

2005

NATIONAL WINTER CANOLA VARIETY TRIAL



Report of Progress 954

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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2005 National Winter Canola Variety Trial

INTRODUCTION

Canola is a special type of oilseed rape defined by its low contents of erucic acid (less than 2 percent in the oil) and glucosinolates (less than 30 micromoles per gram in the oil-free meal). The term “canola” was coined by the Western Canadian Oilseed Crushers Association in 1978. Food and oil-processing industries have a great interest in canola because it produces high-quality oil that is lower in saturated fat than other sources of dietary fats. The meal remaining after oil extraction is used as a protein supplement by the livestock industry.

Winter canola yields are generally 30% greater than yields of the spring types. Winter canola is planted in late summer. The plants must reach the 6 to 8 true-leaf stage and about 8 to 10 inches in height to increase winter survival. Plants over-winter as rosettes and bolt early the next spring. Harvest takes place about the same time as winter wheat harvest in a given area.

In 1985, the Food and Drug Administration of the United States ruled that rapeseed oil with less than 2 percent erucic acid was safe for human consumption. As a result, canola research began in the United States in the late 1980s. Industrial rapeseed had been investigated earlier but, because of the limited demand for this product, interest was low. Winter canola production was attempted in many parts of the United States in the late 1980s, but was not successful. The failure was primarily because there were few adapted varieties, little localized management information, and few local markets for the crop. Since that time, canola-quality lines have been developed that possess significant enhancements in yield potential, winter hardiness, and stress tolerance during the grain-filling period. Production research has produced management recommendations consistent with local conditions. Increased oil consumption has led to increased demand for canola seed and market interest by oil processors.

Canola production fits well in Great Plains agriculture. Canola makes an excellent rotational crop with winter wheat. Yields of wheat following canola are reported to be 8 to 12% better than yields of wheat following wheat. Because canola is a broadleaf crop, more-effective and less-expensive herbicides can be used to control grassy weeds. No major diseases are common between canola and wheat, so canola can help break weed and disease cycles. Standard small-grains equipment is used to grow canola, so a major investment in equipment is not needed to grow a small acreage. Because canola is an oilseed, its commodity price is not tied to that of grains, allowing the producer to spread economic risk to more than one commodity class.

2005 NATIONAL WINTER CANOLA VARIETY TRIAL

Objectives

The objectives of these tests are to evaluate germplasm over a wide range of environments, determine what canola varieties and experimental lines are adapted to what areas, and to increase the visibility of winter canola across the regions. The National Winter Canola Variety Trial (NWCVT) has been coordinated from Kansas State University since the 1994-95 growing season. The NWCVT was established to evaluate not only released varieties but also advanced lines with potential to become released canola varieties. Information obtained from these tests will help determine what experimental lines should be released and where released cultivars might be marketed. Over the past few years, this nursery has expanded the number of environments, and now has locations in the Great Plains, Midwest, Southeast, and the Pacific Northwest. The wide diversity in environments has increased our knowledge and understanding of winter rapeseed germplasm for use in the United States.

Procedures

The NWCVT was distributed to 39 locations in 23 states in the fall of 2004. This test included 13 released varieties and hybrids and 26 experimental lines, from five different breeding programs.

Management guidelines were supplied to each cooperator, but past experience at that locality was used for final management decisions. Local management, site descriptions, and growing conditions can be found on the page for each location established. All tests were planted in small plots (approximately 100 square feet) and replicated three times. The University of Idaho, Moscow, ID, performed analysis for total-oil results. Results for yield and winter survival at most locations also include 2-year and 3-year summaries. Lines are listed in order, from highest to lowest yields for 2005. This test was continued in 2005-2006 and includes 19 experimental lines, 14 released cultivars, and 5 experimental hybrids from Germany. Seven breeding programs contributed to the test, and it was distributed to 45 locations in 23 states.

2004-2005 Growing Conditions

Temperature and precipitation data are plotted for each location. The temperature graphs for each location include 30-year normal and actual 2004-05 daily maximum and minimum temperatures ($^{\circ}\text{F}$). The precipitation graph includes the 30-year normal and the actual cumulative precipitation for 2004-05. In general, the 2004-05 growing season was normal for precipitation and temperatures, and most locations were able to establish adequate stands. Winter conditions were mild in some locations and colder in others, especially where differential winterkill was observed. In some locations, heavy spring thunderstorms dramatically affected yield.

Test Locations

Of the 39 tests distributed in 2004, 17 locations were either lost due to the winter or abandoned before harvest due to severe lodging or shattering. Twenty-two locations in 17 states were harvested (Meridianville, AL; Fruita and Walsh, CO; Griffin, GA; Belleville and Carbondale, IL; Columbia City, IN; Hutchinson,

KS; East Lansing, MI; Thief River Falls, MN; Columbia, MO; Kalispell, MT; Lincoln and Sidney, NE; Fremont, OH; Enid and Goodwell, OK; Pendelton, OR; Chillicothe, TX; Orange and Petersburg, VA; and Lingle, WY).

Results

Yields were comparable to 2004. Three of the 22 locations included at least one line with yields greater than 4000 lb/a. Seven of the 22 locations included at least one line with yields greater than 3000 lbs/a. Eleven of the 22 locations included at least one line with yields greater than 2000 lbs/a. 'Kronos', NPZ0326, 'Wichita', KS9135-exp, 'Titan', and KS7436-055-exp all yielded well at a number of locations, and many other lines have consistently performed well in specific regions where they are best adapted.

Winter hardiness continues to be an important trait to consider when selecting a winter canola cultivar. Winter hardiness has been improved over the past several years, but variability still exists for this trait in available cultivars. Of all the cultivars planted in the Great Plains locations, Wichita had the highest winter survival values. Several other lines had high average winter survival where differential winterkill occurred, including: KS9124-exp, KS3018-exp, KS9135-exp, and 'Plainsman'.

ACKNOWLEDGMENTS

This work was funded in part by the National Canola Research Program, United States Department of Agriculture, Cooperative States Research Program, and the Kansas Agricultural Experiment Station. Assistant Scientist Cindy La Barge and student workers Andy Klein, Doug Miller, and Matt Davis assisted with the planting, care, harvest, and data preparation for some of these tests.

Meridianville, Alabama

Ernst Cebert, Alabama A&M University

Planted after fallow on 10/7/2004 at 6.3 lb/a in 7.5-in. rows

Harvested on 6/16/2005

Pesticides: Treflan 1.5 pt/a

Irrigation: none

Decatur silty clay loam, pH: 6.2, P test: high, K test: high

30-30-30 lbs N-P-K fertilizer in the fall

60-0-0 lbs N-P-K fertilizer in the spring

Elevation: 624 ft, Latitude: 34°35'N

Dry at planting.

