

# 2006

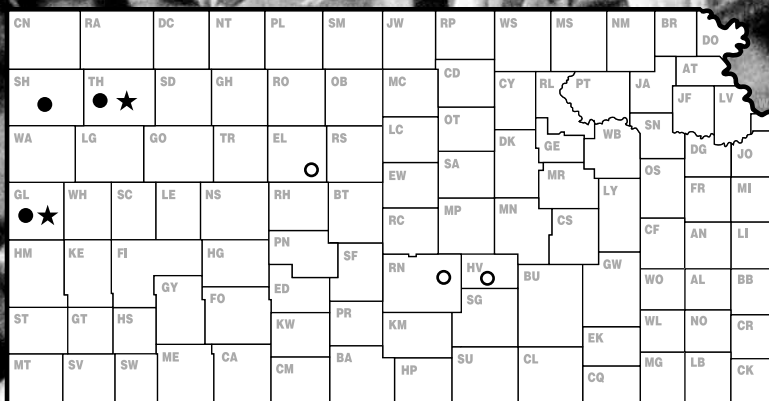
Kansas Performance Tests with

# Sunflower Hybrids

Report of Progress 972



Kansas State University  
Agricultural Experiment Station  
and Cooperative Extension Service



● summer fallow ○ dryland ★ irrigated

# TABLE OF CONTENTS

## INTRODUCTION

Test Objectives and Procedures .....	1
Data Interpretation .....	1

## PERFORMANCE TEST RESULTS

### OILSEED TESTS

#### NORTHWEST

Table 1. Colby Irrigated, Thomas County.....	2
Table 2. Colby Fallow, Thomas County .....	5

#### WEST CENTRAL

Table 3. Tribune Irrigated, Greeley County .....	7
--	---

#### SOUTH CENTRAL

Table 4. Hesston Dryland, continuous crop, Harvey County .....	9
--	---

### CONFECTIONARY TESTS

#### NORTHWEST

Table 5. Colby Irrigated, Thomas County.....	11
Table 6. Colby Fallow, Thomas County .....	13

#### WEST CENTRAL

Table 7. Tribune Irrigated, Greeley County .....	14
--	----

## ENTRANTS AND ENTRIES IN 2006 TESTS

Table 8.....	15
Electronic Access, University Research Policy, and Duplication Policy.....	16

## INTRODUCTION

### Objectives and Procedures

Sunflower performance tests were conducted in 2006 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.

The test locations in 2006 included Thomas County – on fallow; Thomas and Greeley Counties – irrigated; and Harvey County – dryland, continuous crop. Dryland tests in Ellis and Greeley Counties were abandoned due to severe weather conditions. Oilseed entries were grown at all locations. Confectionary entries were evaluated in Thomas and Greeley counties. 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 were planted to stand with a modified Monosem Vacuum Planter.

Environmental factors affecting test results and cultural practices are discussed individually for each of the test sites. Test results for 2006, and period-of-years average data, are included in Tables 1 through 7. Entrants and entries in 2006 tests are listed in Table 8.

### Data Interpretation

**Yields** are reported as lbs seed/acre adjusted to 10% moisture content.

**Days to half bloom** is number of days from date of planting to date when 50% of plants were 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 lbs oil/a.

**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 may have no real meaning. To help interpret data, we applied a statistical technique, analysis of variance, wherever 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, then 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, Kraig Roozeboom, assistant professor, and Jane Lingenfelter, coordinator – Kansas Crop Performance Tests, assisted in preparing this report, and temporary workers Trenton Powell and Val Jackson helped with seed counting, plot thinning, and maintenance. Mary Knapp at the Weather Data Library provided climatological data, and James R. Cochrane, Assistant Scientist, posted data to the Kansas Crop Performance Test web site.

# NORTHWEST KANSAS OILSEED SUNFLOWER TESTS

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

Keith silt loam; Sunflowers in 2005

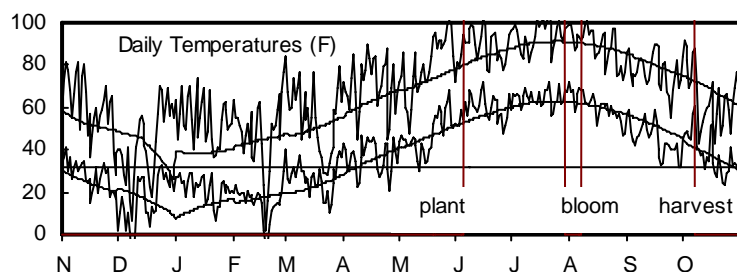
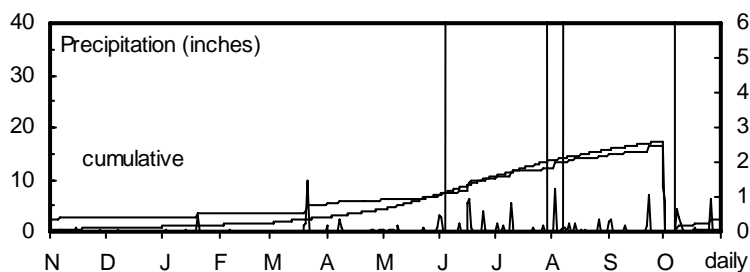
60 - 0 - 0 lb/a N, P, K

Planted on 6/5/2006; Harvested on 10/6/2006

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

Very dry at planting time, with a heavy rain three days after planting, which caused crusting and reduced stands. The remainder of the growing season had normal temperatures and more than 9" of rain June through September.

Month	Precipitation		Average Temp.	
	2006	Norm.	2006	Norm.
Nov.-Mar	2.9	2.5	37	32
April	0.6	1.4	54	49
May	1.0	2.9	64	59
June	3.2	3.5	74	70
July	1.7	3.1	79	76
August	2.4	2.1	75	74
Sept.	2.1	1.7	61	66
Oct.	2.4	0.4	51	53
Totals:	16.4	17.5	54	51



