2011

Kansas Performance Tests with

Sunflower Hybrids

Report of Progress 1060



Kansas State University Agricultural Experiment Station and Cooperative Extension Service

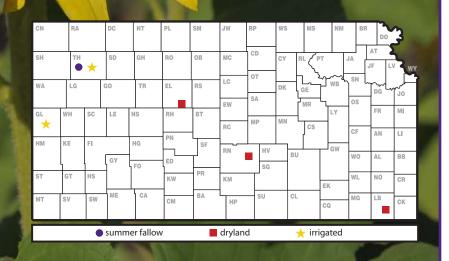


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INTRODUCTION

Objectives and Procedures

Sunflower performance tests were conducted in 2011 by the Kansas Agricultural Experiment Station to provide farmers, extension workers, and private industry with unbiased agronomic information on many of the sunflower hybrids marketed in the state. Tests were financed in part by entry fees from private companies. Companies known to be developing and marketing sunflowers were invited to participate and enter hybrids on a voluntary, fee-entry basis. As a result, not all hybrids grown in the state were included in the tests, and hybrids were not grown uniformly at all locations.

Test locations in 2011 were Thomas County-irrigated and fallow; Greely County-irrigated; Ellis County-dryland; and Labette and Reno Counties-dryland. Oilseed entries were grown at all locations. Confectionary entries were evaluated in Thomas County-irrigated and fallow; Greeley County-irrigated; and Labette County-dryland. Oilseed and confectionary entries were planted separately in all tests. Entries were planted in four-row, replicated plots at all locations. To ensure uniform and adequate stands, all tests except those in Thomas County were planted at a high seeding rate and were hand thinned after emergence to desired stands. Tests in Thomas County were planted to stand with a modified Monosem Vacuum Planter.

Environmental factors affecting test results and cultural practices are presented for each individual test site. The oilseed and confectionary tests at Thomas County and the oilseed tests at Ellis County were abandoned for adverse conditions during the growing season. Test results for 2011 and period-of-years average data are included in Tables 1 through 5. Entrants and entries in 2011 tests are listed in Table 6.

Data Interpretation

Yields are reported as pounds of seed per acre adjusted to 10% moisture content.

Days to half bloom is the number of days from date of planting to the date when 50% of plants are in bloom.

Lodging percentage is based on counts of lodged and total plants in harvested areas at all locations.

Oil percentage was obtained from samples submitted under code number to the Kansas Grain Inspection Service for analysis and is reported on a 10% moisture basis. Samples for all tests were derived by compositing replications by entry for each location and subsampling.

Oil yields are reported as net pounds of oil per acre.

Seed-size percentage analysis for confectionary-type entries was performed at the Northwest Research-Extension Center on cleaned samples submitted from each of the tests. Separation by seed size was made by screening a weighed sample through a series of six sieves (22/64, 21/64, 20/64, 19/64, 18/64, and 16/64-round holes) secured on a Ro-Tap mechanical shaker.

Statistical analysis: Conducting perfect tests is virtually impossible because soil fertility, moisture, and other environmental factors vary. Therefore, small differences in results might have no real meaning. To help interpret data, we applied a statistical technique, analysis of variance, whenever possible. Such analysis requires repeating whole sets of varieties or treatments several times and placing individual varieties or treatments as they would be placed by chance alone. Results of the analyses are reported in terms of least significant differences (LSD). If two means differ by more than the LSD (.05), such a difference would be due to chance variation only 5% of the time. So, it's 95% probable that the difference was due to treatment. If means do not differ by as much as the LSD, little confidence can be placed in the importance of varietal or treatment differences. The coefficient of variability (CV) represents an estimate of the precision of replicated vield trials. Trials with a CV ranging from 10% to 15% are usually acceptable for performance comparisons. Trials with a CV greater than 15% provide only a rough guide to hybrid performance.

ACKNOWLEDGEMENTS

Cooperation of research center personnel who performed many of the field operations is sincerely appreciated. Vicki Brown, secretary, and Jane Lingenfelser, Kansas Crop Performance Tests coordinator, assisted in preparing this report, and temporary workers Matthew Dickman and Anna Taylor helped with seed counting, plot thinning, and maintenance. Mary Knapp at the Weather Data Library provided climatological data.