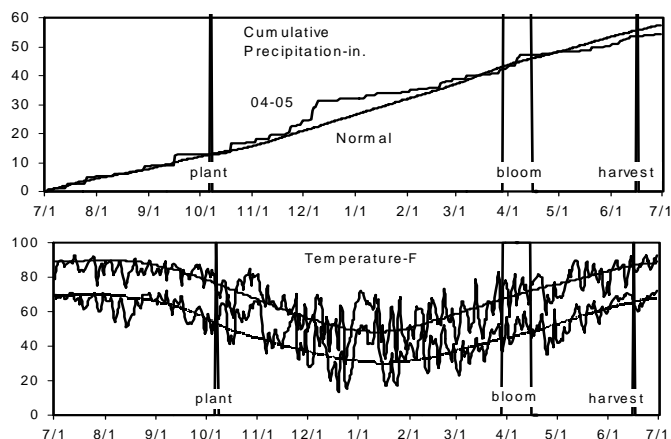


Table 1. Results from the 2005 National Winter Canola Variety Trial at Meridianville, Alabama.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
VSX-2	1890	2427	--	100	100	--	98	4/10	6/10	45	0	--	46.1	39.5
Titan	1832	2412	--	100	100	--	91	4/10	6/10	51 t	2	--	47.6	41.0
ARC2180-1	1519	--	--	100	--	--	92	4/11	6/12	50 t	0	--	46.3	39.2
KS7436-055	1470	--	--	100	--	--	96	4/9	6/12	41	0	--	47.4	39.8
Abilene	1427	1906	1716	100	100	100	97	4/9	6/10	49 t	2	--	48.4	38.8
Wichita	1405	2083	1751	100	100	100	92	4/10	6/10	46	0	--	48.1	39.2
KS9135	1402	2155	--	100	100	--	86	4/11	6/11	47	0	--	48.4	39.5
Baldur	1379	--	--	100	--	--	93	4/11	6/11	47	0	--	47.9	41.2
Jetton	1363	2232	1994	100	100	100	91	4/10	6/8 e	36 s	0	--	45.8	39.6
NPZ 0326	1301	--	--	100	--	--	93	4/10	6/11	47	0	--	46.6	40.0
Kronos	1194	1982	--	100	100	--	88	4/11	6/11	51 t	0	--	47.6	39.8
Ceres	1193	1596	1373	97	98	99	77	4/10	6/10	47	1	--	46.9	39.1
KS7436	1184	1726	1430	100	100	100	94	4/10	6/9 e	47	0	--	48.1	39.7
KS9124	1154	1903	--	100	100	--	93	4/11	6/12	45	0	--	47.4	39.1
Virginia	1154	2189	1900	100	100	100	90	4/10	6/9 e	39 s	0	--	45.0	40.2
Baros	1108	--	--	100	--	--	99	3/29 e	6/6 e	45	2	--	44.8	42.3
KS2169	1103	--	--	98	--	--	91	4/7	6/8 e	40 s	0	--	47.0	39.8
KS420B	1102	--	--	100	--	--	83	4/10	6/10	39 s	0	--	46.3	39.2
Plainsman	1009	1761	1524	100	100	100	80	4/14 l	6/13 l	52 t	0	--	46.9	39.1
KS3018	998	--	--	100	--	--	88	4/8	6/9 e	44	0	--	46.6	38.6
Rasmus	983	2180	--	100	100	--	85	4/9	6/10	43	0	--	45.8	40.1
ARC2189-1	963	--	--	98	--	--	92	4/10	6/10	49 t	0	--	47.0	38.9
KS2098	953	--	--	100	--	--	83	4/13 l	6/16 l	53 t	0	--	47.6	39.2
ARC92004-1	916	1513	--	100	100	--	90	4/11	6/12	52 t	1	--	47.0	39.9
KS2064	891	--	--	100	--	--	93	4/10	6/10	45	0	--	46.6	39.9
Sumner	717	--	--	100	--	--	75	4/10	6/10	40 s	0	--	48.1	39.7
ARC92007-2	701	1341	--	100	100	--	87	4/11	6/10	48	0	--	45.8	39.3
KS2185	674	--	--	100	--	--	95	4/8	6/8 e	36 s	0	--	47.4	40.0
Mean	1178	1877	1628	100	100	100	90	4/10	6/11	45	0	--	46.9	39.7
LSD (0.05)	669			2			11	2	3	5	2	--	1.1	1.0
CV (%)	35			1			8	1	1	6	439	--	1.5	1.2

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Griffin, Georgia

Paul Raymer and Paul Rose, University of Georgia

Planted after wheat on 10/6/2004 at 5 lb/a in 7-in. rows

Harvested on 6/17/2005

Pesticides: Capture, Treflan, and Poast

Irrigation: none

Cecil sandy clay loam, pH: 6.4, P test: high, K test: high

49-98-147 lbs N-P-K fertilizer in the fall

120-0-0 lbs N-P-K fertilizer in the spring

Elevation: 924 ft, Latitude: 33°16'N

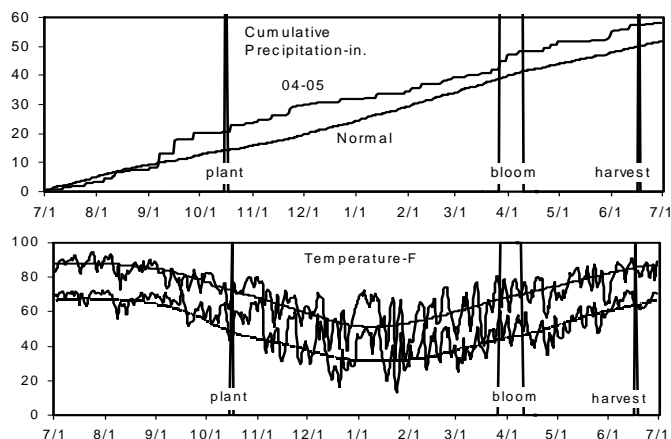


Table 2. Results from the 2005 National Winter Canola Variety Trial at Griffin, Georgia.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Wichita	3063	2417	2225	100	100	100	--	4/6	6/13	59	1	--	--	43.0
Virginia	2916	2353	2200	100	100	100	--	4/4	6/12	51 s	1	--	--	43.8
Baros	2873	--	--	100	--	--	--	3/27 e	6/7 e	49 s	1	--	--	46.2
Jetton	2849	2279	2130	100	100	100	--	4/4	6/14	52 s	1	--	--	43.4
V SX-2	2799	2319	--	100	100	--	--	4/5	6/15	54	1	--	--	43.3
Baldur	2758	--	--	100	--	--	--	4/3	6/13	62 t	1	--	--	43.0
KS420B	2739	--	--	100	--	--	--	4/3	6/15	56	1	--	--	43.5
KS2185	2630	--	--	100	--	--	--	3/31	6/11	48 s	1	--	--	43.2
NPZ 0326	2620	--	--	100	--	--	--	4/6	6/14	57	1	--	--	42.4
Sumner	2595	--	--	100	--	--	--	4/4	6/10	53	1	--	--	44.6
Titan	2557	2270	--	100	100	--	--	4/6	6/15	61 t	1	--	--	43.9
KS2169	2495	--	--	100	--	--	--	4/4	6/13	53	1	--	--	41.8
ARC2180-1	2432	--	--	100	--	--	--	4/4	6/16	63 t	1	--	--	42.8
Kronos	2357	2196	--	100	100	--	--	4/6	6/13	62 t	1	--	--	42.3
KS7436	2334	1838	1860	100	100	100	--	4/4	6/14	58	1	--	--	43.8
KS7436-055	2307	--	--	100	--	--	--	4/2	6/10	53	1	--	--	44.8
Rasmus	2261	1909	--	100	100	--	--	4/3	6/13	51 s	1	--	--	43.1
KS3018	2199	--	--	100	--	--	--	4/3	6/13	53	1	--	--	41.9
KS2064	2186	--	--	100	--	--	--	4/6	6/16	58	1	--	--	43.2
KS9135	2123	1596	--	100	100	--	--	4/7	6/17	58	1	--	--	42.0
ARC92004-1	2117	1845	--	100	100	--	--	4/5	6/17	64 t	1	--	--	43.5
ARC2189-1	2104	--	--	100	--	--	--	4/6	6/16	63 t	1	--	--	42.5
ARC92007-2	2067	1751	--	100	100	--	--	4/4	6/16	62 t	1	--	--	42.4
Abilene	2011	1681	1663	100	100	100	--	4/6	6/11	55	1	--	--	41.1
KS9124	1870	1562	--	100	100	--	--	4/7	6/16	60	1	--	--	42.0
Ceres	1792	1660	1521	100	100	100	--	4/6	6/15	51 s	1	--	--	42.5
Plainsman	1492	1032	1205	100	100	100	--	4/9 l	6/17	65 t	1	--	--	40.7
KS2098	1328	--	--	100	--	--	--	4/8 l	6/19 l	61 t	1	--	--	42.4
Mean	2353	1953	1851	100	100	100	--	4/4	6/14	57	1	--	--	42.9
LSD (0.05)	455			NS			--	2	2	5	--	--	--	1.2

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Orange, Virginia

David Starner, N. Piedmont AREC, Virginia Tech.