**Table 1. Colby Irrigated Oilseed Sunflower Performance Test, 2006.**

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 (lbs/bu)	Seed Weight (g/200)
ADVANTA PACIFIC AP533NS	2197	87	43.0	945	58	52	7	26.3	12.1
ADVANTA PACIFIC AP534NS/CL	2736	109	39.1	1070	59	56	8	26.0	12.5
ADVANTA PACIFIC AP561NS	3287	131	40.6	1335	60	55	6	29.0	11.5
ADVANTA PACIFIC F41271	1834	73	37.8	693	58	49	12	27.1	11.6
ADVANTA PACIFIC F41273	2822	112	43.3	1222	58	54	3	27.5	11.5
ADVANTA PACIFIC F51321	2842	113	41.4	1177	57	50	5	27.4	10.5
CROPLAN GENETICS 3080DMR	2256	90	45.1	1017	57	50	13	25.9	9.6
CROPLAN GENETICS 308NS	2443	97	44.8	1094	57	48	11	28.0	10.2
CROPLAN GENETICS 356NS	2126	85	41.6	884	58	51	7	26.3	12.3
CROPLAN GENETICS 378DMR,	2316	92	42.2	977	58	55	6	26.3	12.8
DEKALB DK 3875	2784	111	41.4	1153	58	52	11	26.4	12.7
DEKALB DKF35-10NS	2457	98	39.1	961	57	53	5	27.8	13.8
DEKALB DKF37-31NS	2308	92	40.6	937	58	48	2	26.2	14.3
DEKALB DKF38-30NS	2699	107	42.0	1134	60	54	6	27.5	11.6
DEKALB DKF38-45NS	1998	79	43.0	859	57	55	5	26.8	13.7
FONTANELLE 902 NS	2711	108	44.9	1217	59	54	10	24.4	11.5
FONTANELLE EXP1060	2326	92	41.4	963	58	49	13	26.8	13.8
FONTANELLE HO120	2430	97	41.9	1018	58	58	2	26.0	12.7
FONTANELLE HYSUN 454	2358	94	41.6	981	58	54	10	26.6	12.4
GARST 4420	2961	118	40.9	1211	60	53	6	28.1	11.5
GARST 4596 HO	2816	112	41.2	1160	57	56	11	30.2	12.2
GARST 4651 NS	2641	105	41.8	1104	58	54	9	27.0	13.5
GARST 4665 HO	2118	84	39.3	832	57	54	11	25.6	10.7
MONSANTO MH4436	1984	79	41.0	813	57	51	13	25.6	11.1
MONSANTO MH4437CL	1895	75	40.1	760	57	50	15	25.6	11.7
MONSANTO MH4438CL	2006	80	40.3	808	57	52	17	27.1	10.7
MONSANTO MH5434	1994	79	44.0	877	57	56	12	25.8	12.4
MONSANTO MH5436	2272	90	42.5	966	57	49	8	26.8	11.8
MYCOGEN 8H350DM	2333	93	43.6	1017	57	55	10	26.3	10.1
MYCOGEN 8H419CL	2828	112	42.6	1205	59	55	11	27.0	10.3
MYCOGEN 8N 453 DM	2803	111	45.4	1273	57	52	7	29.8	11.0

**Table 1. Colby Irrigated Oilseed Sunflower Performance Test, 2006, continued.**

<b>BRAND and HYBRID</b>	<b>Yield (lbs/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lbs/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lbs/bu)</b>	<b>Seed Weight (g/200)</b>
MYCOGEN 8N 462 DM	2276	90	45.1	1026	59	52	8	27.9	10.5
MYCOGEN 8N 520 DM	2502	99	41.3	1033	58	51	7	25.5	9.7
MYCOGEN 8N352	2928	116	45.2	1323	57	52	3	29.9	12.5
MYCOGEN 8N386CL	2309	92	39.2	905	57	56	4	26.8	12.2
MYCOGEN 8N510	2585	103	42.5	1099	59	53	1	26.9	10.8
PIONEER 63M80	2115	84	42.3	895	57	52	9	26.7	13.0
PIONEER 63M91	2741	109	42.2	1157	57	57	5	29.2	13.8
PIONEER 64H41	2202	88	41.2	907	58	56	12	29.3	14.2
TRIUMPH 636	2628	104	43.7	1148	57	51	7	25.0	15.0
TRIUMPH 645	2622	104	46.2	1211	58	55	5	23.1	11.7
TRIUMPH 658	2933	117	44.8	1314	59	53	7	24.2	13.0
TRIUMPH 660CL	2713	108	42.6	1156	61	55	6	24.6	11.6
TRIUMPH 665	2893	115	45.2	1308	60	54	5	26.9	11.1
TRIUMPH 845HO	2404	96	45.4	1091	59	54	5	23.2	12.2
TRIUMPH 847HO	2375	94	42.6	1012	61	56	6	25.5	12.8
TRIUMPH s672	3023	120	45.9	1388	60	36	0	28.5	11.0
TRIUMPH s675	3047	121	45.4	1383	63	39	1	28.1	12.8
TRIUMPH s678	2737	109	44.0	1204	62	46	1	27.6	12.8
TRIUMPH TRXs 5423	3148	125	45.7	1439	60	35	2	27.9	9.6
AVERAGES	2515	100	42.6	1073	58	52	7	26.8	12.0
CV(%)	14	14	--	--	1	6	88	3.6	--
LSD(0.05)*	482	19	--	--	1	4	9	1.4	--

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

### 2-Year Averages (2005 and 2006)

ADVANTA PACIFIC AP534NS/CL	3000	111	40.1	1206	58	62	5	25.3	11.7
ADVANTA PACIFIC AP561NS	3392	126	40.8	1382	59	60	4	27.2	10.9
CROPLAN GENETICS 3080DMR	2561	95	45.6	1168	55	54	9	25.9	9.3
CROPLAN GENETICS 308NS	2675	99	45.3	1213	55	51	6	27.2	10.1
CROPLAN GENETICS 378DMR,	2743	101	42.8	1175	57	61	4	25.3	12.0
DEKALB DKF35-10NS	2701	100	39.7	1074	55	57	3	27.0	13.3
DEKALB DKF38-30NS	2790	104	41.4	1153	58	57	4	26.1	10.9
FONTANELLE 902 NS	3027	112	45.0	1362	58	60	6	23.9	11.5
FONTANELLE HO120	2610	97	41.9	1092	57	61	4	25.0	13.0
FONTANELLE HYSUN 454	2633	97	41.9	1102	57	59	5	26.4	12.1
GARST 4596 HO	2918	108	42.3	1234	56	60	6	29.3	11.7
GARST 4651 NS	2656	99	42.3	1123	57	59	5	25.8	12.9
GARST 4665 HO	2501	92	39.9	1000	56	61	7	26.1	10.9
MYCOGEN 8H350DM	2586	96	44.2	1143	55	58	6	25.5	9.8
MYCOGEN 8H419CL	2975	110	42.2	1253	58	60	6	25.9	10.3
MYCOGEN 8N352	3116	116	45.5	1418	56	57	2	28.8	11.6
MYCOGEN 8N386CL	2790	103	40.6	1138	55	60	3	25.4	11.8
MYCOGEN 8N510	3155	116	41.9	1317	57	56	2	25.9	10.7
PIONEER 63M80	2479	91	43.4	1080	55	58	5	26.0	12.6
PIONEER 63M91	2999	111	43.3	1300	56	63	3	28.5	13.0
PIONEER 64H41	2644	97	42.0	1114	57	61	7	29.0	13.8
TRIUMPH 636	3021	111	43.7	1318	56	58	4	24.5	14.6
TRIUMPH 645	2822	105	46.1	1299	57	60	3	23.2	11.5
TRIUMPH 660CL	2814	105	41.8	1174	60	62	4	24.2	11.2
TRIUMPH 665	2999	111	44.4	1329	59	59	3	25.7	10.8
TRIUMPH s672	3007	112	45.2	1359	58	40	1	27.6	10.6
TRIUMPH s675	2960	110	45.3	1341	61	42	4	27.8	12.0
TRIUMPH s678	2700	101	44.4	1198	60	49	2	27.5	11.8
AVERAGES	2698	100	42.4	1146	56	56	4	26.2	11.5