WEST CENTRAL KANSAS OILSEED SUNFLOWER TESTS

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist

Colby silt loam; corn in 2010

120 - 25 - 0 lb/a N, P, K

Planted on 6/10/2011; harvested on 11/1/2011

Target stand of 23,000 plants/acre; 9.1 in. spacing

Poor stands in some plots, very dry after mid-August.

Month	<u>Precip</u> 2011	<u>vitation</u> Norm.	<u>Average</u> 2011	<u>e Temp.</u> Norm.
Nov - Mar	0.2	21	35	34
April	1.2	1.3	51	49
May	0.7	2.3	59	59
June	4.1	2.5	74	70
July	4.3	2.6	80	76
August	2.8	2.3	78	74
Sept.	0.8	1.3	64	66
Oct.	2.2	0.3	54	57
Totals:	16.2	14.7	53	52

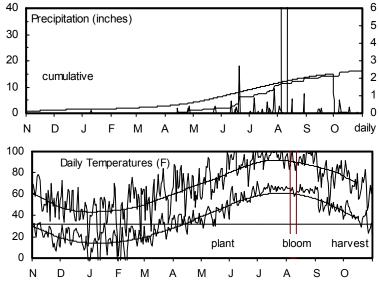


Table 1. Tribune Irrigated Oilseed Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (lb/a)	Yield as % of test average	Oil content (%)	Oil yield (lb/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (lb/bu)	Seed weight (g/200)
CROPLAN GENETICS CG 306 DMR	1950	115	44.0	848	55	58	10	29.0	13.0
CROPLAN GENETICS CG 3080 DMR	1004	59	44.0	443	55	53	23	27.0	10.0
CROPLAN GENETICS CG 356A NS	2134	126	41.0	869	57	56	8	29.0	14.0
CROPLAN GENETICS CG 442E NS	1450	85	40.0	573	58	58	7	24.0	14.0
CROPLAN GENETICS CG 460 E NS	1240	73	43.0	538	59	61	23	26.0	13.0
CROPLAN GENETICS CG 548CL DM	2003	118	39.0	783	57	57	13	28.0	12.0
CROPLAN GENETICS CG 559 CL DM	1964	116	40.0	793	58	66	8	27.0	12.0
DAHLGREN 2012CL	1570	92	39.0	615	55	61	9	28.0	14.0
MYCOGEN 8H 449 CLDM	1923	113	42.0	815	58	56	4	30.0	14.0
MYCOGEN 8N 421 CLDM	1833	108	42.0	763	56	57	6	28.0	12.0
MYCOGEN 8N 453 DM	1670	98	44.0	738	57	55	9	29.0	12.0
MYCOGEN 8N 510	2051	121	40.0	831	58	54	8	28.0	12.0
SEEDS 2000 Camaro	1599	94	40.0	636	58	60	5	28.0	12.0
SEEDS 2000 Durango	1508	89	38.0	578	61	62	9	28.0	10.0
SEEDS 2000 SIERRA HO	1425	84	38.0	546	60	62	13	24.0	10.0
SEEDS 2000 Torino	1588	94	39.0	621	59	65	3	26.0	11.0
SEEDS 2000 X9452 CL,HO	1323	78	38.0	503	58	56	3	26.0	12.0
SEEDS 2000 X9822 CL,HO,DMR	1242	73	40.0	491	57	56	6	27.0	12.0
SYNGENTA 3158 NS/CL/DM	1703	100	43.0	732	56	50	13	27.0	12.0
SYNGENTA 3495 NS/CL/DM	1838	108	38.0	700	57	60	10	30.0	13.0
SYNGENTA 3733 NS/DM	1798	106	44.0	789	56	52	13	28.0	13.0
SYNGENTA 3733 NS/DM Coated	1748	103	43.0	752	55	49	10	27.0	14.0
SYNGENTA 3845 HO	1488	88	40.0	588	56	55	2	27.0	18.0
SYNGENTA 3845HO Coated	1389	82	33.0	460	59	63	10	24.0	11.0
SYNGENTA 3995 NS/SU	1564	92	39.0	613	57	52	9	27.0	13.0
SYNGENTA 4596 HO/DM	1334	78	36.0	486	57	61	6	29.0	14.0
TRIUMPH 660CL	1678	99	39.0	661	59	64	9	26.0	12.0
TRIUMPH s668	2117	125	39.0	828	59	49	7	29.0	12.0
TRIUMPH s671	2173	128	43.0	943	59	51	8	30.0	11.0
TRIUMPH s673	2154	127	44.0	959	61	50	3	28.0	12.0
TRIUMPH TRX8341	1830	108	40.0	737	56	53	5	28.0	18.0

