	Rev <sup>™</sup> 22BHR43 <sup>™</sup>	137	60.4	14.0	27,000
Terral Seed, Inc	Rev® 26HR50™	137	58.0	16.0	25,400
Terral Seed, Inc	Rev® 27HR52™	126	55.9	11.9	29,400
Triumph Seed Co. Inc.	1157X	126	54.6	11.8	24,900
Hoegemeyer	7876 Hx/LL/RR/CB	125	57.1	10.8	28,900
Triumph Seed Co. Inc.	TRX21366H	121	54.6	11.6	24,400
Triumph Seed Co. Inc.	1358H	121	53.2	13.6	27,400
Terral Seed, Inc	Rev® 25BHR63 <sup>™</sup>	118	59.2	12.6	30,700
Terral Seed, Inc	Rev <sup>™</sup> 23RE73 <sup>™</sup>	111	58.6	14.0	26,800
Hoegemeyer	8122 HX/LL/RR	111	58.7	13.5	27,900
Terral Seed, Inc	Rev <sup>®</sup> 28R10 <sup>™</sup>	110	57.5	13.4	27,000
Terral Seed, Inc	Rev <sup>™</sup> 21HR33 <sup>™</sup>	109	57.3	11.1	28,600
Hoegemeyer	8389 HXT/LL/RR	109	59.9	12.7	26,100
Triumph Seed Co. Inc.	1725H	108	55.7	14.6	29,200
Terral Seed, Inc	Rev® 29HR13™	103	56.9	15.9	28,900
Terral Seed, Inc	Rev® 26R60™	101	56.1	10.8	27,400
Terral Seed, Inc	Rev® 26HR23™	99	59.2	14.2	28,400
Triumph Seed Co. Inc.	7514S	99	55.7	13.5	28,400
Triumph Seed Co. Inc.	2288H	99	56.5	19.6	25,200
Terral Seed, Inc	Rev <sup>™</sup> 28HR20 <sup>™</sup>	96	56.8	12.8	29,100
Hoegemeyer	7422 Rw/LL/GT/CB	96	55.3	10.6	26,400
Triumph Seed Co. Inc.	1329H	94	55.1	12.3	29,500
Triumph Seed Co. Inc.	1801H	88	54.7	15.2	27,900
	Mean	115	57.0	13.2	27,500
	CV %	16.6	1.7	10.3	9
	L.S.D.	27	1.4	1.9	NS

Cooperator: OPREC Soil Series: Gruver Clay Loam (formally Richfield)
Strip-Till: Following wheat double crop sunflower in 2011 Soil Test: N: NA P: NA K: NA pH: NA

Fertilizer: N: 200 lbs/ac, P: 40 lbs P2O5/ac, K: 0, 5 gal 10-34-0 in row with planter

Herbicide: 2.0qt/ac Cinch ATZ Lite (Preemergence) + 1 oz/ac Balance pro Target population: 28,000 plants/ac for grain and 32,000 plants/ac for ensilage

Planting Date: April 18, 2012

Harvest Date: Grain September 10, 2012,

Monthly Rainfall (in.) Apr. May June July Aug **Total** 2012: 2.28 0.88 2.33 1.95 0.85 **8.29** 

Long term mean: 1.33 3.25 2.86 2.58 2.28 **12.30** 

Irrigation: 1.25 1.25 5.00 6.25 1.25

Table 6. OPREC Ensilage Yields for Panhandle Corn Performance Trial, 2011.

Company Brand Name	Hybrid		ELD ns/ac	Plant Population	Harvest Moisture
Diana Name		2012	two-year	plants/ac	%
Triumph Seed Co. Inc.	1157X	23.8	22.2	24,800	48.1
Triumph Seed Co. Inc.	2288H	23.5	20.9	28,300	60.1
Terral Seed, Inc	Rev <sup>™</sup> 28HR20 <sup>™</sup>	19.7	19.9	32,100	36.9
Triumph Seed Co. Inc.	1217S	19.1	19.3	27,200	48.9
Triumph Seed Co. Inc.	1725H	20.1	18.4	28,900	52.9
Triumph Seed Co. Inc.	7514S	19.7	18.3	30,200	47.4
Terral Seed, Inc	Rev® 28R10 <sup>™</sup>	19.3	18.0	29,800	42.8
Terral Seed, Inc	Rev® 27HR52™	19.6	18.0	31,800	44.5
Terral Seed, Inc	Rev® 26R60™	19.3	18.0	30,600	41.3
Terral Seed, Inc	Rev® 26HR50™	18.0	17.0	29,800	48.1
Hoegemeyer	7876 Hx/LL/RR/CB	25.4		31,800	42.3
Hoegemeyer	7644 Hx/LL/RR	21.6		29,600	36.4
Terral Seed, Inc	Rev <sup>™</sup> 22BHR43 <sup>™</sup>	21.2		33,000	49.9
Triumph Seed Co. Inc.	TRX21366H	21.0		31,100	46.5
Terral Seed, Inc	Rev® 24BHR93™	20.4		27,400	46.1
Hoegemeyer	8389 HXT/LL/RR	20.0		31,100	49.0
Triumph Seed Co. Inc.	1329H	19.9		31,400	45.8
Hoegemeyer	8122 HX/LL/RR	19.7		31,700	54.6
Terral Seed, Inc	Rev <sup>™</sup> 23RE73 <sup>™</sup>	19.6		30,600	47.1
Triumph Seed Co. Inc.	1358H	19.6		29,600	47.9
Terral Seed, Inc	Rev® 26HR23™	19.5		31,800	46.3
Triumph Seed Co. Inc.	1801H	19.5		28,900	43.6
Terral Seed, Inc	Rev® 25BHR63 <sup>™</sup>	19.2		27,900	40.0
Terral Seed, Inc	Rev® 29HR13™	19.0		33,300	47.7
Hoegemeyer	7422 Rw/LL/GT/CB	17.9		29,200	42.7
Terral Seed, Inc	Rev® 27HR83™	17.6		33,800	45.6
Terral Seed, Inc	Rev <sup>™</sup> 21HR33 <sup>™</sup>	16.0		27,700	28.0
	Mean	20.0	19.0	30,100	45.6
	CV %	14.3	11.8	13	12.9
	L.S.D.	4.7	2.6	NS	0.1

Cooperator: OPREC
Soil Series: Gruver Clay Loam (formally Richfield)
Strip-Till: Following wheat double crop sunflower in 2011
Soil Test: N: NA P: NA K: NA pH: NA

Fertilizer: N: 200 lbs/ac, P: 40 lbs P2O5/ac, K: 0, 5 gal 10-34-0 in row with planter

Herbicide: 2.0qt/ac Cinch ATZ Lite (Preemergence) + 1 oz/ac Balance pro Target population: 28,000 plants/ac for grain and 32,000 plants/ac for ensilage

Planting Date: April 18, 2012 Harvest Date: August 23, 2012

Monthly Rainfall (in.) Apr. May June July Aug **Total** 

2012: 2.28 0.88 2.33 1.95 0.85 **8.29** Long term mean: 1.33 3.25 2.86 2.58 2.28 **12.30** 

Irrigation: 1.25 1.25 5.00 6.25 1.25