Planted after fallow on 10/8/2004 at 5 lb/a in 7-in. rows

Harvested on 6/29/2005

Pesticides: Capture 2 EC, Treflan

Irrigation: none

Davidson clay loam, pH: 6.39, P test: 12(M), K test: 149(H)

25-118-40 lbs N-P-K fertilizer in the fall

60-0-0 lbs N-P-K fertilizer in the spring

Elevation: 505 ft, Latitude: 38°13'N

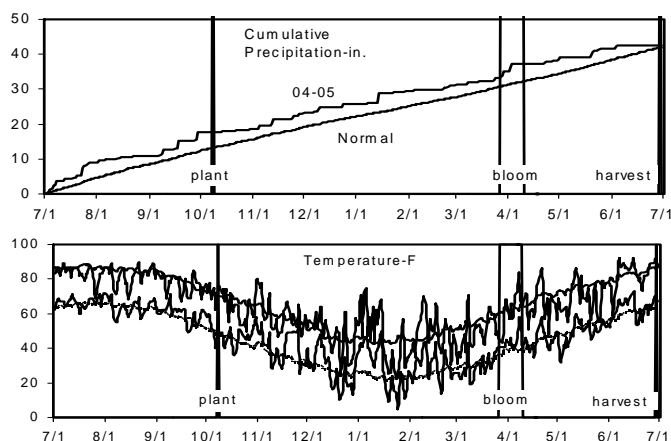


Table 3. Results from the 2005 National Winter Canola Variety Trial at Orange, Virginia.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Baldur	4793	--	--	90	--	--	78	4/21	6/24	61 t	7	5	50.5	40.7
Kronos	4544	3843	--	87	77	--	83	4/22	6/23	59 t	47	5	50.3	39.5
Wichita	4493	3757	3469	87	78	84	88	4/21	6/23 e	59 t	30	5	50.6	39.0
NPZ 0326	4203	--	--	78	--	--	85	4/21	6/23 e	59 t	7	5	50.0	39.5
Jetton	4010	3563	3316	85	79	85	77	4/22	6/23 e	55	7	5	50.4	40.2
Sumner	3833	--	--	82	--	--	78	4/20	6/23 e	58 t	10	5	51.4	39.4
VSX-2	3823	3130	--	85	64	--	85	4/21	6/23 e	56	13	5	49.5	40.2
KS2185	3808	--	--	83	--	--	83	4/18 e	6/21 e	52 s	27	5	51.0	40.2
Abilene	3807	3281	3033	83	67	70	75	4/21	6/21 e	53 s	50	5	49.9	38.1
ARC2189-1	3785	--	--	88	--	--	88	4/21	6/24	57 t	43	5	49.6	39.1
Baros	3745	--	--	87	--	--	88	4/18 e	6/22 e	53 s	33	5	50.4	41.6
KS2169	3636	--	--	78	--	--	80	4/21	6/23 e	54	17	5	50.1	38.2
Titan	3629	3401	--	83	73	--	82	4/21	6/24	55	7	5	49.3	40.5
KS9135	3604	3206	--	88	78	--	85	4/22	6/24	56	17	5	49.9	39.3
ARC2180-1	3513	--	--	87	--	--	87	4/21	6/23 e	62 t	13	5	49.9	39.2
ARC92007-2	3487	2785	--	83	70	--	87	4/22	6/23	60 t	27	5	50.4	38.9
KS3018	3485	--	--	78	--	--	85	4/19 e	6/23 e	53	7	5	50.6	38.2
KS7436	3462	3162	3050	82	75	83	73	4/22	6/25	59 t	17	5	50.8	39.6
KS2064	3432	--	--	87	--	--	82	4/20	6/23 e	53	33	5	50.6	39.2
ARC92004-1	3365	2677	--	80	64	--	85	4/22	6/25	57 t	30	5	50.0	38.9
KS420B	3322	--	--	80	--	--	83	4/22	6/25	56	17	5	48.4	38.0
KS9124	3289	3065	--	82	71	--	73	4/22	6/25	56	37	5	50.3	38.7
KS7436-055	2999	--	--	80	--	--	57	4/20	6/23	48 s	13	5	51.0	39.7
Rasmus	2962	2817	--	82	67	--	70	4/22	6/25	54	0	5	48.1	40.1
Virginia	2643	2593	2619	65	62	74	48	4/22	6/25	52 s	30	5	48.3	38.8
Ceres	2526	2363	2422	73	63	73	57	4/24 l	6/25	53	40	5	50.5	37.9
KS2098	2336	--	--	83	--	--	87	4/25 l	6/26 l	58 t	20	5	48.9	38.1
Plainsman	1680	1994	1889	75	64	72	53	4/26 l	6/28 l	55	63	5	48.1	36.5
Mean	3508	2915	2833	82	68	78	78	4/22	6/24	56	24	5	50.0	39.2
LSD (0.05)	737			13			13	2	2	5	35	0	1.0	2.1
CV (%)	13			10			10	1	1	6	91	0	1.2	2.6

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Petersburg, Virginia

Harbans Bhardwaj, Virginia State University

Planted after white lupin on 10/8/2004 at 6 lb/a in 15-in. rows

Harvested on 6/28/2005

Pesticides: none

Irrigation: none

Abell sandy loam, pH: NA, P test: NA, K test: NA

100-100-100 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 134 ft, Latitude: 37°14'N