Table 1 continued. Tribune Irrigated Oilseed Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (lb/a)	Yield as % of test average	Oil content (%)	Oil yield (lb/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (Ib/bu)	Seed weight (g/200)
TRIUMPH TRXs11431CL	1653	97	42.0	691	61	45	6	26.0	12.0
TRIUMPH TRXs11432CL	1803	106	40.0	730	58	47	7	28.0	14.0
AVERAGES	1689	1689	40.0	686	57	56	9	27.0	13.0
CV(%)	20	20			1	9	62	6.0	
LSD(0.05)*	482	28			0	7	7	2.0	
* Unless two varieties differ by more that	in the LSD	, little confid	ence can be	placed in	one being s	superior to	the other.		
2-Year Averages (2010 and 2011)									
CROPLAN GENETICS CG 306 DMR	1653	103	41.5	848	53	61	12	29.5	13.0
CROPLAN GENETICS CG 3080 DMR	1137	72	42.0	443	53	60	14	29.0	12.0
CROPLAN GENETICS CG 356A NS	2058	130	40.5	869	55	59	10	30.0	13.5
CROPLAN GENETICS CG 460 E NS	1191	75	42.5	538	57	65	14	27.5	13.5
CROPLAN GENETICS CG 559 CL DM	1698	106	38.5	793	56	72	8	29.0	7.0
MYCOGEN 8H 449 CLDM	1747	109	42.0	815	56	64	4	31.0	13.5
MYCOGEN 8N 453 DM	1335	83	42.0	738	55	61	7	30.5	13.5
MYCOGEN 8N 510	1867	117	39.0	831	56	59	6	29.5	12.0
SYNGENTA 3845 HO	1374	86	40.0	588	53	58	6	28.5	17.5
TRIUMPH 660CL	1668	105	38.5	661	56	69	7	28.5	12.5
TRIUMPH s668	2027	128	39.5	828	57	54	4	30.5	12.0
TRIUMPH s671	2024	127	42.5	943	57	55	5	31.0	11.0
TRIUMPH s673	1901	119	42.5	959	59	55	4	29.0	12.0
AVERAGES	1589	1589	39.5	686	55	62	7	28.5	13.0
3-Year Averages (2009 to 2011)									
CROPLAN GENETICS CG 306 DMR	1733	102	41.7	822	53	60	8	29.3	12.3
CROPLAN GENETICS CG 460 E NS	1272	75	43.3	591	56	66	9	27.3	13.0
MYCOGEN 8H 449 CLDM	1775	104	43.0	819	55	65	3	30.7	12.7
MYCOGEN 8N 453 DM	1594	92	43.3	855	54	62	5	30.7	12.7
MYCOGEN 8N 510	1872	111	40.3	820	55	62	4	29.0	11.0
SYNGENTA 3845 HO	1518	89	41.7	701	52	58	4	28.7	16.0
TRIUMPH 660CL	1787	105	41.0	796	56	70	5	29.0	11.3
TRIUMPH s668	2137	126	41.7	956	57	53	3	30.3	11.3
TRIUMPH s671	2038	120	43.3	936	56	56	3	30.7	10.7
AVERAGES	1696	1092	40.7	754	55	62	5	28.7	12.3

SOUTH CENTRAL KANSAS DRYLAND OILSEED SUNFLOWER TEST

South Central Kansas Experiment Field, Hutchinson; William Heer, agronomist

Ost silt loam; wheat in 2010

85 - 40 - 0 lb/a N, P, K

Planted on 6/22/2011; harvested on 10/6/2011

Target stand of 22,000 plants/acre; 9.5 in. spacing Conditions were hot and dry; insects were not a

problem.

Month	<u>Precip</u> 2011	<u>oitation</u> Norm.	<u>Averag</u> 2011	<u>e Temp.</u> Norm.
montan	2011		2011	
Nov Mar.	3.5	4.4	36	37
April	0.3	2.6	56	55
May	1.7	3.8	65	65
June	0.9	4.3	81	75
July	0.0	3.5	88	81
August	1.7	3.1	83	79
Sept.	0.6	3.3	67	70
Oct.	1.0	1.1	58	62
Totals:	9.8	26.1	57	56