**Table 1. Colby Irrigated Oilseed Sunflower Performance Test, 2006, continued.**

<b>BRAND and HYBRID</b>	<b>Yield (lbs/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lbs/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lbs/bu)</b>	<b>Seed Weight (g/200)</b>
<b>3-Year Averages (2004 to 2006)</b>									
CROPLAN GENETICS 3080DMR	2571	97	44.8	1152	56	57	7	26.1	9.2
CROPLAN GENETICS 308NS	2636	99	45.0	1188	56	56	6	27.2	10.0
DEKALB DKF35-10NS	2556	96	39.2	1005	58	61	3	27.3	12.6
DEKALB DKF38-30NS	2681	101	41.3	1107	60	61	3	26.6	10.7
FONTANELLE 902 NS	2942	111	43.9	1293	60	65	5	23.8	11.8
FONTANELLE HYSUN 454	2590	97	41.9	1086	59	63	5	26.6	11.9
MYCOGEN 8N352	3156	119	45.3	1430	58	61	3	29.0	11.2
MYCOGEN 8N510	2898	108	41.5	1201	60	60	5	26.0	10.5
PIONEER 63M80	2509	94	43.2	1087	57	61	4	26.2	12.5
PIONEER 63M91	2879	108	42.8	1235	58	67	3	28.2	12.2
TRIUMPH 636	2959	111	43.3	1282	59	62	5	24.2	13.7
TRIUMPH 645	2849	107	45.9	1306	60	64	3	23.9	11.7
TRIUMPH 665	2858	108	44.1	1261	61	65	6	25.8	10.7
TRIUMPH s672	2845	107	45.0	1281	60	42	2	28.0	10.0
TRIUMPH s675	2853	108	45.5	1299	63	42	7	28.1	11.3
AVERAGES	2656	100	42.1	1119	59	60	5	26.4	11.3

## NORTHWEST KANSAS FALLOW OILSEED SUNFLOWER TESTS

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

Keith silt loam; Fallow in 2005; Target stand of 17,000 plants/acre

Planted on 6/5/2006; Harvested on 10/4/2006; 50 - 0 - 0 lb/a N, P, K

Very dry at planting time, with a heavy rain three days after planting, which caused crusting and reduced stands. The remainder of the growing season had normal temperatures and more than 9" of rain June through September.

**Table 2. Colby Fallow Oilseed Sunflower Performance Test, 2006.**

<b>BRAND and HYBRID</b>	<b>Yield (lbs/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lbs/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lbs/bu)</b>	<b>Seed Weight (g/200)</b>
ADVANTA PACIFIC AP533NS	1538	108	39.6	609	59	49	10	24.7	9.1
ADVANTA PACIFIC AP534NS/CL	1559	109	35.8	558	59	49	9	23.3	8.3
ADVANTA PACIFIC AP561NS	1415	99	36.3	514	61	52	11	18.6	9.7
ADVANTA PACIFIC F41271	1110	78	33.9	376	60	43	5	24.1	10.0
DEKALB DK 3875	1656	116	35.5	588	59	45	3	26.2	9.0
DEKALB DKF35-10NS	1312	92	35.7	468	59	49	0	24.9	8.7
DEKALB DKF37-31NS	1576	110	35.6	561	60	48	0	25.1	8.5
DEKALB DKF38-30NS	1267	89	35.1	445	61	49	5	24.6	9.0
DEKALB DKF38-45NS	1370	96	37.4	512	59	49	0	24.7	9.5
FONTANELLE 902 NS	1694	119	41.2	698	60	50	7	23.4	8.9
FONTANELLE HO120	1669	117	37.8	631	59	53	0	24.7	9.8
FONTANELLE HYSUN 454	1557	109	37.9	590	59	49	0	25.6	8.3
GARST 4420	1460	102	35.9	524	61	54	3	24.3	8.4
GARST 4596 HO	1436	101	36.4	523	59	49	3	25.6	8.0
GARST 4651 NS	1274	89	36.1	460	60	47	6	23.1	10.0
GARST 4665 HO	1321	93	36.0	476	59	49	1	25.2	11.1
GARST 4668NS/CL	1282	90	35.2	451	61	47	7	18.3	7.9
MONSANTO MH4436	1225	86	40.1	491	58	48	18	26.4	9.0
MONSANTO MH4437CL	1321	93	37.5	495	58	47	14	24.6	9.9
MONSANTO MH4438CL	1230	86	37.1	456	58	49	3	23.8	7.9
MONSANTO MH5434	1380	97	39.8	549	59	52	4	23.4	8.9
MONSANTO MH5436	1706	120	38.2	652	59	44	3	24.1	8.7
MYCOGEN 8H350DM	1327	93	39.9	529	58	52	0	25.0	8.5
MYCOGEN 8H419CL	1342	94	38.1	511	59	50	0	24.2	9.2
MYCOGEN 8N 453 DM	1733	121	41.1	712	60	47	0	26.8	8.4
MYCOGEN 8N 462 DM	1569	110	40.0	628	59	50	1	26.7	8.6
MYCOGEN 8N 520 DM	1618	113	36.7	594	60	49	0	24.0	7.9
MYCOGEN 8N352	1518	106	39.9	606	58	45	1	27.4	7.8
MYCOGEN 8N386CL	1451	102	37.3	541	59	51	0	24.7	8.4
MYCOGEN 8N510	1301	91	35.2	458	59	47	11	23.8	9.0
PIONEER 63M80	1250	88	37.9	474	59	48	2	24.0	9.4
PIONEER 63M91	1110	78	38.0	422	59	52	4	24.1	8.9
TRIUMPH 660CL	1647	115	36.9	608	61	51	1	24.0	11.5
TRIUMPH s672	1551	109	41.4	642	61	35	0	20.2	9.2
TRIUMPH s678	1193	84	38.9	464	62	46	0	24.4	8.1
AVERAGES	1428	100	37.6	538	59	48	4	24.2	9.0
CV(%)	25	25	--	--	2	5	181	15.5	--
LSD(0.05)*	507	36	--	--	1	3	9	5.2	--

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

### 2-Year Averages (2005 and 2006)

DEKALB DKF35-10NS	1492	95	35.2	523	57	46	0	24.7	8.8
DEKALB DKF38-30NS	1563	99	35.0	547	59	47	3	24.1	8.9
FONTANELLE 902 NS	1713	110	39.3	672	58	48	5	22.8	8.0
FONTANELLE HO120	1678	108	37.8	633	57	50	2	24.3	9.7
FONTANELLE HYSUN 454	1650	105	37.3	614	57	49	0	25.2	8.8
GARST 4596 HO	1616	103	36.1	583	57	49	3	25.7	7.7
GARST 4651 NS	1542	97	35.8	551	58	46	4	22.8	9.0
GARST 4665 HO	1569	99	35.5	555	57	47	2	24.7	9.4
MYCOGEN 8H350DM	1418	91	39.3	556	55	48	0	24.6	7.9

