

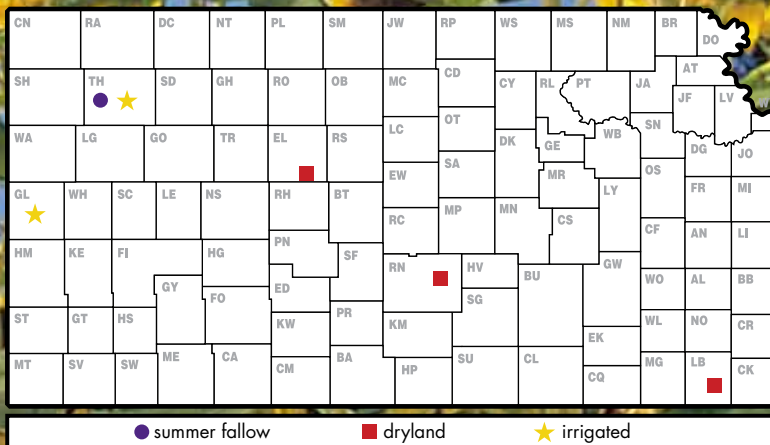
# 2010

## *Kansas Performance Tests with* **Sunflower Hybrids**

*Report of Progress 1042*



**Kansas State University**  
**Agricultural Experiment Station**  
**and Cooperative Extension Service**



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## INTRODUCTION

### Objectives and Procedures

Sunflower performance tests were conducted in 2010 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 tests, and hybrids were not grown uniformly at all locations.

Test locations in 2010 were Thomas County, irrigated and fallow; Greeley County, irrigated; Ellis County, dryland; and Labette and Hutchinson Counties, dryland. Oilseed entries were grown at all locations. Confectionary entries were evaluated in Thomas County, irrigated and fallow; and Greeley County, irrigated. 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. Test results for 2010 and period-of-years average data are included in Tables 1 through 9. Entrants and entries in 2010 tests are listed in Table 10.

### 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. Consequently, 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 yield 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 Lingenfelter, Kansas Crop Performance Tests coordinator, assisted in preparing this report, and temporary worker Jenny Dickman helped with seed counting, plot thinning, and maintenance. Mary Knapp at the Weather Data Library provided climatological data.

## NORTHWEST KANSAS OILSEED SUNFLOWER TESTS

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

Keith silt loam; Soybeans in 2009

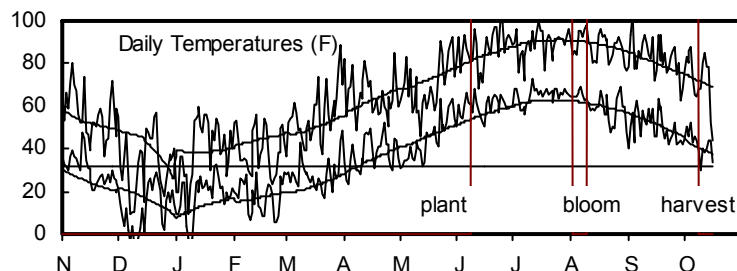
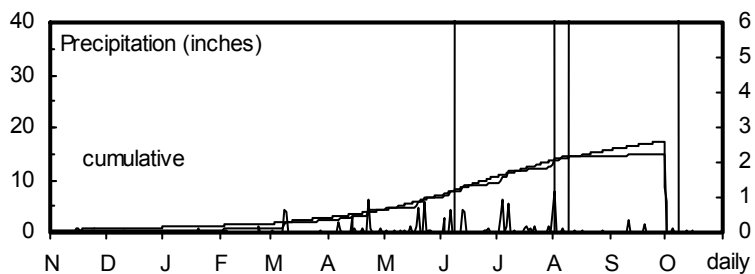
160 - 55 - 0 lb/a N, P, K

Planted on 6/9/2010; Harvested on 10/7/2010

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

Excellent summer growing conditions with minor lodging in some plots.

Month	Precipitation		Average Temp.	
	2010	Norm.	2010	Norm.
Nov.- Mar.	2.2	2.4	33	32
April	2.3	1.4	52	49
May	2.3	2.9	58	59
June	2.5	3.4	74	70
July	3.8	3.1	77	76
August	1.4	2.1	74	74
Sept.	0.6	1.6	67	66
Oct.	0.2	0.2	58	56
Totals:	15.2	17.2	52	51



**Table 1. Colby Irrigated Oilseed Sunflower Performance Test, 2010**

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)
ADVANTA SEEDS USA LLC F51137N	2522	85	39.0	986	56	61	0	28.0	10.0
ADVANTA SEEDS USA LLC F89057N	2453	83	41.0	1003	58	75	4	27.0	10.0
ADVANTA SEEDS USA LLC F91034N	2190	74	40.0	874	56	68	4	28.0	9.0
CROPLAN GENETICS CG 306 DMR	2620	88	42.0	1100	55	62	1	28.0	12.0
CROPLAN GENETICS CG 3080DMR	2769	93	45.0	1252	53	63	4	28.0	10.0
CROPLAN GENETICS CG 356A NS	2732	92	42.0	1145	56	67	5	27.0	10.0
CROPLAN GENETICS CG 378DMR,N	2946	99	40.0	1187	56	71	1	28.0	12.0
CROPLAN GENETICS CG 460 E NS	2743	93	45.0	1240	58	74	4	28.0	11.0
CROPLAN GENETICS CG 559CL DM	2768	93	42.0	1176	58	76	3	29.0	10.0
MYCOGEN 8H 449DM	3735	126	45.0	1677	56	75	1	30.0	12.0
MYCOGEN 8N 453 DM	3193	108	44.0	1418	56	73	3	30.0	11.0
MYCOGEN 8N358CLDM	2371	80	42.0	1008	55	70	21	28.0	12.0
MYCOGEN 8N421	2986	101	43.0	1275	57	66	7	28.0	10.0
MYCOGEN 8N433DM	3055	103	46.0	1399	55	67	2	27.0	9.0
MYCOGEN 8N510DM	2849	96	41.0	1174	56	70	3	27.0	9.0
PIONEER 63M91	2951	100	42.0	1245	55	76	3	30.0	11.0
PIONEER 63N82	2683	90	40.0	1084	56	69	2	29.0	13.0
PIONEER P63ME70	3282	111	43.0	1408	56	76	0	27.0	12.0
PIONEER P64HE01	2386	80	41.0	985	55	67	3	25.0	13.0
SEEDS 2000 BLAZER CL-NS	3346	113	42.0	1395	59	74	3	28.0	12.0
SEEDS 2000 FIREBIRD EXPRESS	3454	117	54.0	1879	60	68	3	28.0	10.0
SEEDS 2000 X9866	3267	110	39.0	1277	57	74	1	28.0	13.0
SYNGENTA 4651NS/DM	2983	101	40.0	1205	57	72	2	27.0	13.0
SYNGENTA DKF 37-32NS	2957	100	41.0	1224	55	65	5	28.0	12.0
SYNGENTA DKF 38-45NS	3194	108	44.0	1399	54	67	0	30.0	13.0
SYNGENTA DKF 38-75NS	3296	111	42.0	1381	56	73	8	28.0	12.0