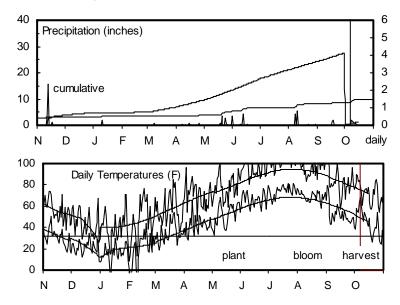


Table 2. Hutchinson Dryland Oilseed Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (lb/a)	Yield as % of test average	Oil content (%)	Oil yield (Ib/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (lb/bu)	Seed weight (g/200)
CROPLAN GENETICS CG 306 DMR	178	66	29.0	51	0	42	44	19.0	8.0
CROPLAN GENETICS CG 3080 DMR	123	45	30.0	37	0	39	82	19.0	8.0
CROPLAN GENETICS CG 356A NS	212	79	28.0	60	0	40	5	21.0	8.0
CROPLAN GENETICS CG 442E NS	312	116	30.0	94	0	48	11	19.0	8.0
CROPLAN GENETICS CG 460 E NS	201	75	29.0	59	0	47	7	20.0	8.0
CROPLAN GENETICS CG 548CL DM	219	81	27.0	60	0	40	5	20.0	7.0
CROPLAN GENETICS CG 559 CL DM	176	65	28.0	50	0	42	4	20.0	7.0
MYCOGEN 8H 449 CLDM	336	125	29.0	99	0	42	1	19.0	8.0
MYCOGEN 8N 421 CLDM	399	148	30.0	122	0	44	10	18.0	8.0
MYCOGEN 8N 453 DM	203	75	30.0	62	0	41	7	22.0	8.0
MYCOGEN 8N 510	323	120	28.0	91	0	42	9	18.0	7.0
PIONEER 63M91	302	112	31.0	93	0	42	13	18.0	9.0
PIONEER P63ME70	310	115	29.0	89	0	45	10	18.0	8.0
PIONEER P63ME80	293	109	29.0	86	0	45	2	19.0	8.0
PIONEER P64HE01	319	118	30.0	95	0	40	6	20.0	9.0
SYNGENTA 3158 NS/CL/DM	217	80	30.0	66	0	43	19	20.0	8.0
SYNGENTA 3495 NS/CL/DM	327	121	30.0	96	0	42	15	20.0	8.0
SYNGENTA 3733 NS/DM	314	116	30.0	95	0	43	17	18.0	8.0
SYNGENTA 3733 NS/DM Coated	244	90	29.0	71	0	41	33	18.0	8.0
SYNGENTA 3845 HO	230	85	31.0	72	0	44	12	20.0	9.0
SYNGENTA 3845HO Coated	304	113	26.0	81	0	51	23	19.0	8.0
SYNGENTA 3995 NS/SU	230	85	32.0	72	0	46	2	18.0	8.0
SYNGENTA 4596 HO/DM	318	118	30.0	94	0	41	23	20.0	8.0
TRIUMPH s668	224	83	30.0	67	0	35	2	20.0	8.0
TRIUMPH s673	333	124	27.0	90	0	37	1	19.0	7.0
TRIUMPH s674	347	129	29.0	100	0	35	1	19.0	8.0
TRIUMPH TRXs11431CL	300	112	28.0	83	0	37	3	18.0	7.0
TRIUMPH TRXs11432CL	212	79	30.0	63	0	35	7	19.0	8.0
AVERAGES	268	268	29.0	78	0	42	13	19.0	8.0
CV(%)	33	33				5	81	7.0	0.0
LSD(0.05)*	126	47			0	3	15	2.0	0.0