**Table 2. Colby Fallow Oilseed Sunflower Performance Test, 2006, continued.**

<b>BRAND and HYBRID</b>	<b>Yield (lbs/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lbs/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lbs/bu)</b>	<b>Seed Weight (g/200)</b>
MYCOGEN 8H419CL	1547	98	37.3	574	58	46	0	23.7	8.7
MYCOGEN 8N352	1747	111	39.5	688	56	44	1	26.3	8.1
MYCOGEN 8N386CL	1647	105	37.7	622	57	47	1	23.9	8.6
MYCOGEN 8N510	1616	102	35.3	570	57	44	6	23.4	8.4
PIONEER 63M80	1429	91	38.1	544	57	47	2	23.4	9.4
PIONEER 63M91	1447	91	38.1	551	57	50	3	24.5	8.7
TRIUMPH 660CL	1741	111	36.0	626	60	47	1	23.1	9.5
TRIUMPH s672	1676	107	40.4	675	59	33	0	23.1	8.4
AVERAGES	1571	100	36.9	579	57	46	2	24.0	8.5
<b>3-Year Averages (2004 to 2006)</b>									
DEKALB DKF35-10NS	1443	93	34.9	503	59	48	2	24.3	8.8
DEKALB DKF38-30NS	1548	99	35.3	547	61	48	6	24.1	8.9
FONTANELLE 902 NS	1716	111	37.8	649	60	51	9	21.8	8.3
FONTANELLE HYSUN 454	1616	104	37.0	597	59	51	1	24.5	9.0
MYCOGEN 8N510	1641	105	34.6	568	59	47	5	22.7	8.3
PIONEER 63M80	1440	93	37.3	537	58	48	5	22.4	9.8
PIONEER 63M91	1454	93	37.6	547	59	52	4	23.5	8.8
AVERAGES	1550	100	36.2	562	59	48	5	23.3	8.7



# WEST CENTRAL KANSAS OILSEED SUNFLOWER TESTS

Southwest Res.-Ext. Center, Tribune; Alan Schlegel, agronomist

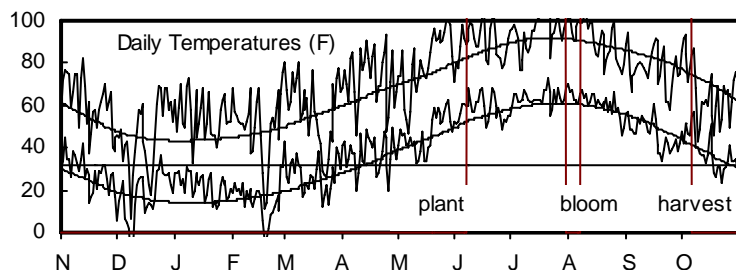
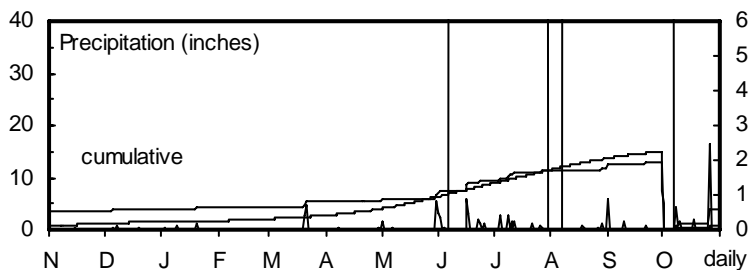
Ulysses silt loam; corn in 2005

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

Planted on 6/7/2006; Harvested on 10/5/2006

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

Month	Precipitation		Average Temp.	
	2006	Norm.	2006	Norm.
Nov.-Mar	1.8	2.1	38	34
April	0.2	1.3	55	49
May	1.6	2.3	64	59
June	2.4	2.6	74	70
July	1.7	2.5	79	76
August	0.4	2.2	76	74
Sept.	1.2	1.3	62	66
Oct.	3.8	0.7	52	53
Totals:	13.0	15.0	54	52



**Table 3. Tribune Irrigated Oilseed Sunflower Performance Test, 2006.**

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 (lbs/bu)	Seed Weight (g/200)
ADVANTA PACIFIC AP 561NS	2126	112	39.3	836	57	77	1	29.7	11.5
ADVANTA PACIFIC AP534NS/CL	1498	79	41.1	616	57	73	1	29.6	11.9
ADVANTA PACIFIC AP533NS	1978	104	43.1	853	56	65	3	29.4	11.3
ADVANTA PACIFIC F41271	2089	110	39.9	834	57	68	1	30.6	11.0
ADVANTA PACIFIC F51321	1944	103	40.0	778	55	65	3	29.3	11.4
CROPLAN GENETICS 3080DMR	2290	121	44.4	1017	55	70	1	30.4	10.2
CROPLAN GENETICS 308NS	1903	100	44.5	847	55	67	4	28.2	10.7
CROPLAN GENETICS 356NS	1978	104	41.7	825	57	63	4	28.7	13.6
CROPLAN GENETICS 378DMR,	2155	114	41.6	896	56	74	1	29.1	13.0
DEKALB DK 3875	1936	102	42.1	815	55	67	4	28.2	13.1
DEKALB DKF35-10NS	2059	109	39.3	809	55	69	2	28.7	13.0
DEKALB DKF37-31NS	1886	100	43.0	811	56	62	3	28.7	12.2
DEKALB DKF38-30NS	1543	81	41.5	640	57	70	7	29.9	12.1
DEKALB DKF38-45NS	1860	98	43.4	807	55	65	4	28.7	11.6
FONTANELLE 902 NS	1495	79	44.7	668	57	72	0	28.3	11.9
FONTANELLE EXP1060	1811	96	43.1	781	56	64	1	29.5	14.8
FONTANELLE HO120	1663	88	41.7	693	56	74	3	27.3	12.7
FONTANELLE HYSUN 454	1855	98	42.9	796	56	70	1	29.4	11.9
GARST 4420	2020	107	41.4	836	57	75	4	29.5	11.9
GARST 4596 HO	2319	122	40.7	944	56	72	12	29.5	12.7
GARST 4651 NS	1673	88	43.3	724	56	73	5	29.2	12.4
GARST 4665 HO	1542	81	40.2	620	56	71	1	29.6	10.9
MONSANTO MH4436	1707	90	41.9	715	56	65	2	29.2	11.6
MONSANTO MH4437CL	1934	102	40.4	781	55	64	3	29.6	12.6
MONSANTO MH4438CL	1693	89	39.8	674	55	64	1	28.7	11.7
MONSANTO MH5434	1799	95	42.6	766	56	73	5	29.1	12.9
MONSANTO MH5436	1671	88	42.1	703	55	66	4	27.4	11.0
MYCOGEN 8H350DM	2171	115	42.7	927	55	72	2	29.3	10.7
MYCOGEN 8H419CL	2230	118	42.4	946	57	72	1	29.9	10.6
MYCOGEN 8N 453 DM	1822	96	45.1	822	55	69	3	28.6	11.3
MYCOGEN 8N 462 DM	1739	92	44.6	776	56	72	4	29.3	11.9
MYCOGEN 8N 520 DM	1721	91	42.0	723	57	70	7	28.6	11.7
MYCOGEN 8N352	1954	103	45.7	893	56	69	2	27.4	11.3
MYCOGEN 8N386CL	2159	114	40.0	864	56	73	5	29.5	13.0