**Table 1 continued. Colby Irrigated Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
SYNGENTA DKF 39-80CL	2704	91	38.0	1022	59	77	3	27.0	12.0
TRIUMPH 610CLD	2849	96	42.0	1205	55	68	5	27.0	10.0
TRIUMPH 657	2995	101	44.0	1327	58	71	3	26.0	12.0
TRIUMPH 660CL	2952	100	43.0	1261	57	74	2	29.0	11.0
TRIUMPH 664	2911	98	45.0	1310	59	71	0	27.0	12.0
TRIUMPH 810HCLD	2489	84	42.0	1040	55	73	6	27.0	11.0
TRIUMPH s668	3462	117	43.0	1499	59	51	3	29.0	11.0
TRIUMPH s671	3059	103	44.0	1352	57	58	8	30.0	9.0
TRIUMPH s673	3186	108	43.0	1380	58	55	2	28.0	10.0
TRIUMPH s674	2891	98	45.0	1301	60	47	20	29.0	10.0
TRIUMPH s678	3134	106	44.0	1382	59	55	3	30.0	12.0
TRIUMPH s878H	2880	97	43.0	1236	58	59	7	29.0	11.0
TRIUMPH TRX8341	3067	103	45.0	1377	56	62	1	28.0	12.0
TRIUMPH TRXs10325	3286	111	38.0	1242	55	53	1	30.0	13.0
TRIUMPH TRXs10424	3328	112	44.0	1454	60	55	3	28.0	10.0
AVERAGES	2949	2949	43.0	1263	57	67	4	28.0	11.0
CV(%)	14	14	--	--	1	4	92	6.0	--
LSD(0.05)*	578	19	--	--	1	4	5	2.0	--

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

**2-Year Averages (2009 and 2010)**

CROPLAN GENETICS CG 306 DMR	2532	92	42.0	1063	58	62	5	27.5	12.5
CROPLAN GENETICS CG 460 E NS	2735	100	44.0	1206	61	74	7	27.0	12.0
MYCOGEN 8H 449DM	3552	129	45.5	1613	60	72	1	30.0	12.5
MYCOGEN 8N 453 DM	3171	115	45.5	1449	59	72	4	29.5	11.5
MYCOGEN 8N433DM	3199	117	46.5	1485	58	67	3	27.5	10.0
MYCOGEN 8N510DM	2421	87	41.5	1006	60	69	13	26.5	9.5
PIONEER 63M91	3014	110	43.0	1299	58	76	3	29.5	11.5
PIONEER 63N82	2403	86	40.5	977	59	71	9	28.5	13.5
SYNGENTA DKF 37-32NS	2953	107	42.0	1246	59	65	14	28.0	12.0
SYNGENTA DKF 38-45NS	3072	112	44.0	1348	58	66	3	28.5	12.5
SYNGENTA DKF 38-75NS	3139	114	42.0	1317	59	71	11	28.0	12.5
SYNGENTA DKF 39-80CL	2548	92	38.5	977	61	76	7	27.0	12.5
TRIUMPH s668	3204	116	43.5	1397	62	49	5	29.0	11.5
TRIUMPH s671	2761	100	44.0	1218	61	54	10	29.5	9.5
TRIUMPH s674	2720	99	44.0	1198	63	47	22	28.5	11.0
TRIUMPH s678	2860	103	44.5	1273	62	55	8	29.5	11.5
TRIUMPH s878H	2582	93	44.0	1132	61	58	10	28.5	12.0
TRIUMPH TRX8341	3086	112	44.5	1372	59	63	1	28.0	13.0
AVERAGES	2757	1525	43.0	1183	60	65	7	28.0	11.5

**3-Year Averages (2008 to 2010)**

CROPLAN GENETICS CG 306 DMR	2598	61	42.0	1092	57	62	10	27.8	12.4
MYCOGEN 8H 449DM	3458	86	45.3	1564	59	71	11	28.9	12.1
MYCOGEN 8N 453 DM	3067	77	45.1	1387	58	70	20	28.9	11.6
MYCOGEN 8N510DM	2474	58	41.2	1019	59	67	19	27.0	9.9
PIONEER 63M91	2859	73	42.9	1228	58	75	11	29.3	11.9
PIONEER 63N82	2392	57	40.5	972	58	69	18	28.3	13.4
SYNGENTA DKF 38-45NS	2974	74	44.3	1314	57	66	12	27.8	12.8
SYNGENTA DKF 39-80CL	2427	61	39.0	944	60	78	18	27.0	12.3

**Table 1 continued. Colby Irrigated Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
TRIUMPH s668	3210	77	43.5	1398	61	49	10	29.0	11.6
TRIUMPH s671	2785	66	43.6	1215	60	52	15	29.3	9.7
TRIUMPH s678	2713	69	44.0	1196	61	54	14	28.9	11.5
TRIUMPH s878H	2624	62	43.6	1140	60	57	20	27.7	12.1
AVERAGES	2687	1050	42.7	1147	59	65	14	27.6	11.6

## NORTHWEST KANSAS FALLOW OILSEED SUNFLOWER TESTS

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

Keith silt loam; Fallow in 2009

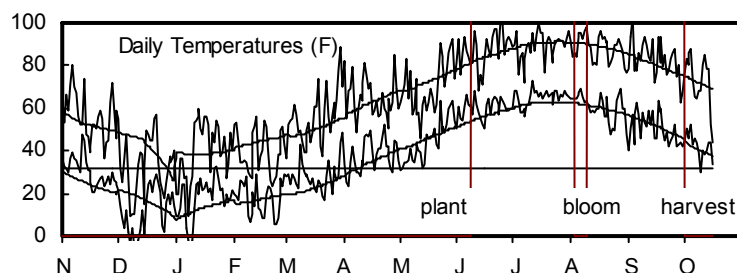
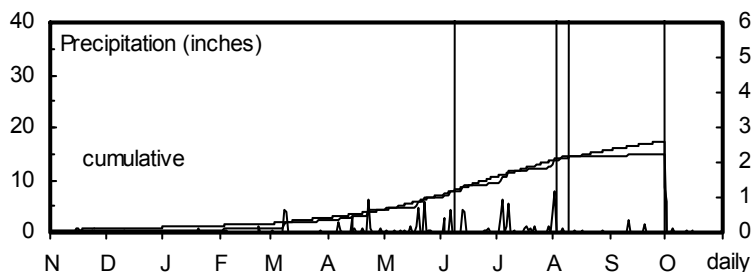
80 - 0 - 0 lb/a N, P, K

Planted on 6/9/2010; Harvested on 9/29/2010

Target stand of 17,000 plants/acre; 12.3 in. spacing

Excellent growing conditions with above average rainfall during the growing season.