BRAND and HYBRID	Yield (lb/a)	Yield as % of test average	Oil content (%)	Oil yield (lb/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (lb/bu)	Seed weight (g/200)
* Unless two varieties differ by more that	n the LSD	, little confide	ence can be	e placed in	one being s	superior to	the other.		
2-Year Averages (2010 and 2011)									
CROPLAN GENETICS CG 306 DMR	484	77	34.0	51	26	49	39	24.0	9.0
CROPLAN GENETICS CG 3080 DMR	188	37	35.0	37	26	46	89	24.0	8.5
CROPLAN GENETICS CG 356A NS	624	97	33.5	60	26	50	7	24.5	9.0
CROPLAN GENETICS CG 460 E NS	391	70	34.0	59	27	57	12	24.0	8.5
CROPLAN GENETICS CG 559 CL DM	475	75	33.0	50	27	56	6	23.5	8.0
MYCOGEN 8H 449 CLDM	590	109	34.0	99	27	57	4	23.0	9.0
MYCOGEN 8N 453 DM	566	89	35.0	62	26	56	9	25.5	8.5
MYCOGEN 8N 510	707	120	33.5	91	26	55	14	23.0	8.0
SYNGENTA 3845 HO	678	105	36.0	72	26	56	9	24.0	9.5
TRIUMPH s668	634	99	34.5	67	26	39	5	24.5	8.5
TRIUMPH s673	842	137	33.0	90	27	43	3	23.5	8.0
TRIUMPH s674	767	130	33.5	100	28	41	2	24.0	9.0
AVERAGES	586	586	34.0	78	27	52	14	23.5	9.0
3-Year Averages (2009 to 2011)									
CROPLAN GENETICS CG 306 DMR	764	78	37.3	317	35	48	35	25.7	10.0
CROPLAN GENETICS CG 460 E NS	660	71	37.3	293	37	60	8	25.3	9.7
MYCOGEN 8H 449 CLDM	888	103	37.7	384	36	58	7	25.7	9.7
MYCOGEN 8N 453 DM	946	94	38.7	424	35	56	6	27.0	9.0
MYCOGEN 8N 510	1173	123	36.7	498	36	53	9	24.7	8.7
SYNGENTA 3845 HO	762	89	38.7	241	35	55	17	25.3	10.0
TRIUMPH s674	1121	124	37.3	462	38	43	1	26.0	9.3
AVERAGES	934	424	37.3	398	36	52	11	25.3	9.7

SOUTHEAST KANSAS OILSEED SUNFLOWER TESTS

Southeast Agricultural Research Center; Kelly Kusel, agronomist

Parsons silt loam; Wheat in 2010

90 - 0 - 0 lb/a N, P, K

Planted on 6/28/2011; harvested on 10/6/2011

Target stand of 17,400 plants/acre; 12.0 in. spacing

Good stands were obtained for the conditions. Summer was very hot and dry. Rhizopus head rot was severe in most plots.

	Precip	oitation	Average Temp		
Month	2011	Norm.	2011	Norm.	
Nov Mar.	2.9	10.3	38	39	
April	1.9	3.7	61	57	
May	1.6	5.0	66	65	
June	3.9	4.8	79	74	
July	1.3	3.6	81	80	
August	2.5	3.8	81	79	
Sept.	0.1	4.5	71	71	
Oct.	0.0	1.9	60	63	
Totals:	14.1	37.5	57	57	

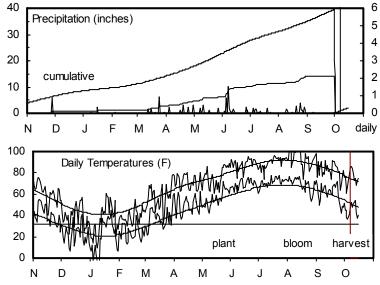


Table 3. Parsons Dryland Oilseed Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (Ib/a)	Yield as % of test average	Oil content (%)	Oil yield (Ib/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (lb/bu)	Seed weight (g/200)
MYCOGEN 8H 449 CLDM	879	126	38.0	336	52	47	0	21.0	11.0
MYCOGEN 8N 421 CLDM	618	89	36.0	222	52	48	0	23.0	9.0
MYCOGEN 8N 453 DM	901	129	39.0	348	51	46	0	23.0	10.0
MYCOGEN 8N 510	789	113	33.0	258	52	44	1	21.0	8.0
TRIUMPH s668	564	81	35.0	196	53	39	0	23.0	8.0
TRIUMPH s671	620	89	35.0	218	53	38	0	27.0	9.0
TRIUMPH s673	573	82	34.0	195	53	42	0	20.0	8.0
TRIUMPH s674	772	111	37.0	285	54	39	0	25.0	10.0
TRIUMPH TRXs11431CL	692	99	38.0	264	54	39	0	22.0	10.0
TRIUMPH TRXs11432CL	524	75	34.0	181	53	36	0	22.0	8.0
AVERAGES	693	693	36.0	249	53	42	0	23.0	9.0
CV(%)	23	23			1	4	249	5.0	
LSD(0.05)*	237	34			0	2	1	1.0	

* Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

2-Year Averages	(2010 and 2011))