**Table 3. Tribune Irrigated Oilseed Sunflower Performance Test, 2006, continued.**

<b>BRAND and HYBRID</b>	<b>Yield (lbs/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lbs/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lbs/bu)</b>	<b>Seed Weight (g/200)</b>
MYCOGEN 8N510	1547	82	42.2	653	56	70	2	28.7	11.1
PIONEER 63M80	1739	92	42.4	737	55	67	2	27.6	12.8
PIONEER 63M91	1945	103	42.8	832	55	73	4	29.0	12.8
PIONEER 64H41	2365	125	41.5	981	55	68	1	29.8	14.7
SEEDS 2000 BLAZER	1603	85	42.8	686	56	65	2	28.6	10.2
SEEDS 2000 SIERRA	1696	90	40.5	687	59	66	3	29.1	11.2
TRIUMPH 645	2169	115	45.0	976	58	75	3	29.4	12.2
TRIUMPH 660CL	2272	120	43.9	997	58	75	1	30.3	10.9
TRIUMPH 845HO	1470	78	43.9	645	58	74	3	28.8	13.1
TRIUMPH s672	2273	120	44.9	1021	57	54	2	29.2	10.4
TRIUMPH s675	2099	111	44.4	932	60	55	1	27.9	11.9
TRIUMPH s678	1722	91	44.3	763	59	61	2	29.4	11.8
AVERAGES	1894	100	42.4	803	56	69	3	29.0	11.9
CV(%)	22	22	--	--	1	4	133	5.3	--
LSD(0.05)*	581	31	--	--	1	4	5	2.1	--

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

### 2-Year Averages (2005 and 2006)

CROPLAN GENETICS 308NS	2168	106	43.7	945	56	68	4	27.1	10.3
CROPLAN GENETICS 378DMR,	2184	108	41.7	911	59	75	10	28.3	11.7
DEKALB DKF35-10NS	2024	100	38.6	782	56	71	4	27.3	12.3
DEKALB DKF38-30NS	1831	90	41.1	750	60	71	5	27.5	11.3
FONTANELLE HO120	1683	83	41.1	691	58	77	4	26.5	12.0
FONTANELLE HYSUN 454	2105	103	41.6	871	58	73	5	27.8	12.0
MYCOGEN 8H350DM	2073	103	41.5	861	56	72	5	27.3	10.1
MYCOGEN 8H419CL	2105	105	41.5	875	57	73	2	27.8	10.5
MYCOGEN 8N352	1981	98	44.0	871	58	69	16	26.9	10.8
MYCOGEN 8N386CL	2251	111	40.5	912	57	73	6	27.7	11.5
MYCOGEN 8N510	2046	100	41.6	848	58	70	6	27.5	9.9
PIONEER 63M80	1903	94	41.5	788	57	68	4	26.4	12.1
PIONEER 63M91	1943	96	42.6	827	57	74	7	27.8	12.0
PIONEER 64H41	2419	120	40.9	988	57	71	3	29.4	13.8
SEEDS 2000 BLAZER	2016	98	42.2	848	58	67	3	26.9	9.8
SEEDS 2000 SIERRA	1939	95	40.2	778	62	71	13	25.9	10.0
TRIUMPH 645	2334	115	45.2	1055	60	76	5	26.9	11.6
TRIUMPH 660CL	2079	104	42.8	891	61	76	12	27.2	10.2
TRIUMPH s672	2171	108	45.1	979	59	55	2	28.4	9.7
TRIUMPH s675	2255	111	44.7	1008	62	55	2	28.3	11.4
TRIUMPH s678	2064	101	45.1	932	62	63	3	28.8	10.9
AVERAGES	2029	100	41.6	843	58	70	5	27.5	11.2

### 3-Year Averages (2004 to 2006)

DEKALB DKF35-10NS	2130	103	38.8	826	59	72	7	28.4	12.1
DEKALB DKF38-30NS	1898	91	40.7	772	62	72	10	28.5	11.4
FONTANELLE HYSUN 454	2086	101	40.9	851	60	74	6	27.8	12.2
MYCOGEN 8N352	2120	102	44.3	939	60	71	13	28.5	10.9
MYCOGEN 8N510	2095	100	41.8	873	61	70	7	28.3	9.7
PIONEER 63M80	2126	102	41.6	885	58	69	4	27.7	12.7
PIONEER 63M91	1947	94	42.6	830	59	74	6	29.2	12.3
SEEDS 2000 BLAZER	2122	102	41.7	882	60	67	7	27.0	10.5
TRIUMPH 645	2324	112	45.2	1051	61	77	12	27.0	11.5
TRIUMPH s675	2221	107	44.9	998	64	56	30	27.9	11.6
AVERAGES	2072	100	41.4	858	60	70	8	28.0	11.4

# SOUTH CENTRAL KANSAS DRYLAND OILSEED SUNFLOWER TEST

Harvey County Experiment Field, Hesston; Mark Claassen, agronomist

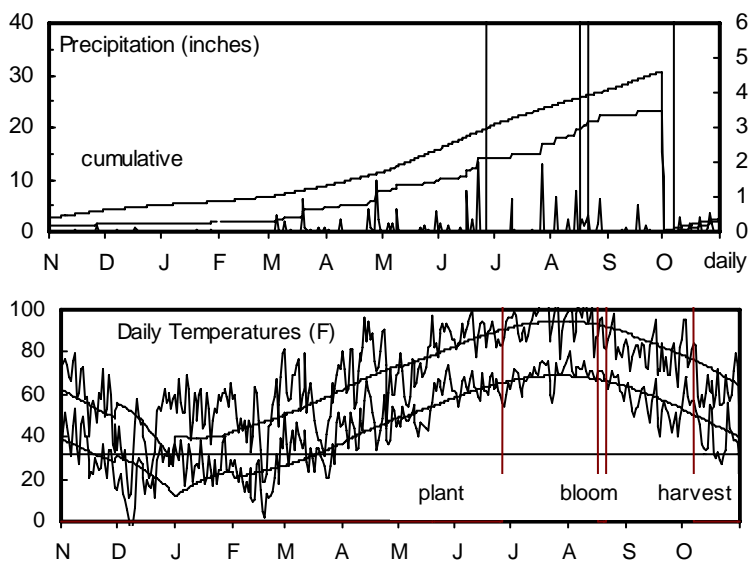
Smolan silt loam; Wheat in 2005

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

Planted on 6/27/2006; Harvested on 10/6/2006

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

The months of July and August had a total of 31 days with temperatures of 95 degrees or higher, and 13 days of temperatures of 100 to 108 F. July was dryer than usual. Above-normal rainfall in August, coupled with more moderate temperatures during the second half of the month, was very beneficial. Head moth levels were very light. Woollybear caterpillars caused notable leaf damage but were controlled with insecticide. Head clipping weevil resulted in minor yield loss. Stem borers and stalk rot caused some lodging. Late-season lodging was significant and caused yield loss as well as variability in some entries.