Month	Precipitation		Average Temp.	
	2010	Norm.	2010	Norm.
Nov.- Mar.	2.2	2.4	33	32
April	2.3	1.4	52	49
May	2.3	2.9	58	59
June	2.5	3.4	74	70
July	3.8	3.1	77	76
August	1.4	2.1	74	74
Sept.	0.6	1.6	67	66
Oct.	0.2	0.2	58	56
Totals:	15.2	17.2	52	51



**Table 2. Colby Fallow Oilseed Sunflower Performance Test, 2010**

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	2422	93	41.0	993	55	56	0	25.0	12.0
CROPLAN GENETICS CG 3080DMR	2362	91	40.0	942	54	56	4	24.0	9.0
CROPLAN GENETICS CG 356A NS	3363	129	40.0	1335	57	58	0	25.0	12.0
CROPLAN GENETICS CG 378DMR,N	2722	104	38.0	1045	57	62	1	23.0	12.0
CROPLAN GENETICS CG 460 E NS	2582	99	38.0	984	59	61	1	23.0	11.0
CROPLAN GENETICS CG 559CL DM	2482	95	38.0	931	59	65	0	24.0	10.0
MYCOGEN 8H 449DM	2611	100	38.0	990	42	63	0	25.0	10.0
MYCOGEN 8N 453 DM	2922	112	40.0	1157	56	62	0	26.0	12.0
MYCOGEN 8N358CLDM	2624	101	38.0	1000	55	61	0	23.0	10.0
MYCOGEN 8N433DM	2800	107	40.0	1120	56	60	0	23.0	9.0
MYCOGEN 8N510DM	2742	105	38.0	1031	56	60	0	23.0	10.0
PIONEER 63M91	2875	110	39.0	1110	56	64	0	26.0	12.0
PIONEER 63N82	2484	95	37.0	924	57	61	0	24.0	14.0
PIONEER P63ME70	2125	81	36.0	759	58	61	0	21.0	12.0
PIONEER P64HE01	2432	93	38.0	927	56	61	1	27.0	14.0
SEEDS 2000 BLAZER CL-NS	2659	102	38.0	1002	60	65	0	24.0	11.0
SEEDS 2000 FIREBIRD EXPRESS	2425	93	36.0	875	61	61	0	22.0	10.0
SEEDS 2000 SIERRA HO	2458	94	32.0	794	59	57	0	22.0	8.0
SEEDS 2000 X9464	1787	68	36.0	640	60	57	1	23.0	11.0
SEEDS 2000 X9866	2030	78	36.0	737	58	63	0	23.0	12.0
SYNGENTA 4651NS/DM	2748	105	38.0	1050	58	65	0	25.0	13.0
SYNGENTA DKF 37-32NS	2826	108	37.0	1051	56	59	0	23.0	12.0
SYNGENTA DKF 38-45NS	2723	104	39.0	1054	55	58	0	25.0	13.0
SYNGENTA DKF 38-75NS	3010	116	36.0	1099	57	60	0	24.0	12.0
SYNGENTA DKF 39-80CL	2434	93	34.0	840	57	67	0	22.0	11.0
TRIUMPH 657	2456	94	37.0	914	58	63	0	21.0	11.0
TRIUMPH 664	2689	103	39.0	1057	58	63	1	25.0	12.0

**Table 2 continued. Colby Fallow Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
TRIUMPH s668	2944	113	40.0	1166	59	47	0	26.0	11.0
TRIUMPH s671	2469	95	39.0	960	58	51	0	25.0	10.0
TRIUMPH s673	2554	98	37.0	945	61	52	0	25.0	10.0
TRIUMPH s674	2672	102	40.0	1063	61	48	0	25.0	11.0
AVERAGES	2594	2594	38.0	984	57	59	0	24.0	11.0
CV(%)	18	18	--	--	9	4	408	5.0	--
LSD(0.05)*	659	25	--	--	7	4	2	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 (2009 and 2010)**

CROPLAN GENETICS CG 306 DMR	2248	90	40.0	901	60	54	0	25.5	14.0
CROPLAN GENETICS CG 460 E NS	2463	98	40.0	984	63	60	4	23.0	13.5
MYCOGEN 8H 449DM	2499	100	40.5	1008	54	59	0	26.0	12.5
MYCOGEN 8N 453 DM	2759	110	41.0	1124	60	59	2	27.5	12.0
MYCOGEN 8N433DM	2729	109	42.0	1145	60	58	1	24.5	10.5
MYCOGEN 8N510DM	2639	105	39.0	1023	61	58	1	24.5	11.0
PIONEER 63M91	2468	98	40.0	978	61	62	1	26.5	14.0
PIONEER 63N82	2406	96	38.0	916	62	60	1	25.0	15.5
SEEDS 2000 BLAZER CL-NS	2393	95	37.5	894	63	62	1	24.0	12.5
SEEDS 2000 FIREBIRD EXPRESS	2547	102	37.0	944	64	59	0	23.5	12.0
SEEDS 2000 SIERRA HO	2742	110	35.5	987	63	58	1	23.0	9.5
SYNGENTA DKF 37-32NS	2671	106	39.0	1041	60	55	0	25.0	14.0
SYNGENTA DKF 38-45NS	2725	109	41.0	1113	59	57	0	26.5	14.5
SYNGENTA DKF 38-75NS	2882	115	37.5	1087	61	59	2	25.5	13.5
SYNGENTA DKF 39-80CL	2378	95	36.0	861	62	63	1	24.0	12.5
TRIUMPH s671	2461	98	40.5	995	62	48	0	26.5	11.5
TRIUMPH s674	2634	105	42.0	1102	64	47	0	26.0	13.0
AVERAGES	2502	1347	39.0	974	61	57	1	25.0	13.0

**3-Year Averages (2008 to 2010)**

CROPLAN GENETICS CG 306 DMR	2516	92	40.7	1029	58	52	2	26.2	13.8
MYCOGEN 8H 449DM	2924	106	41.8	1232	55	58	1	26.9	12.2
MYCOGEN 8N 453 DM	3000	109	40.8	1219	59	57	2	27.9	11.6
MYCOGEN 8N510DM	2771	102	41.1	1140	60	55	2	25.5	10.7
PIONEER 63M91	2761	100	40.4	1111	60	62	0	27.1	13.6
PIONEER 63N82	2594	95	39.0	1017	61	58	1	25.8	14.9
SEEDS 2000 BLAZER CL-NS	2541	93	38.5	978	63	59	2	24.7	11.9
SEEDS 2000 SIERRA HO	3019	110	38.5	1188	62	57	1	23.8	9.6
SYNGENTA DKF 38-45NS	2923	107	41.2	1201	59	56	1	27.2	14.7
SYNGENTA DKF 39-80CL	2708	98	37.6	1032	61	63	1	24.8	12.5
AVERAGES	2728	931	39.8	1088	60	55	2	25.8	12.7