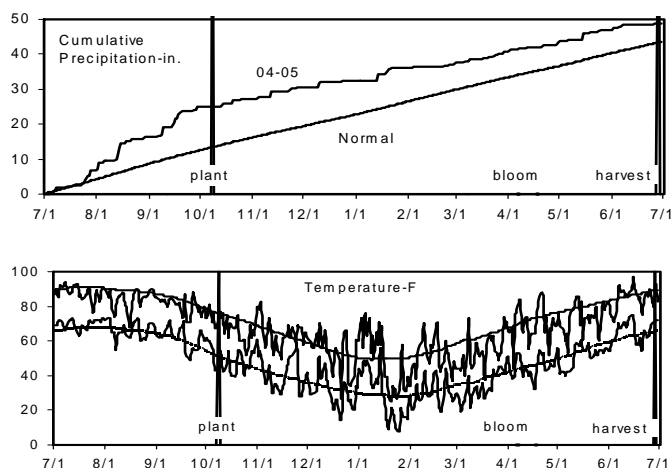


Table 4. Results from the 2005 National Winter Canola Variety Trial at Petersburg, Virginia.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	lb/ac			%			%	date	date	in.	%	%	lb/bu	%
Rasmus	1838	2588	--	100	100	--	--	--	--	43	--	--	--	--
VSX-2	1835	2926	--	100	100	--	--	--	--	40 s	--	--	--	--
ARC2189-1	1641	--	--	100	--	--	--	--	--	47 t	--	--	--	--
Baldur	1614	--	--	100	--	--	--	--	--	42	--	--	--	--
Virginia	1598	2765	3031	100	100	100	--	--	--	36 s	--	--	--	--
Abilene	1589	2369	2417	100	100	100	--	--	--	43	--	--	--	--
Titan	1579	2428	--	100	100	--	--	--	--	45 t	--	--	--	--
Sumner	1551	--	--	100	--	--	--	--	--	42	--	--	--	--
KS3018	1492	--	--	100	--	--	--	--	--	42	--	--	--	--
KS9135	1487	2500	--	100	100	--	--	--	--	46 t	--	--	--	--
KS7436-055	1441	--	--	100	--	--	--	--	--	37 s	--	--	--	--
Wichita	1336	2771	2926	100	100	100	--	--	--	44 t	--	--	--	--
Kronos	1307	2589	--	100	100	--	--	--	--	48 t	--	--	--	--
Ceres	1299	1893	1736	100	100	100	--	--	--	44 t	--	--	--	--
Jetton	1293	2676	2529	100	100	100	--	--	--	35 s	--	--	--	--
KS2169	1271	--	--	100	--	--	--	--	--	39 s	--	--	--	--
Baros	1254	--	--	100	--	--	--	--	--	41	--	--	--	--
ARC92007-2	1229	2048	--	100	100	--	--	--	--	45 t	--	--	--	--
NPZ 0326	1223	--	--	100	--	--	--	--	--	42	--	--	--	--
KS420B	1217	--	--	100	--	--	--	--	--	40	--	--	--	--
ARC92004-1	1212	2070	--	100	100	--	--	--	--	47 t	--	--	--	--
KS2064	1198	--	--	100	--	--	--	--	--	43	--	--	--	--
KS2185	1162	--	--	100	--	--	--	--	--	40 s	--	--	--	--
Plainsman	1077	1743	1717	100	100	100	--	--	--	47 t	--	--	--	--
KS9124	1006	1956	--	100	100	--	--	--	--	42	--	--	--	--
ARC2180-1	991	--	--	100	--	--	--	--	--	45 t	--	--	--	--
KS2098	802	--	--	100	--	--	--	--	--	47 t	--	--	--	--
KS7436	749	1777	1918	100	100	100	--	--	--	41	--	--	--	--
Mean	1332	2250	2317	100	100	100	--	--	--	43	--	--	--	--
LSD (0.05)	456			NS			--	--	--	4	--	--	--	--
CV (%)	21			--			--	--	--	6	--	--	--	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

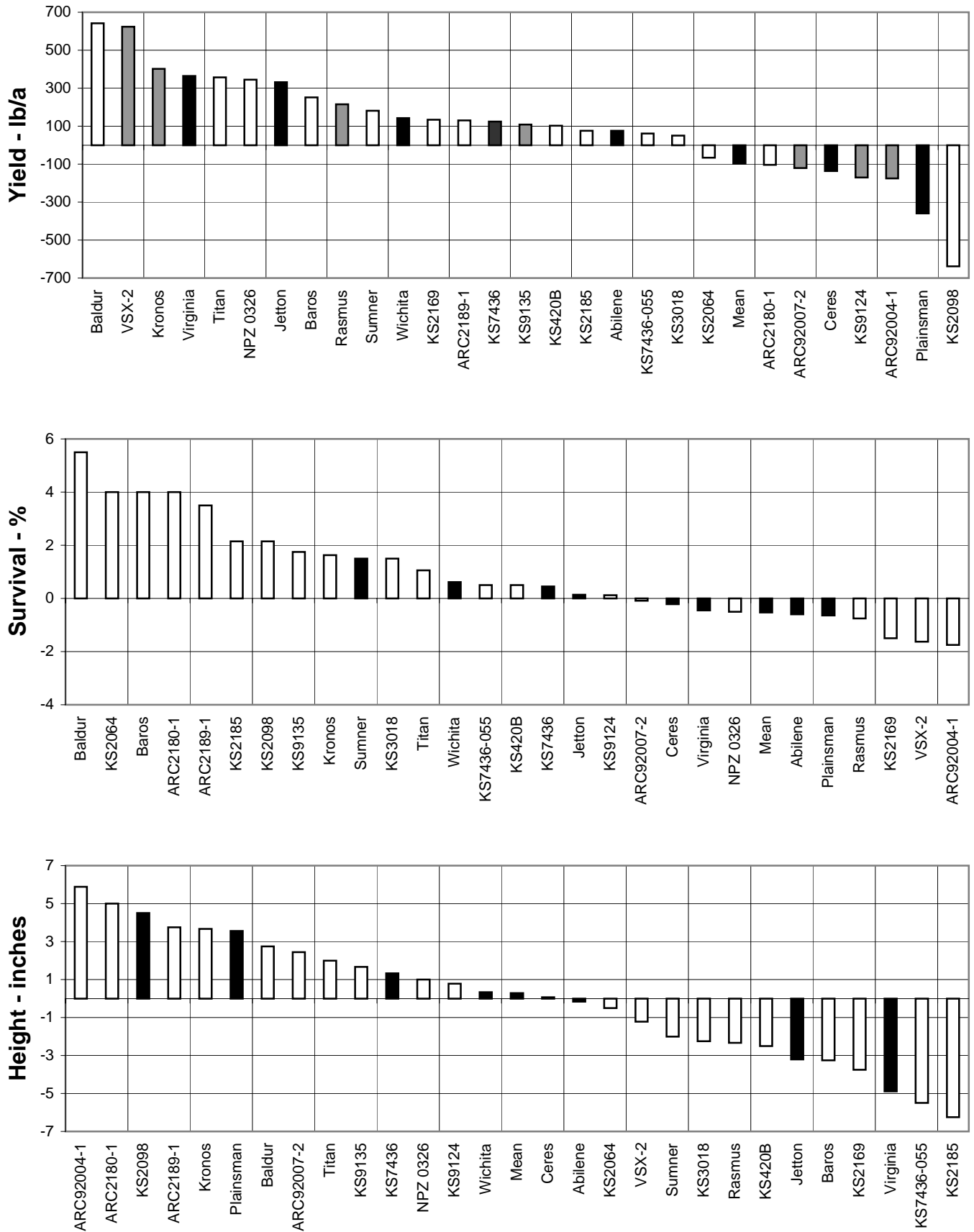
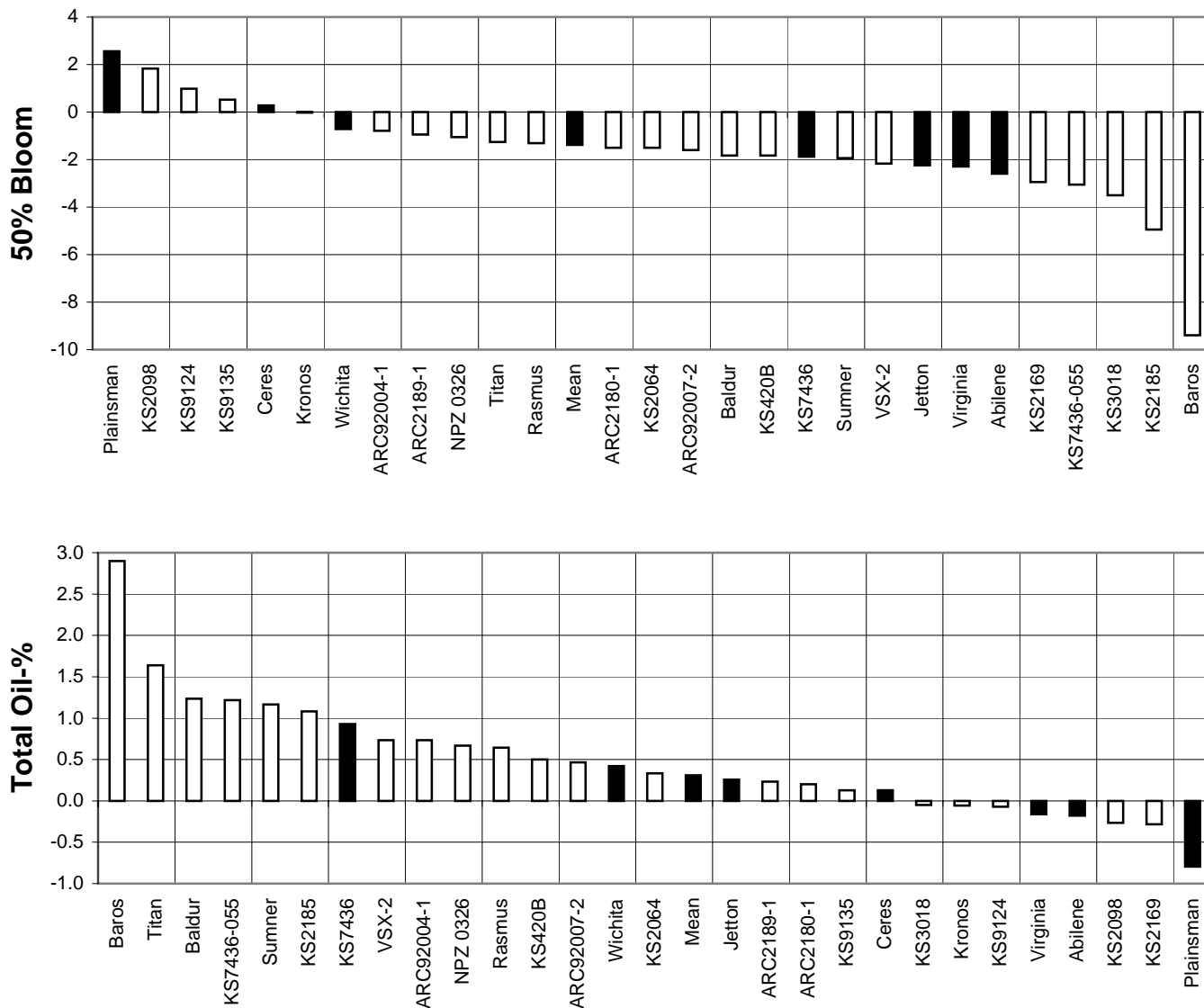