MYCOGEN 8H 449 CLDM	884	108	38.5	340	52	50	7	23.5	10.0
MYCOGEN 8N 453 DM	901	111	40.0	360	52	50	7	26.0	10.0
MYCOGEN 8N 510	911	109	34.5	317	53	48	4	23.5	8.0
TRIUMPH s668	858	99	36.0	310	54	37	2	24.5	9.0
TRIUMPH s671	888	104	37.0	334	53	39	0	28.0	8.5
TRIUMPH s673	655	79	34.5	227	54	42	0	22.0	9.0
TRIUMPH s674	873	105	36.5	318	56	39	0	26.0	9.5
AVERAGES	835	835	37.0	312	53	44	5	25.0	9.5
<u>3-Year Averages (2009 to 2011)</u>									
MYCOGEN 8H 449 CLDM	1112	102	39.0	435	51	50	34	24.3	9.3
MYCOGEN 8N 453 DM	1032	99	40.3	417	51	49	31	26.0	9.7
MYCOGEN 8N 510	1233	109	35.7	449	52	45	15	24.7	7.7
TRIUMPH s671	1347	113	39.3	555	52	35	1	27.7	8.7

Table 3 continued, Parsons Drv	and Oilseed Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (lb/a)	Yield as % of test average	Oil content (%)	Oil yield (Ib/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (lb/bu)	Seed weight (g/200)
TRIUMPH s674	1211	107	38.0	470	55	35	0	26.0	9.0
AVERAGES	1125	590	38.3	441	52	42	15	25.3	9.0

WEST CENTRAL KANSAS CONFECTIONARY SUNFLOWER TESTS

Southwest Research-Extension Center, Tribune; Alan Schlegel, agronomist Colby silt loam; corn in 2010; target stand of 17,400 plants/acre Planted on 6/10/2011; harvested on 11/1/2011; 120 - 25 - 0 lb/a N, P, K

Poor stands in some plots; very dry after mid-August.

Table 4. Tribune Irrigated Confectionary Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (lbs/a)	Yield as % of test average	Oil content (%)	Oil yield (lbs/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (Ibs/bu)	Seed weight (g/200)
CHS 10EXP01	1845	106			59	61	4	17.0	29.0
DAHLGREN 9512	1492	86			59	63	7	17.0	29.0
DAHLGREN 9530	1816	105			60	68	9	17.0	30.0
DAHLGREN 9530CL	1651	95			62	75	8	17.0	28.0
DAHLGREN 9579	2081	120			60	59	7	17.0	33.0
DAHLGREN 9592EXP	1474	85			60	66	6	17.0	28.0
DAHLGREN 9599	1743	100			62	66	5	17.0	32.0
RED R. COMMODITIES RRC 2215	2066	119			58	71	11	20.0	28.0
RED R. COMMODITIES RRC 2217	1485	85			60	65	10	17.0	28.0
RED R. COMMODITIES RRC 8015	2029	117			61	62	5	17.0	33.0
SEEDS 2000 JAGUAR CL	1906	110			56	58	10	17.0	27.0
SEEDS 2000 Jaguar II CL	1437	83			56	61	20	17.0	29.0
SEEDS 2000 Jaguar XL CL	1665	96			59	73	10	17.0	28.0
SEEDS 2000 PANTHER II	1485	85			56	58	10	18.0	30.0
SEEDS 2000 Sundance	1866	107			57	59	8	17.0	31.0
SEEDS 2000 X9674 DMR	2135	123			56	59	11	17.0	28.0
TRIUMPH 770CL	1316	76			65	69	8	17.0	29.0
TRIUMPH 777C	1550	89			62	67	6	17.0	28.0
TRIUMPH TRXCL9350C	1789	103			62	64	8	17.0	32.0
AVERAGES	1728	1728			59	64	9	17.0	29.0
CV(%)	13	13			1	6	80	6.0	
LSD(0.05)*	338	19			1	5	10	1.0	

* Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

2-Year Averages (2010 and 2011)

RED R. COMMODITIES RRC 2215	2026	120	 	56	72	7	20.0	27.5
RED R. COMMODITIES RRC 2217	1636	97	 	57	71	7	18.0	27.5
RED R. COMMODITIES RRC 8015	1625	96	 	58	64	4	17.0	31.5
SEEDS 2000 JAGUAR CL	1873	111	 	54	61	11	18.0	26.0
SEEDS 2000 PANTHER II	1375	81	 	54	64	7	19.5	31.5
TRIUMPH 770CL	1409	84	 	62	74	5	17.5	31.0
TRIUMPH 777C	1611	96	 	59	71	5	17.5	28.0
AVERAGES	1679	1679	 	57	68	7	18.0	29.5
3-Year Averages (2009 to 2011)								
SEEDS 2000 JAGUAR CL	1798	106	 	54	62	7	17.7	24.9
SEEDS 2000 PANTHER II	1472	86	 	54	66	5	18.7	27.8
TRIUMPH 777C	1651	97	 	59	74	3	17.0	25.4
AVERAGES	1689	1153	 	56	69	4	17.3	26.9