## WEST CENTRAL KANSAS OILSEED SUNFLOWER TESTS

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

Colby silt loam; Corn in 2009

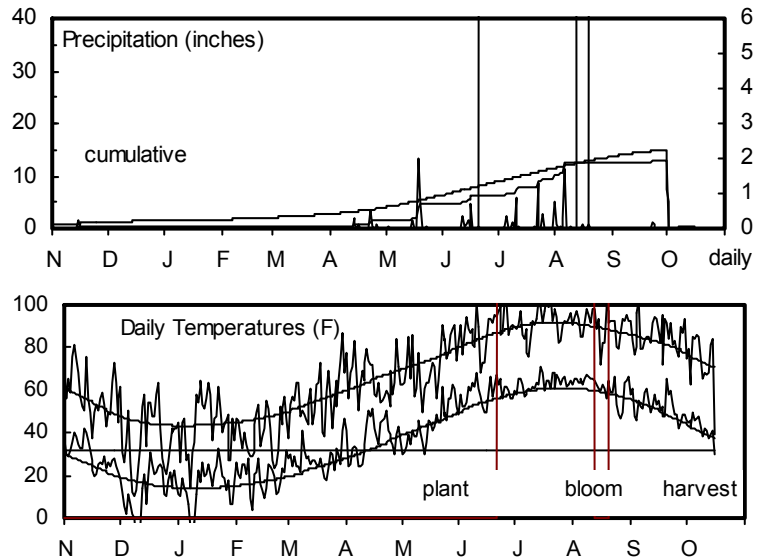
120 - 0 - 0 lb/a N, P, K

Planted on 6/21/2010; Harvested on 10/27/2010

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

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

Month	Precipitation		Average Temp.	
	2010	Norm.	2010	Norm.
Nov.- Mar.	0.3	2.1	34	34
April	1.2	1.3	52	49
May	3.0	2.3	58	59
June	1.6	2.5	74	70
July	4.1	2.6	78	76
August	2.4	2.3	76	74
Sept.	0.3	1.3	69	66
Oct.	0.0	0.3	58	57
Totals:	13.0	14.7	53	52



**Table 3. Tribune Irrigated Oilseed Sunflower Performance Test, 2010**

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)
ADVANTA SEEDS USA LLC F51137N	1417	95	37.0	--	53	64	8	31.0	13.0
ADVANTA SEEDS USA LLC F89057N	1326	89	37.0	--	54	75	7	29.0	12.0
ADVANTA SEEDS USA LLC F91034N	1460	98	37.0	--	52	69	6	30.0	12.0
CROPLAN GENETICS CG 306 DMR	1356	91	39.0	--	51	64	13	30.0	13.0
CROPLAN GENETICS CG 3080DMR	1269	85	40.0	--	51	67	4	31.0	14.0
CROPLAN GENETICS CG 356A NS	1981	133	40.0	--	52	62	12	31.0	13.0
CROPLAN GENETICS CG 378DMR,N	1336	89	38.0	--	53	70	4	30.0	14.0
CROPLAN GENETICS CG 460 E NS	1142	76	42.0	--	54	68	5	29.0	14.0
CROPLAN GENETICS CG 559CL DM	1432	96	37.0	--	54	77	7	31.0	2.0
MYCOGEN 8H 449DM	1570	105	42.0	--	53	72	4	32.0	13.0
MYCOGEN 8N 453 DM	1000	67	40.0	--	52	66	5	32.0	15.0
MYCOGEN 8N433DM	1535	103	42.0	--	52	64	6	31.0	13.0
MYCOGEN 8N510DM	1683	113	38.0	--	53	64	3	31.0	12.0
SEEDS 2000 BLAZER CL-NS	1433	96	38.0	--	55	70	6	30.0	13.0
SEEDS 2000 FIREBIRD EXPRESS	1830	122	38.0	--	54	71	4	29.0	12.0
SEEDS 2000 X9866	1317	88	35.0	--	54	74	4	29.0	13.0
SYNGENTA 4651NS/DM	1209	81	36.0	--	54	68	0	29.0	15.0
SYNGENTA DKF 37-32NS	1769	118	38.0	--	51	60	5	31.0	16.0
SYNGENTA DKF 38-45NS	1259	84	40.0	--	49	61	10	30.0	17.0
SYNGENTA DKF 38-75NS	1987	133	38.0	--	53	68	2	31.0	16.0
SYNGENTA DKF 39-80CL	1491	100	39.0	--	54	73	7	30.0	12.0
TRIUMPH 610CLD	1156	77	39.0	--	51	63	8	29.0	12.0
TRIUMPH 660CL	1658	111	38.0	--	53	74	5	31.0	13.0
TRIUMPH 664	1477	99	39.0	--	53	73	5	30.0	15.0
TRIUMPH 810HCLD	1122	75	38.0	--	51	68	1	28.0	14.0
TRIUMPH s668	1937	130	40.0	--	55	59	1	32.0	12.0
TRIUMPH s671	1874	125	42.0	--	54	59	1	32.0	11.0
TRIUMPH s673	1648	110	41.0	--	56	59	5	30.0	12.0

**Table 3 continued. Tribune Irrigated Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
AVERAGES	1488	1488	39.0	--	53	67	5	30.0	13.0
CV(%)	20	20	--	--	1	5	115	3.0	--
LSD(0.05)*	439	29	--	--	0	5	9	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 (2009 and 2010)**

CROPLAN GENETICS CG 306 DMR	1625	95	40.5	795	52	61	7	29.5	12.0
CROPLAN GENETICS CG 460 E NS	1288	76	43.5	645	55	69	3	28.0	13.0
MYCOGEN 8H 449DM	1701	100	43.5	824	54	70	2	31.0	12.0
MYCOGEN 8N 453 DM	1556	89	43.0	972	53	66	3	31.5	13.0
MYCOGEN 8N433DM	1726	102	42.5	824	53	64	3	30.0	12.0
MYCOGEN 8N510DM	1782	106	40.5	809	54	67	2	29.5	10.5
SYNGENTA DKF 37-32NS	1905	112	40.5	877	52	61	3	30.0	14.0
SYNGENTA DKF 38-45NS	1533	89	42.5	813	51	60	5	29.5	15.0
SYNGENTA DKF 38-75NS	2029	121	40.0	869	54	64	1	30.5	15.0
SYNGENTA DKF 39-80CL	1730	102	39.5	788	55	72	4	29.5	11.5
TRIUMPH 660CL	1842	109	42.0	932	55	73	3	30.5	11.0
TRIUMPH s668	2148	127	43.0	1085	56	55	1	31.0	11.0
TRIUMPH s671	1970	117	43.5	930	55	58	1	31.0	10.5
AVERAGES	1699	794	41.0	821	54	66	3	29.5	12.0