Figure 1. Southeast Winter Canola Summary, 1996-2005.



Note: Values are averages of the differences between each cultivar and the mean of Jetton, Ceres, Plainsman, and Wichita for yield (lb/a), winter survival (%), total oil content (%), plant height (inches), and 50% bloom date (days). The number of observations for each trait is represented by the different colors of the bars (as shown at right).

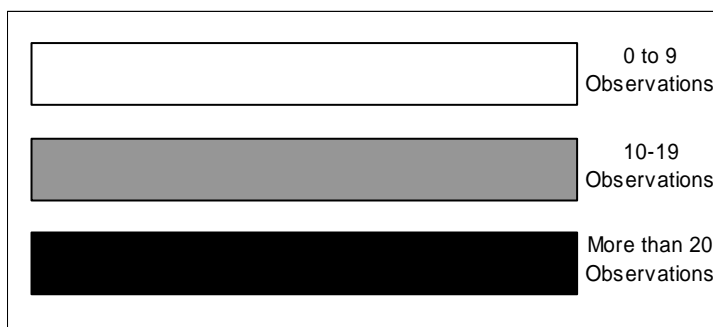


Figure 1. Southeast Winter Canola Summary, 1996-2005 (continued).

Belleville, Illinois

Mike Schmidt and Jim Klein, Southern Illinois University, Carbondale

Planted on 10/6/2004 at 10 lb/a in 7.5-in. rows

Harvested on 6/22/2005

Pesticides: Treflan

Irrigation: none

Stoy silt loam, pH: NA, P test: NA, K test: NA

18-46-60 lbs N-P-K fertilizer in the fall

120-0-0 lbs N-P-K fertilizer in the spring

Elevation: 415 ft, Latitude: 37°47'N

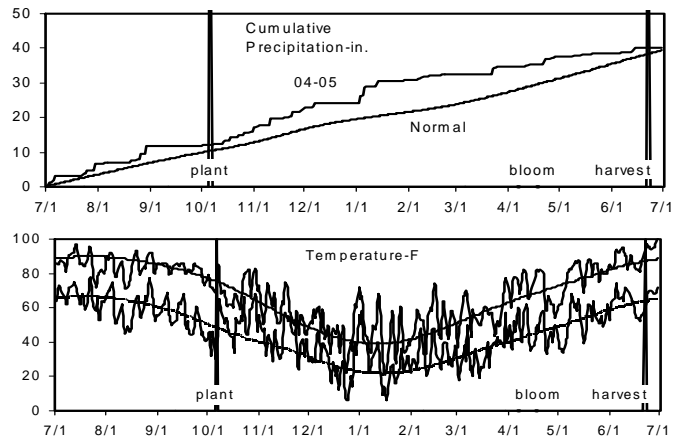


Table 5. Results from the 2005 National Winter Canola Variety Trial at Belleville, Illinois.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS9124	4318	3540	--	90	87	--	83	--	--	55 t	--	--	49.8	--
KS2185	4189	--	--	77	--	--	93	--	--	47 s	--	--	50.8	--
ARC2189-1	4073	--	--	80	--	--	97	--	--	56 t	--	--	49.9	--
VSX-2	4036	3555	--	73	75	--	93	--	--	46 s	--	--	49.9	--
ARC2180-1	4024	--	--	82	--	--	97	--	--	53 t	--	--	48.5	--
KS2169	3981	--	--	73	--	--	83	--	--	49 s	--	--	50.6	--
KS9135	3941	3467	--	73	83	--	77	--	--	53 t	--	--	50.6	--
KS7436-055	3936	--	--	57	--	--	73	--	--	44 s	--	--	51.2	--
NPZ 0326	3910	--	--	77	--	--	93	--	--	51	--	--	51.4	--
Rasmus	3827	3533	--	60	67	--	77	--	--	49 s	--	--	48.6	--
KS7436	3822	3249	3328	73	79	84	87	--	--	52 t	--	--	51.0	--
KS2064	3776	--	--	63	--	--	70	--	--	51	--	--	49.6	--
Virginia	3774	3534	3751	53	69	79	83	--	--	49 s	--	--	48.3	--
Jetton	3754	3599	3780	77	82	88	97	--	--	46 s	--	--	50.0	--
Abilene	3750	3036	3104	70	75	81	87	--	--	53 t	--	--	52.1	--
Casino	3738	3011	2840	77	83	89	90	--	--	54 t	--	--	51.7	--
Kronos	3663	3195	--	67	81	--	90	--	--	51	--	--	52.7	--
KS2098	3602	--	--	80	--	--	90	--	--	58 t	--	--	48.7	--
Wichita	3591	3138	3383	80	87	91	90	--	--	50	--	--	51.9	--
Baldur	3447	--	--	67	--	--	87	--	--	54 t	--	--	49.7	--
Sumner	3412	--	--	70	--	--	77	--	--	51	--	--	52.9	--
ARC92007-2	3382	2993	--	77	82	--	87	--	--	53 t	--	--	50.4	--
Baros	3286	--	--	77	--	--	93	--	--	50	--	--	50.3	--
Plainsman	3242	3078	2786	63	74	83	77	--	--	54 t	--	--	49.4	--
ARC92004-1	3226	3099	--	80	85	--	87	--	--	53 t	--	--	50.9	--
KS3018	3064	--	--	50	--	--	67	--	--	50	--	--	50.8	--
Ceres	3002	2766	3023	50	50	67	43	--	--	52 t	--	--	50.0	--
Titan	2732	2817	--	53	67	--	73	--	--	51	--	--	48.5	--
Mean	3661	3197	3232	70	77	83	84	--	--	51	--	--	50.4	--
LSD (0.05)	828			14			12	--	--	6	--	--	2.2	--
CV (%)	14			12			9	--	--	7	--	--	2.7	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Carbondale, Illinois