Month	Precipitation		Average Temp.	
	2006	Norm.	2006	Norm.
Nov.-Mar	3.4	5.9	40	37
April	3.1	2.7	60	56
May	2.2	4.3	66	65
June	4.0	4.8	76	75
July	3.1	3.8	82	81
August	5.1	3.1	80	80
Sept.	1.2	3.5	66	71
Oct.	2.0	2.5	56	59
Totals:	24.1	30.6	57	56

**Table 4. Hesston Dryland Oilseed Sunflower Performance Test, 2006.**

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 (lbs/bu)	Seed Weight (g/200)
CROPLAN GENETICS 356NS	1199	65	41.7	500	51	57	61	22.2	9.6
CROPLAN GENETICS 378DMR,	1983	108	41.8	829	52	63	6	23.5	9.9
DEKALB DKF35-10NS	2070	113	39.9	826	50	56	11	25.2	10.0
DEKALB DKF38-30NS	1575	86	41.4	652	53	61	32	23.4	9.2
FONTANELLE 902 NS	1827	100	42.7	780	51	60	18	21.5	9.3
TRIUMPH 645	2147	117	43.4	932	51	59	2	22.8	10.5
TRIUMPH 660CL	1529	83	41.4	633	53	57	10	22.1	8.9
TRIUMPH s672	1975	108	43.7	863	53	39	4	21.2	8.9
TRIUMPH s675	1857	101	42.2	784	55	39	17	20.5	9.2
TRIUMPH s678	2164	118	42.7	924	55	47	1	22.6	10.0
AVERAGES	1833	100	42.1	772	52	54	16	22.5	9.5
CV(%)	12	12	--	--	1	4	101	8.9	--
LSD(0.05)*	336	18	--	--	1	3	24	3.0	--

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

## 2-Year Averages (2005 and 2006)

CROPLAN GENETICS 378DMR,	2017	109	42.5	857	53	59	8	26.4	10.7
DEKALB DKF35-10NS	2104	113	39.7	835	50	54	10	26.7	11.3
DEKALB DKF38-30NS	1732	93	42.0	728	53	55	24	25.8	9.9
TRIUMPH 645	2229	120	43.6	972	52	55	12	24.9	10.7
TRIUMPH s672	2008	108	44.2	887	53	36	9	24.5	9.2
AVERAGES	1859	100	42.4	788	52	51	18	25.4	10.1

**Table 4. Hesston Dryland Oilseed Sunflower Performance Test, 2006, continued.**

<b>BRAND and HYBRID</b>	<b>Yield (lbs/a)</b>	<b>Yield as % of Test Average</b>	<b>Oil Content (%)</b>	<b>Oil Yield (lbs/a)</b>	<b>Days to Half Bloom</b>	<b>Plant Height (in.)</b>	<b>Lodging (%)</b>	<b>Test Weight (lbs/bu)</b>	<b>Seed Weight (g/200)</b>
<b>3-Year Averages (2004 to 2006)</b>									
DEKALB DKF35-10NS	2163	115	39.0	843	51	56	13	26.6	11.2
DEKALB DKF38-30NS	1886	100	40.8	767	54	59	17	25.5	9.8
TRIUMPH 645	2322	124	43.1	999	52	58	10	24.7	10.7
AVERAGES	1879	100	40.9	768	52	55	18	25.2	9.9

## NORTHWEST KANSAS CONFECTIONARY SUNFLOWER TESTS

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist  
Keith silt loam; Sunflowers in 2005; Target stand of 17,000 plants/acre  
Planted on 6/5/2006; Harvested on 10/7/2006; 60 - 0 - 0 lb/a N, P, K

Very dry at planting time, with a heavy rain three days after planting, which caused crusting and reduced stands. The remainder of the growing season had normal temperatures and over 9" of rain June through September.

**Table 5. Colby Irrigated Confectionary Sunflower Performance Test, 2006.**

BRAND and HYBRID	Yield (lb/a)	Yield % of Avg	Days to Half Blm	Plant Ht. (in.)	Lodging (%)	Test Wt. (lb/bu)	Seed Wt. (g/200)	Seed Size Distribution (%)						
								Above 22/64	21/64 to 22/64	20/64 to 21/64	19/64 to 20/64	18/64 to 19/64	16/64 to 18/64	Below 16/64
ADVANTA PACIFIC F09048	1705	100	59	60	3	20.5	27.6	21.1	17.7	20.3	22.2	11.3	6.8	0.9
ADVANTA PACIFIC F41270	1757	103	58	58	7	20.1	27.8	29.0	22.6	20.2	16.0	6.8	4.6	0.6
CHS SUNFLOWER RH112	2000	117	59	54	4	17.3	29.9	76.5	11.0	6.7	3.2	1.5	0.8	0.3
CHS SUNFLOWER RH1122	1655	97	59	55	0	17.9	30.8	65.5	13.7	7.8	6.5	3.8	2.5	0.7
CHS SUNFLOWER RH316	2028	119	57	55	0	18.1	32.9	27.3	32.4	20.9	12.0	4.6	2.4	0.5
CROPLAN GENETICS 135	1709	100	54	50	19	16.3	30.6	69.6	12.5	6.5	6.4	2.8	1.8	0.7
CROPLAN GENETICS 137	1678	98	57	54	6	15.5	30.6	63.3	18.3	7.5	4.6	2.7	2.6	1.0
CROPLAN GENETICS 142	1052	62	58	51	14	13.5	33.1	73.6	12.9	6.0	3.8	1.9	1.3	0.7
DAHLGREN 9541	1787	105	59	60	2	18.3	32.5	23.5	27.0	21.4	19.8	5.4	2.1	1.0
DAHLGREN 9569	1683	99	62	57	0	18.2	31.5	42.5	22.4	15.0	9.2	5.3	4.1	2.1
DAHLGREN D-9530	1570	92	63	59	0	18.4	31.8	50.9	19.9	12.5	9.1	3.6	3.5	0.9
GARST 8048	1410	83	57	53	3	19.7	28.0	49.0	20.8	13.8	12.0	3.5	0.7	0.7
MYCOGEN 8C 482	1862	109	60	61	1	18.7	30.3	45.0	20.4	16.0	9.9	4.4	2.9	1.1
MYCOGEN 8C481	1721	101	59	64	4	17.9	30.7	34.9	27.3	19.6	12.2	3.1	1.9	0.8
RED R. COMMODITIES 2215	2043	120	62	59	2	18.1	27.4	45.8	24.9	15.5	9.0	2.4	1.8	0.7
RED R. COMMODITIES 2216	1644	96	63	63	2	18.7	27.6	43.7	25.6	15.6	8.8	3.4	2.1	0.7
RED R. COMMODITIES 7015	1717	101	62	58	3	18.4	28.9	34.5	26.7	16.5	10.7	5.3	5.0	1.6
SEEDS 2000 3938	1553	91	58	54	1	17.7	27.8	19.0	21.1	21.3	19.4	8.9	7.8	2.6
SEEDS 2000 X3967	1171	69	58	57	1	17.6	23.9	39.1	17.3	15.3	9.6	7.3	9.1	2.4
SUN OPTA GOLIATH RT	1932	113	62	57	1	20.2	28.3	25.8	26.0	17.4	14.1	7.4	7.3	0.8
TRIUMPH 767C	1834	107	61	56	8	19.6	28.4	49.1	15.6	9.9	9.4	6.2	7.1	1.8
TRIUMPH 777C	1829	107	63	62	3	18.3	28.1	61.9	16.7	9.2	6.8	2.6	1.5	0.3
TRIUMPH TRX 2354CLS	1921	113	60	55	3	18.2	32.9	59.9	16.4	8.8	5.9	3.8	4.1	1.1
AVERAGES	1707	100	59	57	4	18.1	29.6	45.7	20.4	14.1	10.5	4.7	3.6	1.0
CV(%)	16	16	1	4	105	4.8								
LSD(0.05)*	378	22	1	3	5	1.2								