SOUTHEAST KANSAS CONFECTIONARY SUNFLOWER TESTS

Southeast Agricultural Research Center, Parsons; Kelly Kusel, agronomist Parsons silt loam; wheat in 2010; target stand of 17,400 plants/acre Planted on 6/28/2011; harvested on 10/6/2011; 90 - 0 - 0 lb/a N, P, K

Good stands were obtained for the conditions. Summer was very hot and dry. Rhizopus head rot was severe in most plots.

Table 5 . Parsons Dryland Confectionary Sunflower Performance Test, 2011

BRAND and HYBRID	Yield (Ibs/a)	Yield as % of test average	Oil content (%)	Oil yield (Ibs/a)	Days to half bloom	Plant height (in.)	Lodging (%)	Test weight (Ibs/bu)	Seed weight (g/200)
DAHLGREN 9530	1060	86			55	60	3	20.0	20.0
DAHLGREN 9530CL	1282	104			57	58	4	18.0	21.0
DAHLGREN 9579	1271	104			55	57	3	17.0	25.0
DAHLGREN 9599	1272	104			56	57	2	19.0	22.0
AVERAGES	1221	1221			56	58	3	18.0	22.0
CV(%)	33	33			0	5	90	6.0	
LSD(0.05)*	661	54			0	5	5	2.0	

* Unless two varieties differ by more than the LSD, little confidence can be placed in one being superior to the other.

CHS Sunflowers, Inc. 220 Clement Ave. Grandin, ND 58038 701-484-5129 10EXP01	Mycogen Seed 9330 Zionsville Rd. Indianapolis, IN 46268 317-337-3892 8C 451 8H 449DM 8N 453 DM 8C 410 CL 8N 421 CLDM 8N510DM	Seeds 2000 PO Box 200 Breckenridge, MN 56520 218-643-2410 Camaro Durango Jaguar CL Jaguar II CL Jaguar XL Panther II Sierra HO Sundance Torino X9542 CL,HO X9674 DMR X9822 CL,HO,DMR
Croplan Genetics 525 55th St. SE Minot, ND 58701 701-852-3556 CG 306 DMR CG 3080 DMR NS CG 356A NS CG 442ENS CG 460 E NS CG 548CL DMR NS CG 559CL DMR NS	Pioneer Hi-Bred Intl., Inc. 8100 S. 15th St. Lincoln, NE 68512 800-228-4050 63M91 P63ME70 P63ME80 64HE01	Syngenta Seeds 11055 Wayzata Blvd. Minnetonka, MN 55305 800-445-0956 3158 NS/CL/DM 3495 NS/CL/DM 3733 NS/DM 3733 NS/DM Coated 3845 NS 3845 HO Coated 3995 NS/SU 4596 HO/DM
Dahlgren and Company, Inc. 1220 Sunflower St. Crookston, MN 56716 218-281-2985 2012CL 9512 9530 9530CL 9579 9592 9599	Red River Commodities 1320 East College Dr. Colby, KS 67701 785-462-3911 RRC 2215 RRC 2217 RRC 8015	Triumph Seed Co., Inc. PO Box 1050 Ralls, TX 79357 888-521-7333 664 660CL 770CL 777C \$668 \$671 \$673 \$674 \$673 \$674 \$678 TRX8341 TRX10454C TRXCL9350C TRXs851 TRXs851 TRXs852 TRXs10424 TRXs10429H

TRXs11425 TRXs11431CL TRXs11432CL To access crop performance testing information electronically, visit our website. The information contained in this publication, plus more, is available for viewing or downloading at:

www.agronomy.ksu.edu/kscpt

Excerpts from the

University Research Policy Agreement with Cooperating Seed Companies

Permission is hereby given to Kansas State University (KSU) to test varieties and/or hybrids designated on the attached entry forms in the manner indicated in the test announcements. I certify that seed submitted for testing is a true sample of the seed being offered for sale.

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