Mike Schmidt and Jim Klein, Southern Illinois University, Carbondale

Planted on 9/22/2004 at 10 lb/a in 7.5-in. rows

Harvested on 6/21/2005

Pesticides: Treflan

Irrigation: none

Stoy silt loam, pH: NA, P test: NA, K test: NA

18-46-60 lbs N-P-K fertilizer in the fall

120-0-0 lbs N-P-K fertilizer in the spring

Elevation: 400 ft, Latitude: 38°30'N

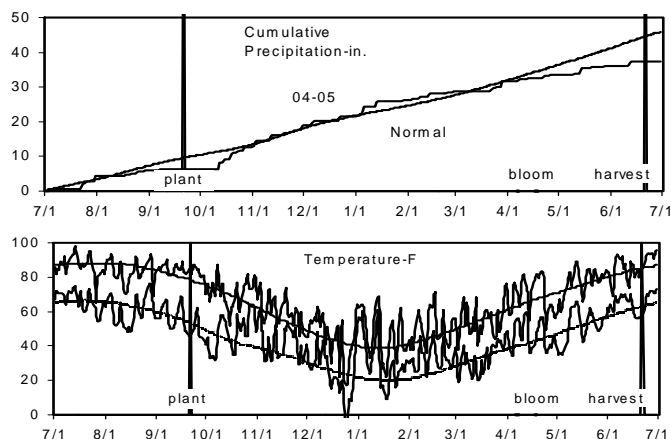


Table 6. Results from the 2005 National Winter Canola Variety Trial at Carbondale, Illinois.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
ARC2189-1	3594	--	--	88	--	--	90	--	--	57 t	0	--	47.7	--
KS2169	3146	--	--	77	--	--	87	--	--	50 t	0	--	49.1	--
KS7436-055	3079	--	--	57	--	--	70	--	--	53 t	5	--	49.2	--
NPZ 0326	3035	--	--	60	--	--	87	--	--	46 s	28	--	48.7	--
Kronos	2961	2405	--	80	79	--	93	--	--	50 t	30	--	50.4	--
KS2185	2960	--	--	78	--	--	87	--	--	50 t	3	--	48.8	--
Casino	2875	2523	2183	93	93	92	97	--	--	56 t	0	--	50.1	--
KS2064	2814	--	--	70	--	--	90	--	--	49 s	0	--	49.8	--
Jetton	2634	2449	2365	78	77	80	83	--	--	52 t	0	--	48.4	--
KS9124	2621	2534	--	88	90	--	90	--	--	55 t	7	--	49.0	--
KS9135	2473	2598	--	43	65	--	63	--	--	46 s	40	--	47.1	--
Rasmus	2450	2388	--	63	68	--	70	--	--	50 t	3	--	46.9	--
VSX-2	2429	2393	--	78	79	--	93	--	--	52 t	0	--	48.5	--
ARC92004-1	2388	2091	--	73	80	--	97	--	--	49 t	32	--	46.9	--
KS3018	2368	--	--	63	--	--	60	--	--	51 t	23	--	46.9	--
Virginia	2349	2166	2180	70	75	74	73	--	--	52 t	18	--	49.1	--
Baros	2291	--	--	72	--	--	100	--	--	47 s	3	--	47.9	--
ARC92007-2	2266	2080	--	67	77	--	90	--	--	55 t	5	--	47.2	--
Ceres	2235	2315	1849	50	68	71	40	--	--	54 t	8	--	47.1	--
Wichita	2209	2197	1963	72	80	82	87	--	--	49 s	23	--	49.1	--
Plainsman	2201	2165	1592	63	78	76	63	--	--	56 t	10	--	47.3	--
ARC2180-1	2153	--	--	45	--	--	100	--	--	47 s	7	--	48.0	--
KS7436	2068	1960	2105	80	84	85	83	--	--	53 t	2	--	50.6	--
KS2098	2009	--	--	83	--	--	87	--	--	57 t	0	--	49.0	--
Titan	1897	2298	--	70	79	--	100	--	--	49 t	23	--	48.9	--
Abilene	1893	1889	1758	85	88	84	80	--	--	47 s	5	--	47.9	--
Sumner	1734	--	--	63	--	--	87	--	--	48 s	3	--	48.4	--
Baldur	1600	--	--	60	--	--	83	--	--	48 s	27	--	47.0	--
Mean	2455	2331	2059	70	78	80	83	--	--	51	11	--	48.4	--
LSD (0.05)	720			29			19	--	--	8	31	--	2.3	--
CV (%)	18			25			14	--	--	10	175	--	2.9	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Columbia City, Indiana