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

### 2-Year Averages (2005 and 2006)

CROPLAN GENETICS 135	2144	112	52	54	11	16.0	27.8	71.6	11.8	6.1	4.9	2.3	2.5	1.2
DAHLGREN D-9530	1876	99	60	61	2	17.5	28.8	58.0	18.4	10.4	7.3	2.8	2.7	0.9
MYCOGEN 8C481	1767	94	57	66	3	16.4	28.9	37.7	25.4	18.4	11.9	3.5	2.4	0.8
RED R. COMMODITIES 2215	2179	116	59	61	2	17.4	26.4	49.8	23.2	14.7	7.2	2.3	2.4	0.6
RED R. COMMODITIES 2216	2043	107	60	65	2	17.6	26.5	50.1	22.8	13.2	7.9	3.8	1.7	0.6
RED R. COMMODITIES 7015	1828	97	59	61	2	17.8	27.4	38.9	27.0	16.1	9.2	3.9	3.6	1.6
SUN OPTA GOLIATH RT	2079	110	60	59	1	18.9	27.8	37.3	24.0	14.8	10.6	5.5	6.1	1.5
TRIUMPH 767C	1790	96	59	58	6	18.0	29.6	62.9	14.2	7.8	5.8	3.6	4.3	1.2
TRIUMPH 777C	2131	112	60	64	2	16.7	27.7	68.2	15.7	7.7	4.5	1.8	1.3	0.6
AVERAGES	1892	100	57	60	3	17.0	28.0	52.7	18.7	12.2	8.4	3.8	3.2	1.1

### 3-Year Averages (2004 to 2006)

CROPLAN GENETICS 135	2057	105	54	54	9	16.2	29.0	67.6	13.9	7.4	5.9	2.4	2.0	1.0
DAHLGREN D-9530	1943	100	61	61	2	17.5	29.0	55.6	19.9	11.3	7.6	2.7	2.4	0.7
RED R. COMMODITIES 2215	2110	109	60	61	2	17.8	26.6	44.2	23.8	16.1	8.9	3.3	3.0	0.7
RED R. COMMODITIES 7015	1982	102	61	61	2	17.5	27.6	36.8	26.3	16.7	10.3	4.3	4.1	1.6

**Table 5. Colby Irrigated Confectionary Sunflower Performance Test, 2006, continued.**

BRAND and HYBRID	Yield (lb/a)	Yield % of Avg	Days to Half Blm	Plant Ht. (in.)	Lodg- ing (%)	Test Wt. (lb/bu)	Seed Wt. (g/200)	Seed Size Distribution (%)						
								Above 22/64	21/64 to 22/64	20/64 to 21/64	19/64 to 20/64	18/64 to 19/64	16/64 to 18/64	Below 16/64
SUN OPTA GOLIATH RT	1947	101	61	59	1	18.9	29.2	37.8	23.1	14.7	10.3	5.3	6.1	2.3
AVERAGES	1942	100	59	60	3	17.4	28.4	50.8	18.7	12.4	9.1	4.1	3.7	1.3

## NORTHWEST KANSAS FALLOW CONFECTIONARY SUNFLOWER TESTS

Northwest Research-Extension Center, Colby; Patrick Evans, agronomist  
 Keith silt loam; Fallow in 2005; Target stand of 14,900 plants/acre  
 Planted on 6/5/2006; Harvested on 10/5/2006; 50 - 0 - 0 lb/a N, P, K

Very dry at planting time, with a heavy rain three days after planting, which caused crusting and reduced stands. The remainder of the growing season had normal temperatures and over 9" of rain June through September.

**Table 6. Colby Fallow Confectionary Sunflower Performance Test, 2006.**

BRAND and HYBRID	Yield (lb/a)	Yield % of Avg	Days to Half Blm	Plant Ht. (in.)	Lodg- ing (%)	Test Wt. (lb/bu)	Seed Wt. (g/200)	Seed Size Distribution (%)						
								Above 22/64	21/64 to 22/64	20/64 to 21/64	19/64 to 20/64	18/64 to 19/64	16/64 to 18/64	Below 16/64
MYCOGEN 8C 482	1406	109	60	50	--	19.5	35.4	32.3	25.7	19.3	13.4	5.4	3.2	1.0
MYCOGEN 8C481	1229	96	62	51	--	18.0	34.2	20.1	24.0	19.9	17.7	8.4	8.2	2.2
SEEDS 2000 3938	1138	88	61	44	--	18.6	31.8	23.4	20.7	16.0	12.1	9.5	14.6	3.7
SEEDS 2000 X3967	1250	97	61	47	--	18.4	32.3	44.5	15.1	12.9	13.3	7.0	5.6	1.8
TRIUMPH 767C	1429	111	62	48	--	19.1	30.3	51.2	11.1	8.8	9.6	7.6	9.6	1.8
TRIUMPH 777C	1270	99	64	51	--	17.4	29.1	50.1	18.9	12.5	7.9	5.2	4.4	0.7
AVERAGES	1287	100	62	48	--	18.5	32.2	36.9	19.3	14.9	12.3	7.2	7.6	1.9
CV(%)	27	27	3	6	--	5.9								
LSD(0.05)*	533	41	3	4	--	1.6								

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

### 2-Year Averages (2005 and 2006)

AVERAGES	1277	100	59	47	0	17.0	27.0	40.8	19.8	14.0	10.9	6.6	6.5	1.5
----------	------	-----	----	----	---	------	------	------	------	------	------	-----	-----	-----

### 3-Year Averages (2004 to 2006)

AVERAGES	1318	100	61	50	2	16.6	23.9	28.6	15.9	13.6	13.6	9.2	12.6	6.6
----------	------	-----	----	----	---	------	------	------	------	------	------	-----	------	-----

## WEST CENTRAL KANSAS CONFECTIONARY SUNFLOWER TESTS

Southwest Res.-Ext. Center, Tribune; Alan Schlegel, agronomist  
 Ulysses silt loam; corn in 2005; Target stand of 17,400 plants/acre  
 Planted on 6/7/2006; Harvested on 10/5/2006; 120 - 0 - 0 lb/a N, P, K

**Table 7. Tribune Irrigated Confectionary Sunflower Performance Test, 2006.**

BRAND and HYBRID	Yield (lb/a)	Yield % of Avg	Days to Half Blm	Plant Ht. (in.)	Lodg- ing (%)	Test Wt. (lb/bu)	Seed Wt. (g/200)	Seed Size Distribution (%)						
								Above 22/64	21/64 to 22/64	20/64 to 21/64	19/64 to 20/64	18/64 to 19/64	16/64 to 18/64	Below 16/64
CHS SUNFLOWER RH112	1670	134	57	78	2	19.0	28.8	65.6	16.3	8.4	4.8	2.0	2.6	0.4
CHS SUNFLOWER RH1122	1520	122	57	72	6	19.7	31.8	65.5	13.5	6.1	5.8	5.0	3.3	1.1
CHS SUNFLOWER RH316	1078	87	57	74	4	19.7	29.0	20.3	24.0	21.7	18.7	7.4	7.4	0.7
DAHLGREN 9541	1256	101	56	83	5	18.3	26.2	8.6	17.5	22.3	28.1	14.8	7.7	1.0
DAHLGREN 9569	882	71	56	74	5	13.8	26.7	34.2	20.4	17.1	13.6	6.8	5.9	2.1
DAHLGREN D-9530	1292	104	56	75	5	20.1	25.3	24.4	24.2	23.2	15.0	6.9	5.4	1.0
MYCOGEN 8C 482	1331	107	57	79	4	19.1	27.0	14.7	22.6	24.8	24.0	6.3	6.7	1.0
MYCOGEN 8C481	1254	101	56	82	3	18.9	25.5	15.4	16.7	19.6	23.1	13.4	10.2	1.4
TRIUMPH 767C	1229	99	56	75	5	18.4	26.3	30.2	19.6	15.3	13.4	7.1	11.0	3.4
TRIUMPH 777C	918	74	57	77	5	19.0	24.8	38.5	20.9	14.9	13.4	5.1	5.4	1.9
AVERAGES	1243	100	56	77	4	18.6	27.1	31.7	19.6	17.3	16.0	7.5	6.6	1.4
CV(%)	33	33	3	5	85	19.2								
LSD(0.05)*	588	47	2	5	5	5.2								