## NORTH CENTRAL KANSAS DRYLAND OILSEED SUNFLOWER TEST

Agricultural Research Center, Hays; Wayne Aschwege, agronomist

Harney silt loam; Fallow in 2009

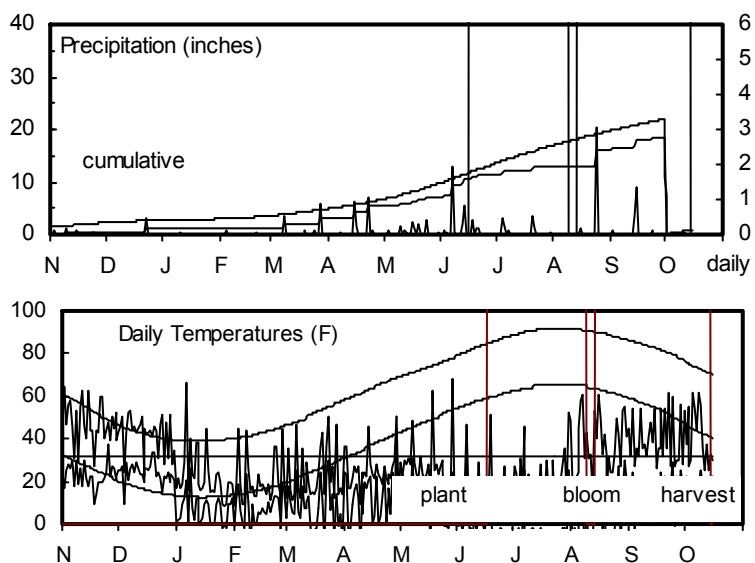
80 - 0 - 0 lb/a N, P, K

Planted on 6/17/2010; Harvested on 10/13/2010

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

Wet spring with dry summer. Went six week without rain from middle of July through August.

Month	Precipitation		Average Temp.	
	2010	Norm.	2010	Norm.
Nov.- Mar.	3.0	3.5	22	33
April	2.5	1.8	19	50
May	1.8	3.1	17	61
June	4.1	3.8	6	71
July	1.6	3.4	9	78
August	3.3	2.8	20	76
Sept.	2.2	2.3	28	68
Oct.	0.1	0.7	30	58
Totals:	18.4	21.3	20	52



**Table 4. Hays Dryland Oilseed Sunflower Performance Test, 2010**

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)
ADVANTA SEEDS USA LLC F51137N	647	89	39.0	253	53	43	17	28.0	10.0
ADVANTA SEEDS USA LLC F89057N	646	89	36.0	231	57	55	20	27.0	8.0
ADVANTA SEEDS USA LLC F91034N	672	93	39.0	261	56	48	10	30.0	10.0
MYCOGEN 8H 449DM	694	96	37.0	255	56	57	12	26.0	9.0
MYCOGEN 8N 453 DM	859	119	38.0	326	56	54	5	28.0	9.0
MYCOGEN 8N433DM	716	99	42.0	302	55	51	9	26.0	10.0
MYCOGEN 8N510DM	1088	151	38.0	409	56	51	12	27.0	8.0
PIONEER 63M91	855	118	33.0	280	55	56	12	26.0	7.0
PIONEER 63N82	787	109	37.0	294	55	55	22	28.0	9.0
PIONEER P63ME70	593	82	39.0	229	56	48	10	24.0	8.0
PIONEER P64HE01	691	95	38.0	259	56	48	17	26.0	11.0
SYNGENTA 4651NS/DM	850	117	38.0	322	56	52	14	27.0	8.0
SYNGENTA DKF 37-32NS	829	115	40.0	334	53	47	7	29.0	11.0
SYNGENTA DKF 38-45NS	474	65	37.0	174	53	54	6	24.0	10.0
SYNGENTA DKF 38-75NS	269	37	39.0	104	56	53	15	27.0	10.0
SYNGENTA DKF 39-80CL	629	87	38.0	240	56	52	27	25.0	10.0
TRIUMPH 660CL	695	96	38.0	261	56	50	19	27.0	7.0
TRIUMPH s668	874	121	39.0	342	56	37	28	28.0	10.0
TRIUMPH s671	664	92	40.0	264	52	43	13	26.0	11.0
TRIUMPH s673	872	121	42.0	364	55	43	11	28.0	9.0
AVERAGES	720	720	38.0	275	55	50	14	27.0	9.0
CV(%)	17	17	--	--	4	8	62	10.0	--
LSD(0.05)*	183	25	--	--	3	5	12	4.0	--

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

**Table 4 continued. Hays Dryland Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
<b>2-Year Averages (2009 and 2010)</b>									
MYCOGEN 8H 449DM	1354	99	38.2	524	56	57	9	24.0	4.5
MYCOGEN 8N 453 DM	1681	122	40.8	709	55	56	5	26.0	4.5
MYCOGEN 8N433DM	1435	104	40.7	575	54	51	6	24.0	5.0
MYCOGEN 8N510DM	1495	123	39.9	602	55	51	11	25.5	4.0
PIONEER 63M91	1133	94	36.5	422	54	57	9	25.5	3.5
PIONEER 63N82	1372	104	39.2	551	55	56	11	26.0	4.5
SYNGENTA DKF 37-32NS	1424	108	40.8	586	53	48	6	27.5	5.5
SYNGENTA DKF 38-45NS	1151	78	39.5	470	53	54	4	23.5	5.0
SYNGENTA DKF 38-75NS	779	51	39.7	312	55	54	9	25.5	5.0
SYNGENTA DKF 39-80CL	1795	118	39.4	723	55	56	17	24.0	5.0
TRIUMPH 660CL	1517	107	40.4	630	54	53	11	25.0	3.5
TRIUMPH s668	1848	131	39.3	728	56	40	15	26.0	5.0
TRIUMPH s671	1650	112	41.3	694	53	43	8	24.5	5.5
AVERAGES	1355	410	19.0	138	54	52	9	25.5	4.5