E.P. Christmas/Shawn Conley, NE Purdue Agric. Center

Planted after wheat on 9/9/2004 at 5 lb/a in 6-in. rows

Harvested on 7/18/2005

Pesticides: Trifluralin 1.2 pt/a

Irrigation: none

Boyer sandy loam, pH: 6.5, P test: 30ppm, K test: 220ppm

31-80-0 lbs N-P-K fertilizer in the fall

120-0-0 lbs N-P-K fertilizer in the spring

Elevation: 825 ft, Latitude: 41°6'N

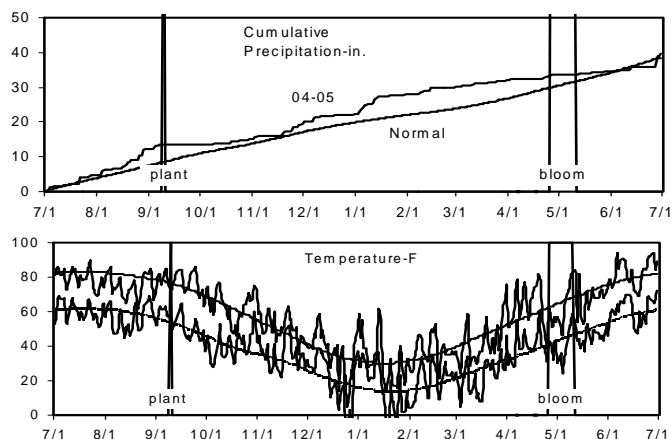


Table 7. Results from the 2005 National Winter Canola Variety Trial at Columbia City, Indiana.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS9135	2463	2040	--	87	93	--	100	5/4 l	6/23 e	48	--	--	47.0	37.2
Abilene	2429	1885	1593	83	92	91	100	5/4	6/21 e	48	--	--	47.7	35.4
Baldur	2428	--	--	33	--	--	100	5/3	6/26	51 t	--	--	46.8	36.5
Baros	2317	--	--	33	--	--	100	5/2	6/29	46	--	--	44.7	38.9
KS2185	2285	--	--	73	--	--	100	4/26 e	6/21 e	44 s	--	--	46.8	36.3
Sumner	2284	--	--	53	--	--	100	4/29	6/22 e	47	--	--	47.3	36.5
Wichita	2284	1890	1529	47	73	82	100	5/3	6/25	47	--	--	46.9	36.2
Casino	2279	1883	1508	73	87	91	80	5/4 l	6/24 e	48	--	--	46.5	36.4
KS2064	2239	--	--	90	--	--	100	5/4	6/22 e	50 t	--	--	47.2	36.3
Titan	2234	1978	--	30	65	--	100	5/4 l	7/1 l	54 t	--	--	46.4	37.1
Kronos	2153	1787	--	43	72	--	100	5/4 l	6/30	53 t	--	--	44.9	36.9
KS2169	2117	--	--	80	--	--	100	5/2	6/23 e	44 s	--	--	46.2	35.9
SW 013154	2072	1842	--	57	78	--	100	5/5 l	6/25	45 s	--	--	46.2	36.2
NPZ 0326	2066	--	--	37	--	--	100	5/4	6/26	47	--	--	45.4	36.4
KS2098	2029	--	--	73	--	--	100	5/5 l	6/28	50 t	--	--	46.6	37.3
KS3018	2019	--	--	87	--	--	100	5/2	6/21 e	44 s	--	--	45.3	36.1
KS7436-055	2001	--	--	63	--	--	100	5/3	6/22 e	42 s	--	--	45.8	35.9
KS7436	1999	1544	1367	67	83	89	100	5/6 l	6/24 e	46	--	--	46.3	37.3
ARC92007-2	1970	1572	--	63	82	--	100	5/5 l	6/24 e	53 t	--	--	45.5	37.0
SW 013173	1918	1720	--	37	68	--	100	5/7 l	6/27	44 s	--	--	44.7	37.1
ARC2180-1	1916	--	--	57	--	--	100	5/3	6/27	49	--	--	44.7	35.8
DKW13-86	1900	1724	--	30	65	--	100	5/2	6/26	45 s	--	--	46.1	36.0
Virginia	1842	1578	1473	40	70	79	100	5/2	6/25	41 s	--	--	46.1	35.5
KS9124	1817	1442	--	83	92	--	100	5/4 l	6/23 e	46	--	--	45.1	35.7
ARC2189-1	1806	--	--	33	--	--	100	5/4 l	7/3 l	55 t	--	--	43.3	33.8
Jetton	1764	1573	1496	53	77	84	100	5/2	6/29	40 s	--	--	44.2	35.9
Rasmus	1731	1570	--	33	67	--	100	5/4 l	6/28	45 s	--	--	43.3	35.6
VSX-2	1690	1440	--	33	67	--	100	5/3	6/28	44 s	--	--	44.7	34.3
ARC92004-1	1656	1317	--	37	68	--	100	5/4 l	6/28	52 t	--	--	44.9	35.1
Plainsman	1642	1293	1176	57	78	81	100	5/6 l	6/28	50 t	--	--	44.9	35.6
Ceres	1453	1156	1026	10	55	68	67	5/5 l	6/25	47	--	--	44.7	36.4
SW 013253	1256	1147	--	13	57	--	100	5/6 l	7/3 l	51 t	--	--	43.5	33.6
SW 013121	1188	1404	--	13	57	--	100	5/6 l	7/4 l	51 t	--	--	42.4	35.7
DKW13-62	1180	1269	--	17	58	--	100	5/5 l	7/2 l	52 t	--	--	42.8	36.1
SW 013211	1054	1089	--	7	53	--	100	5/6 l	6/24 e	50 t	--	--	43.2	31.7
SW 013022	865	956	--	13	57	--	100	5/7 l	7/2 l	40 s	--	--	41.4	36.0
Mean	1899	1598	1386	48	74	82	99	5/4	6/26	47	--	--	45.3	36.0
LSD (0.05)	330			22			12	3	4	5	--	--	1.3	1.8
CV (%)	11			28			8	1	1	7	--	--	1.7	2.4

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

East Lansing, Michigan

Russ Freed, Michigan State University

Planted on 9/8/2004 at 5 lb/a in 6-in. rows

Harvested on 7/13/2005

Pesticides: NA

Irrigation: none

Capac loam, pH: NA, P test: NA, K test: NA

19-19-19 lbs N-P-K fertilizer in the fall

125-0-0 lbs N-P-K fertilizer in the spring

Elevation: 880 ft, Latitude: 42°40'N

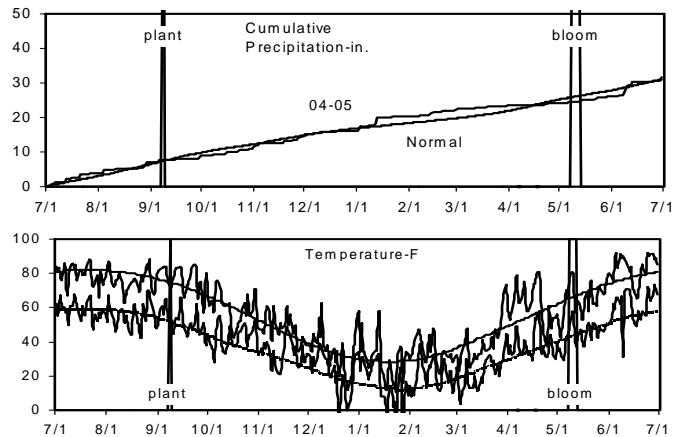


Table 8. Results from the 2005 National Winter Canola Variety Trial at East Lansing, Michigan.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil	
	2005	2yr	3yr	2005	2yr	3yr									
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%	
Abilene	2554	2096	2323	67	84	89	88	5/10	l	--	48	--	--	--	--
KS9135	2531	1644	--	63	82	--	92	5/11	l	--	48	--	--	--	--
SW 013154	2422	2092	--	55	78	--	85	5/10	l	--	48	--	--	--	--
Plainsman	2347	1698	1832	25	63	75	92	5/9	l	--	51	--	--	--	--
Kronos	2331	1742	--	65	83	--	93	5/11	l	--	47	--	--	--	--
DKW13-86	2183	2227	--	82	91	--	92	5/11	l	--	46	--	--	--	--
Sumner	2174	--	--	67	--	--	90	5/9	l	--	41 s	--	--	--	--
Virginia	2065	1626	1964	50	75	83	80	5/10	l	--	48	--	--	--	--
KS2098	2063	--	--	43	--	--	93	5/11	l	--	41 s	--	--	--	--
Wichita	2044	1751	1938	67	84	89	92	5/9	l	--	45	--	--	--	--
SW 013022	2015	1612	--	57	79	--	93	5/10	l	--	46	--	--	--	--
SW 013173	1989	1757	--	63	82	--	93	5/8	e	--	45	--	--	--	--
SW 013211	1986	1501	--	30	65	--	85	5/9	l	--	49	--	--	--	--
ARC92007-2	1982	2092	--	50	75	--	77	5/9	l	--	43	--	--	--	--
NPZ 0326	1968	--	--	75	--	--	95	5/10	l	--	43	--	--	--	--
KS2004	1937	--	--	47	--	--	90	5/11	l	--	50	--	--	--	--
KS7436-055	1905	--	--	30	--	--	90	5/10	l	--	44	--	--	--	--
Jetton	1844	1532	1993	33	67	78	90	5/11	l	--	47	--	--	--	--
ARC2180-1	1795	--	--	22	--	--	92	5/11	l	--	46	--	--	--	--
Titan	1788	2193	--	33	67	--	88	5/9	l	--	56 t	--	--	--	--
Baros	1777	--	--	15	--	--	92	5/10	l	--	46	--	--	--	--
KS3018	1776	--	--	37	--	--	90	5/10	l	--	41 s	--	--	--	--
SW 013121	1563	1335	--	15	58	--	92	5/10	l	--	50	--	--	--	--
Rasmus	1521	1625	--	10	55	--	87	5/11	l	--	46	--	--	--	--
KS9124	1423	1316	--	15	58	--	92	5/12	l	--	53	--	--	--	--
ARC2189-1	1337	--	--	13	--	--	93	5/11	l	--	55 t	--	--	--	--
KS2169	1303	--	--	10	--	--	82	5/11	l	--	49	--	--	--	--
Baldur	1301	--	--	30	--	--	90	5/11	l	--	43	--	--	--	--
Casino	1266	1559	1921	15	58	72	93	5/11	l	--	50	--	--	--	--
KS2185	1177	--	--	23	--	--	90	5/9	l	--	40 s	--	--	--	--
ARC92004-1	1173	1456	--	8	54	--	88	5/11	l	--	47	--	--	--	--
DKW13-62	996	899	--	10	55	--	93	5/9	l	--	46	--	--	--	--
KS7436	898	946	1551	10	55	70	93	5/11	l	--	50	--	--	--	--
VSX-2	830	1240	--	3	52	--	90	5/11	l	--	55 t	--	--	--	--
KS2064	647	--	--	7	--	--	90	5/10	l	--	44	--	--	--	--
Ceres	504	1156	1716	5	53	68	90	5/11	l	--	--	--	--	--	--
SW 013253	403	1071	--	--	--	--	88	5/11	l	--	--	--	--	--	--
Mean	1671	1596	1852	34	67	78	90	5/10	--	--	47	--	--	--	--
LSD (0.05)	1008			57			21	3	--	--	2	--	--	--	--
CV (%)	18			52			7	9	--	--	8	--	--	--	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
* 2yr means include data from 2004 and 2005, 3yr means include data from 2002, 2004, and 2005.