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

### 2-Year Averages (2005 and 2006)

DAHLGREN D-9530	1388	104	59	75	7	18.7	24.2	28.7	25.6	20.3	14.2	6.4	4.1	0.9
MYCOGEN 8C481	1171	89	58	84	10	17.3	22.9	19.5	16.7	18.7	21.2	12.9	9.7	1.4
TRIUMPH 767C	1341	100	58	74	12	18.2	25.6	36.5	21.1	16.1	12.1	5.4	6.7	2.2
TRIUMPH 777C	999	75	60	79	10	17.8	23.4	47.3	19.7	11.9	11.2	4.4	4.4	1.3
AVERAGES	1333	100	57	76	8	17.8	25.3	37.6	19.1	16.1	14.0	6.6	5.4	1.2

### 3-Year Averages (2004 to 2006)

TRIUMPH 777C	1015	80	62	81	10	18.4	24.2	50.2	21.1	11.0	9.4	4.0	3.4	1.0
AVERAGES	1275	100	60	78	10	18.5	25.4	37.4	18.8	16.0	14.0	6.9	5.7	1.2



**Table 8. Entrants and Entries in 2006 Sunflower Performance Tests.**

<b>ADVANTA PACIFIC</b> Advanta Pacific LLC 1215 Prairie Parkway West Fargo, ND 58078 701-373-8115  AP533NS AP534NS/CL AP561NS F09048 F41270 F41271 F41273 F51321	<b>DEKALB</b> Monsanto Seed 4312 Carol Avenue Cortland, IL 60112 815-754-4809  DK 3875 DKF35-10NS DKF37-31NS DKF38-30NS DKF38-45NS  <b>FONTANELLE</b> Fontanelle Hybrid 10981 8th Street Fontanelle, NE 68044 402-721-1410  902 NS EXP1060 HO120 HYSUN 454	<b>MYCOGEN</b> Mycogen Seed 406 18th Ave. N. Whapeton, ND 58075 701-642-6007  8C 482 8C481 8H350DM 8H419CL 8N 453 DM 8N 462 DM 8N 520 DM 8N352 8N386CL 8N510	<b>SUN OPTA</b> Sun Opta 1701 Industrial Loop Goodland, KS 67735 785-899-5607  GOLIATH RT  <b>TRIUMPH</b> Triumph Seed Co., Inc. PO Box 1050 Ralls, TX 79357 800-530-4789  636 645 658 660CL 665 767C 777C 845HO 847HO s672 s675 s678 TRX 2354CLS TRXs 5423
<b>CHS SUNFLOWER</b> CHS Sunflowers 220 Clement Avenue Grandin, ND 58038 701-484-5313  RH112 RH1122 RH316	<b>GARST</b> Garst Seed Co. 2369 330th St. Slater, IA 50244 888-464-2778  4420 4596 HO 4651 NS 4665 HO 4668NS/CL 8048	<b>PIONEER</b> Pioneer Hi-Bred Intl., Inc. 390 Union Blvd. Suite 500A Lakewood, CO 80228 800-258-5604  63M80 63M91 64H41	<b>RED R. COMMODITIES</b> Red River Commodities 1320 East College Drive Colby, KS 67701 785-462-3911  2215 2216 7015
<b>CROPLAN GENETICS</b> Croplan Genetics PO Box 1291 Minot, ND 58078 701-852-2556  135 137 142 3080DMR 308NS 356NS 378DMR,	<b>MONSANTO</b> Monsanto Seed 4312 Carol Avenue Cortland, IL 60112 815-754-4809  MH4436 MH4437CL MH4438CL MH5434 MH5436	<b>SEEDS 2000</b> Seeds 2000 Box 200 Breckenridge, MN 56520 218-643-2410  3938 BARRACUDA BLAZER SIERRA X3967	
<b>DAHLGREN</b> Dahlgren 1220 Sunflower St. Crookston, MN 56716 218-281-2985  9541 9569 D-9530			

For those interested in accessing crop performance testing information electronically, visit our World Wide Web site. All of the information contained in this publication is available for viewing or downloading. Additional information also is available at <http://kscroptests.agron.ksu.edu>.

Excerpts from the UNIVERSITY RESEARCH POLICY AGREEMENT  
WITH COOPERATING SEED COMPANIES\*

Permission is hereby given to Kansas State University 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.

I understand that all results from Kansas Crop Performance Tests belong to the University and the public and shall be controlled by the University so as to produce the greatest benefit to the public. Performance data may be used in the following ways: 1) Tables may be reproduced in their entirety provided the source is referenced and data are not manipulated or reinterpreted; 2) Advertising statements by an individual company about the performance of its entries may be made as long as they are accurate statements about the data as published, with no reference to other companies' names or cultivars. In both cases, the following must be included with the reprint or ad citing the appropriate publication number and title: "See the official Kansas State University Agricultural Experiment Station and Cooperative Extension Service Report of Progress 972 '2006 Kansas Performance Tests with Sunflower Hybrids', or the Kansas Crop Performance Test website, <http://kscroptests.agron.ksu.edu>, for details. Endorsement or recommendation by Kansas State University is not implied."

*These materials may be freely reproduced for educational purposes. All other rights reserved. In each case, give credit to the author(s), name of work, Kansas State University, and the date the work was published.*

## CONTRIBUTORS

Patrick Evans, Research Technologist (Senior Author), Colby

Jane Lingenfelser, Assistant Agronomist, Manhattan

Kraig Roozeboom, Assistant Professor, Manhattan

James R. Cochrane, Assistant Scientist, Manhattan

Mary Knapp, KSU State Climatologist, Manhattan

Mark Claassen, Agronomist, Hesston

William Heer, Agronomist, Hutchinson

Ken Kofoid, Agronomist, Hays

Alan Schlegel, Agronomist, Tribune

*NOTE: Trade names are used to identify products. No endorsement is intended, nor is any criticism implied of similar products not named.*

This Report of Progress was edited, designed, and printed  
by the Department of Communications at Kansas State University

Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan, Kansas, 66506

SRP972

December 2006

Kansas State University Agricultural Experiment Station and Cooperative Extension Service is an equal opportunity provider and employer. These materials may be available in alternative formats.