## SOUTH CENTRAL KANSAS DRYLAND OILSEED SUNFLOWER TEST

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

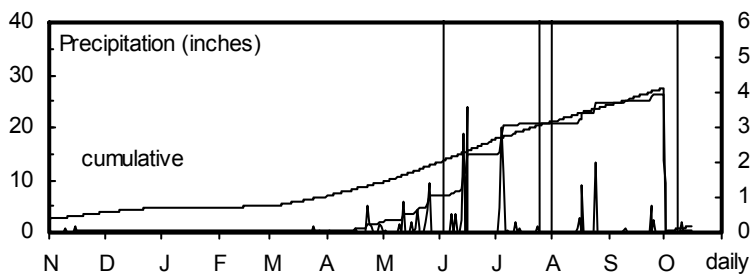
Ost silt loam; Wheat in 2009

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

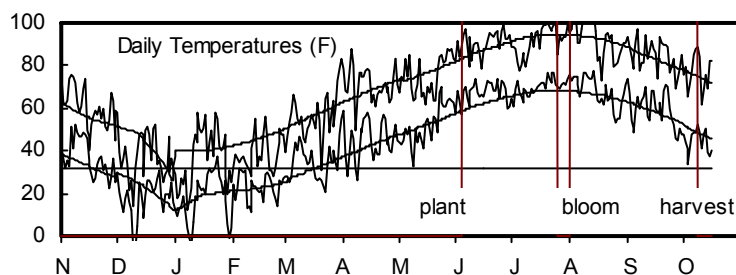
Planted on 6/4/2010; Harvested on 10/7/2010

Target stand of 22,000 plants/acre; 9.5 in. spacing

Excellent seed bed and good moisture led to excellent emergence and good early growth. Early summer was cool and moist. Late July and August were hot and dry.



Month	Precipitation		Average Temp.	
	2010	Norm.	2010	Norm.
Nov.- Mar.	0.5	4.4	36	37
April	1.6	2.6	58	55
May	4.8	3.8	64	65
June	7.8	4.3	79	75
July	6.1	3.5	81	81
August	3.9	3.1	80	79
Sept.	1.3	3.3	72	70
Oct.	0.3	1.1	60	62
Totals:	26.4	26.1	56	56



**Table 5. Hutchinson Dryland Oilseed Sunflower Performance Test, 2010**

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	789	87	39.0	--	51	55	33	29.0	10.0
CROPLAN GENETICS CG 3080DMR	253	28	40.0	--	51	53	96	29.0	9.0
CROPLAN GENETICS CG 356A NS	1036	114	39.0	--	51	60	8	28.0	10.0
CROPLAN GENETICS CG 378DMR,N	626	69	38.0	--	53	65	10	26.0	9.0
CROPLAN GENETICS CG 460 E NS	581	64	39.0	--	53	67	17	28.0	9.0
CROPLAN GENETICS CG 559CL DM	774	85	38.0	--	54	69	7	27.0	9.0
MYCOGEN 8H 449DM	843	93	39.0	--	53	72	6	27.0	10.0
MYCOGEN 8N 453 DM	929	102	40.0	--	52	71	10	29.0	9.0
MYCOGEN 8N433DM	771	85	42.0	--	52	65	13	29.0	9.0
MYCOGEN 8N510DM	1091	120	39.0	--	52	67	18	28.0	9.0
SYNGENTA 4651NS/DM	787	87	37.0	--	54	69	10	26.0	10.0
SYNGENTA DKF 37-32NS	1284	142	40.0	--	52	66	8	29.0	10.0
SYNGENTA DKF 38-45NS	1125	124	41.0	--	51	67	6	28.0	10.0
SYNGENTA DKF 38-75NS	819	90	38.0	--	52	68	6	27.0	9.0
SYNGENTA DKF 39-80CL	1188	131	37.0	--	53	69	3	27.0	10.0
TRIUMPH s668	1043	115	39.0	--	52	43	8	29.0	9.0
TRIUMPH s671	723	80	40.0	--	54	46	3	31.0	9.0
TRIUMPH s673	1351	149	39.0	--	54	48	5	28.0	9.0
TRIUMPH s674	1187	131	38.0	--	56	47	3	29.0	10.0
TRIUMPH s680CL	864	95	38.0	--	56	50	1	29.0	10.0
AVERAGES	903	903	39.0	--	53	61	14	28.0	10.0
CV(%)	27	27	--	--	1	6	87	5.0	--
LSD(0.05)*	350	38	--	--	0	5	17	2.0	--

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

**Table 5 continued. Hutchinson Dryland Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
<b>2-Year Averages (2009 and 2010)</b>									
CROPLAN GENETICS CG 306 DMR	1058	84	41.5	583	53	51	30	29.0	11.0
CROPLAN GENETICS CG 460 E NS	890	69	41.5	527	56	66	9	28.0	10.5
MYCOGEN 8H 449DM	1165	92	42.0	669	54	67	11	29.0	10.5
MYCOGEN 8N 453 DM	1318	103	43.0	785	53	64	5	29.5	9.5
MYCOGEN 8N433DM	1089	86	43.5	633	54	61	9	29.0	10.5
MYCOGEN 8N510DM	1598	124	41.0	905	54	59	9	28.0	9.5
SYNGENTA DKF 37-32NS	1693	135	42.5	945	54	61	4	29.0	11.0
SYNGENTA DKF 38-45NS	1028	91	42.5	410	53	61	19	28.0	10.5
SYNGENTA DKF 38-75NS	1440	108	41.0	907	54	64	4	28.0	10.5
SYNGENTA DKF 39-80CL	1468	119	40.5	769	54	64	2	28.0	10.5
TRIUMPH s671	1322	99	42.0	845	55	46	2	30.5	9.5
TRIUMPH s674	1509	122	41.5	824	57	47	2	29.5	10.0
TRIUMPH s680CL	1223	96	40.5	680	58	46	1	29.5	10.5
AVERAGES	1268	502	41.5	718	54	58	10	28.5	10.5
<b>3-Year Averages (2008 to 2010)</b>									
SYNGENTA DKF 38-45NS	1522	99	42.5	737	54	59	13	29.0	10.2
SYNGENTA DKF 39-80CL	1763	115	41.7	902	55	63	1	29.1	10.9
TRIUMPH s671	1642	100	42.2	908	56	44	1	30.5	10.3
AVERAGES	1574	368	42.0	831	55	57	8	29.1	10.7

## SOUTHEAST KANSAS OILSEED SUNFLOWER TESTS

Southeast Agricultural Research Center; Kelly Kusel, agronomist

Parsons silt loam; Wheat in 2009

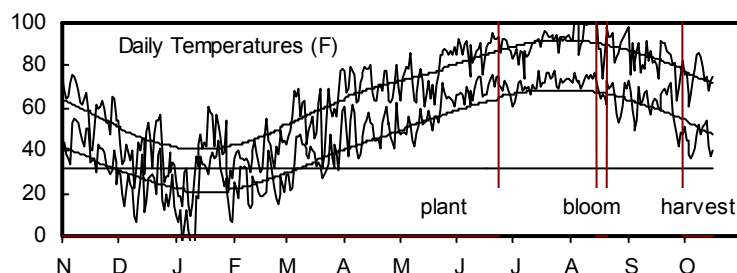
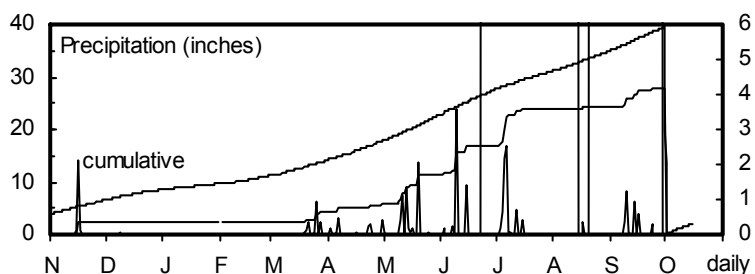
120 - 30 - 30 lb/a N, P, K

Planted on 6/23/2010; Harvested on 9/28/2010

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

Excellent planting conditions followed by heavy rains contributed to very inconsistent stands. Headmoths were present in early August and extensive headrot was present at harvest.

Month	Precipitation		Average Temp.	
	2010	Norm.	2010	Norm.
Nov. - Mar.	4.2	10.3	38	39
April	1.8	3.7	61	57
May	5.6	5.0	66	65
June	5.5	4.8	79	74
July	6.8	3.6	81	80
August	0.4	3.8	81	79
Sept.	3.5	4.5	71	71
Oct.	0.0	1.9	60	63
Totals:	27.7	37.5	57	57



**Table 6. Parsons Dryland Oilseed Sunflower Performance Test, 2010**

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)
MYCOGEN 8H 449DM	888	90	39.0	343	52	52	13	26.0	9.0
MYCOGEN 8N 453 DM	901	92	41.0	371	52	54	14	29.0	10.0
MYCOGEN 8N433DM	969	99	41.0	397	52	51	10	26.0	12.0
MYCOGEN 8N510DM	1032	105	36.0	376	53	51	6	26.0	8.0
SYNGENTA 4651NS/DM	1026	104	38.0	385	52	56	20	26.0	12.0
SYNGENTA DKF 37-32NS	1212	123	40.0	488	53	48	15	28.0	9.0
SYNGENTA DKF 38-45NS	918	93	40.0	371	52	51	15	27.0	11.0
SYNGENTA DKF 38-75NS	792	81	39.0	308	52	52	21	27.0	9.0
SYNGENTA DKF 39-80CL	1010	103	36.0	369	53	48	1	25.0	9.0
TRIUMPH s668	1152	117	37.0	424	54	35	3	26.0	10.0
TRIUMPH s671	1156	118	39.0	450	53	39	0	29.0	8.0
TRIUMPH s673	737	75	35.0	258	54	42	0	24.0	10.0
TRIUMPH s674	973	99	36.0	351	57	39	0	27.0	9.0
TRIUMPH s680CL	919	93	40.0	371	54	35	3	28.0	9.0
AVERAGES	977	977	38.0	375	53	46	9	27.0	10.0
CV(%)	18	18	--	--	1	4	53	3.0	--
LSD(0.05)*	254	26	--	--	1	3	6	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 (2009 and 2010)

MYCOGEN 8H 449DM	1228	91	39.5	485	51	51	51	26.0	8.5
MYCOGEN 8N 453 DM	1098	84	41.0	451	51	51	47	27.5	9.5
MYCOGEN 8N433DM	992	79	39.5	391	50	48	41	27.0	10.0
MYCOGEN 8N510DM	1456	108	37.0	545	52	45	22	26.5	7.5
TRIUMPH s671	1711	125	41.5	723	52	34	2	28.0	8.5

**Table 6 continued. Parsons Dryland Oilseed Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
TRIUMPH s674	1431	105	38.5	563	55	33	0	26.5	8.5
TRIUMPH s680CL	1378	100	41.5	580	53	32	2	27.0	8.5
AVERAGES	1341	539	39.5	537	52	42	23	26.5	9.0



## NORTHWEST KANSAS CONFECTIONARY SUNFLOWER TESTS

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist  
 Keith silt loam; Soybeans in 2009; Target stand of 17,000 plants/acre  
 Planted on 6/9/2010; Harvested on 10/7/2010; 160 - 55 - 0 lb/a N, P, K

Excellent summer growing conditions with minor lodging in some plots.

**Table 7. Colby Irrigated Confectionary Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
CHS INC. RH3126RT	2429	86	--	--	58	--	2	20.0	29.0
CROPLAN GENETICS CG 179	3186	112	--	--	59	--	2	20.0	29.0
MYCOGEN 8C 451	2754	97	--	--	58	--	2	20.0	28.0
RED R. COMMODITIES 2215	2865	101	--	--	59	--	2	20.0	26.0
RED R. COMMODITIES 2217	2923	103	--	--	59	--	5	20.0	26.0
RED R. COMMODITIES RRC8015	2968	105	--	--	58	--	1	18.0	29.0
SEEDS 2000 JAGUAR CL	2831	100	--	--	56	--	0	20.0	26.0
SEEDS 2000 PANTHER II	2708	95	--	--	59	--	3	21.0	30.0
TRIUMPH 747C	3230	114	--	--	56	--	0	19.0	29.0
TRIUMPH 768C	2245	79	--	--	60	--	3	19.0	29.0
TRIUMPH 770CL	2992	105	--	--	65	--	0	20.0	29.0
TRIUMPH 777C	2601	92	--	--	60	--	4	19.0	27.0
TRIUMPH TRX10454C	2985	105	--	--	59	--	0	20.0	31.0
TRIUMPH TRXCL9350C	2811	99	--	--	61	--	0	19.0	31.0
AVERAGES	2823	2823	--	--	59	--	1	19.0	29.0
CV(%)	16	16	--	--	2	--	134	4.0	--
LSD(0.05)*	647	22	--	--	2	--	3	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 (2009 and 2010)

CHS INC. RH3126RT	2307	91	--	--	61	67	1	18.5	30.7
CROPLAN GENETICS CG 179	2985	117	--	--	61	64	2	19.0	28.8
MYCOGEN 8C 451	2586	101	--	--	60	64	3	18.5	28.0
RED R. COMMODITIES 2215	2776	109	--	--	61	65	4	18.5	26.7
RED R. COMMODITIES 2217	2504	97	--	--	61	64	6	18.5	26.1
SEEDS 2000 JAGUAR CL	2167	83	--	--	58	69	12	19.0	26.0
SEEDS 2000 PANTHER II	2432	94	--	--	60	64	6	20.5	29.7
TRIUMPH 747C	2935	114	--	--	59	63	1	18.5	29.6
TRIUMPH 777C	2478	97	--	--	62	67	5	18.0	28.6
AVERAGES	2561	1462	--	--	61	65	4	18.0	28.8

### 3-Year Averages (2008 to 2010)

CHS INC. RH3126RT	2538	101	0.0	0	60	67	6	18.5	30.7
MYCOGEN 8C 451	2501	99	0.0	0	59	64	9	18.5	28.6
RED R. COMMODITIES 2215	2493	98	0.0	0	60	65	16	18.5	26.5
SEEDS 2000 JAGUAR CL	2205	86	0.0	0	58	69	18	19.0	26.4
SEEDS 2000 PANTHER II	2433	96	0.0	0	59	64	14	20.5	29.6
TRIUMPH 747C	2859	113	0.0	0	58	63	4	18.5	30.9
TRIUMPH 777C	2368	94	0.0	0	61	67	10	18.0	29.8
AVERAGES	2529	1008	0.0	0	60	65	8	18.0	29.3

## NORTHWEST KANSAS FALLOW CONFECTIONARY SUNFLOWER TESTS

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist

Excellent growing conditions with above-average rainfall during the growing season.

Keith silt loam; Fallow in 2009; Target stand of 14,900 plants/acre

Planted on 6/9/2010; Harvested on 9/29/2010; 80 - 0 - 0 lb/a N, P, K

**Table 8. Colby Fallow Confectionary Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
CROPLAN GENETICS CG 179	1973	87	--	--	59	53	53	13.0	30.0
MYCOGEN 8C 451	2526	111	--	--	59	57	57	16.0	26.0
RED R. COMMODITIES 2215	2546	112	--	--	59	62	62	17.0	24.0
RED R. COMMODITIES 2217	2483	109	--	--	58	56	56	15.0	24.0
RED R. COMMODITIES RRC8015	1735	76	--	--	60	56	56	16.0	26.0
SEEDS 2000 PANTHER II	2779	122	--	--	58	61	61	17.0	30.0
TRIUMPH 768C	1741	76	--	--	61	58	58	14.0	23.0
TRIUMPH 770CL	2543	112	--	--	62	65	65	15.0	25.0
TRIUMPH 777C	2062	91	--	--	61	63	63	15.0	21.0
AVERAGES	2265	2265	--	--	59	59	59	15.0	25.0
CV(%)	24	24	--	--	3	4	4	17.0	--
LSD(0.05)*	812	35	--	--	2	4	4	4.0	--

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

### 2-Year Averages (2009 and 2010)

CROPLAN GENETICS CG 179	1850	91	--	--	62	53	27	14.0	33.3
MYCOGEN 8C 451	2201	108	--	--	63	56	29	15.5	29.1
AVERAGES	2033	1183	--	--	63	56	30	15.0	29.7

### 3-Year Averages (2008 to 2010)

MYCOGEN 8C 451	2278	103	--	0	62	54	20	16.5	28.2
AVERAGES	2227	822	0.0	0	62	54	20	16.5	28.0

## WEST CENTRAL KANSAS CONFECTIONARY SUNFLOWER TESTS

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

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

Colby silt loam; Corn in 2009; Target stand of 17,400 plants/acre

Planted on 6/17/2009; Harvested on 10/27/2010; 120 - 0 - 0 lb/a N, P, K

**Table 9. Tribune Irrigated Confectionary Sunflower Performance Test, 2010**

<b>BRAND and HYBRID</b>	<b>Yield (lb/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lb/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lb/bu)</b>	<b>Seed Weight (g/200)</b>
CHS INC. RH3126RT	1601	98	--	--	54	79	3	20.0	33.0
CROPLAN GENETICS CG 179	1888	115	--	--	52	66	1	20.0	31.0
RED R. COMMODITIES 2215	1985	121	--	--	54	73	2	20.0	27.0
RED R. COMMODITIES 2217	1787	109	--	--	54	76	4	19.0	27.0
RED R. COMMODITIES RRC8015	1221	74	--	--	55	65	3	17.0	30.0
SEEDS 2000 JAGUAR CL	1839	112	--	--	52	64	11	19.0	25.0
SEEDS 2000 PANTHER II	1264	77	--	--	52	70	4	21.0	33.0
TRIUMPH 768C	1388	85	--	--	55	75	4	18.0	28.0
TRIUMPH 770CL	1502	92	--	--	58	79	2	18.0	33.0
TRIUMPH 777C	1672	102	--	--	56	75	3	18.0	28.0
TRIUMPH TRX10454C	1787	109	--	--	53	66	3	20.0	31.0
AVERAGES	1630	1630	--	--	54	71	4	19.0	30.0
CV(%)	21	21	--	--	1	3	105	4.0	--
LSD(0.05)*	496	30	--	--	1	4	6	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 (2009 and 2010)**

CHS INC. RH3126RT	1877	112	--	--	55	81	2	18.0	26.6
CROPLAN GENETICS CG 179	1818	109	--	--	54	68	1	18.5	27.9
SEEDS 2000 JAGUAR CL	1745	104	--	--	54	64	6	18.0	23.9
SEEDS 2000 PANTHER II	1465	87	--	--	53	70	2	19.0	26.8
TRIUMPH 777C	1701	102	--	--	58	78	2	17.0	24.2
AVERAGES	1669	865	--	--	55	72	2	17.5	25.9

Table 10. Entrants and Entries in the 2010 Sunflower Performance Tests

<b>Advanta Seeds USA LLC</b> 1215 Prairie Parkway West Fargo, ND 58078 701-373-8115 F51137NS,CL F89057NS,SU F91034NS,SU	<b>Mycogen Seed</b> 406 18 <sup>th</sup> Avenue N. Whapeton, ND 58075 701-642-6007 8C 451 8H 449DM 8N 453 DM 8N358CLDM 8N421 8N433DM 8N510DM	<b>Seeds 2000</b> PO Box 200 Breckenridge, MN 56520 218-643-2410 BLAZER CL-NS FIREBIRD EXPRESS JAGUAR CL PANTHER II SIERRA HO X9464 X9866
<b>CHS Sunflowers, Inc.</b> 220 Clement Avenue Grandin, ND 58038 701-484-5313 RH3126RT	<b>Pioneer Hi-Bred Intl., Inc.</b> 390 Union Blvd. Suite 500A Lakewood, CO 80228 800-258-5604 63M91 63N82 P63ME70 P64HE01	<b>Syngenta Seeds</b> 7500 Olson Memorial Hwy. Golden Valley, MN 55427 402-616-6534 4651NS/DM DKF 37-32NS DKF 38-45NS DKF 38-75NS DKF 39-80CL
<b>Croplan Genetics</b> PO Box 1291 Minot, ND 58078 701-852-2556 CG 179 CG 306 DMR CG 3080DMR NS CG 356A NS CG 378DMR NS CG 460 E NS CG 559CL DMR NS	<b>Red River Commodities</b> 1320 East College Drive Colby, KS 67701 785-462-3911 2215 2217 RRC8015	<b>Triumph Seed Co., Inc.</b> PO Box 1050 Ralls, TX 79357 800-530-4789 657 664 610CLD 660CL 747C 768C 770CL 777C 810HCLD s668 s671 s673 s674 s678 s680CL s878H TRX10454C TRX8341 TRXCL9350C TRXs10325 TRXs10424

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**[www.agronomy.ksu.edu/kscpt](http://www.agronomy.ksu.edu/kscpt)**

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