Thief River Falls, Minnesota

Paul Porter and Dave LeGare, University of Minnesota

Planted after barley on 9/2/2004 at 5 lb/a in 6-in. rows
 Swathed 7/4/2005 to 7/21/2005
 Harvested 7/10/2005 to 7/30/2005
 Pesticides: Assure II (7 oz/a) 9/29, Stinger (7 oz/a) 5/16
 Irrigation: none
 Roliss loam, pH: NA, P test: 18, K test: 332
 34-42-0 lbs N-P-K fertilizer in the fall
 120-0-0 lbs N-P-K fertilizer in the spring
 Elevation: 1115 ft, Latitude: 48°1'N

Some entries were lost because of differential winter kill due to tillage differences. All plots on plowed ground were killed over the winter. Surviving plots were on barley stubble.

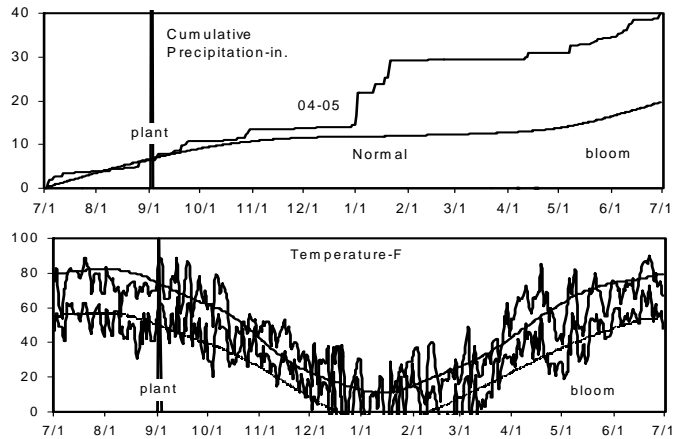


Table 9. Results from the 2005 National Winter Canola Variety Trial at Thief River Falls, Minnesota.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS2169	1272	--	--	80	--	--	93	6/13	7/19 l	37 s	3	--	52.7	39.6
KS2185	1244	--	--	80	--	--	90	6/12	7/20 l	37 s	4	--	53.3	39.0
Kronos	1134	--	--	87	--	--	100	6/12	7/20 l	41 t	3	--	53.3	37.7
KS7436	1076	--	--	80	--	--	70	6/14 l	7/20 l	40 t	4	--	52.8	40.0
Wichita	1074	--	--	80	--	--	87	6/15 l	7/19	38 s	4	--	53.1	38.1
KS9135	1069	--	--	90	--	--	93	6/14 l	7/19 l	40 t	3	--	53.2	38.8
Casino	1051	--	--	73	--	--	77	6/15 l	7/21 l	44 t	3	--	52.7	37.9
KS9183	1019	--	--	80	--	--	93	6/13	7/19 l	40 t	4	--	52.6	38.6
KS9124	1017	--	--	70	--	--	87	6/14	7/19	42 t	4	--	52.7	38.6
KS2098	1016	--	--	80	--	--	90	6/14 l	7/20 l	42 t	4	--	52.9	38.8
KS2064	1006	--	--	83	--	--	93	6/14 l	7/20 l	41 t	4	--	53.1	39.1
Sumner	987	--	--	80	--	--	97	6/12	7/16	35 s	4	--	52.7	39.5
ARC92004-1	820	--	--	80	--	--	90	6/15 l	7/19 l	45 t	4	--	52.1	37.2
KS2004	778	--	--	43	--	--	80	6/15 l	7/22 l	38 s	5	--	52.3	38.2
KS3018	717	--	--	77	--	--	80	6/12	7/17	36 s	6	--	51.3	36.2
Plainsman	555	--	--	57	--	--	83	6/16 l	7/22 l	46 t	4	--	52.2	37.5
Largo	448	--	--	90	--	--	97	6/8 e	7/4 e	32 s	3	--	51.6	36.9
Mean	958	--	--	77	--	--	88	6/13	7/19	11	4	--	52.6	38.3
LSD (0.05)	297			30			25	3	3	7	1	--	0.7	1.7
CV (%)	19			18			11	2	2	11	20	--	0.8	2.7

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
 e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
 * 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Columbia, Missouri

Howard Mason, University of Missouri

Planted on 9/13/2004 at 8 lb/a in 7.5-in. rows

Harvested on 6/22/2005

Pesticides: none

Irrigation: none

Mexico silt loam, pH: NA, P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

100-0-0 lbs N-P-K fertilizer in the spring

Elevation: 870 ft, Latitude: 38°32'N

Dry fall conditions resulted in relatively poor stands.
Heaving and winter kill further reduced stands, resulting in relatively poor yields.

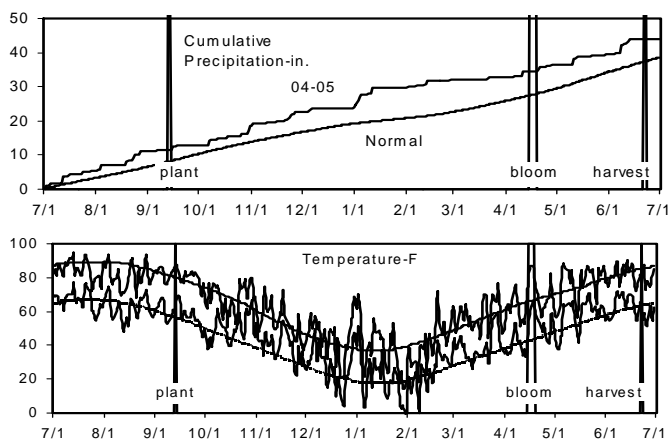


Table 10. Results from the 2005 National Winter Canola Variety Trial at Columbia, Missouri.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
NPZ 0326	1068	--	--	78	--	--	38	4/15 e	--	39	8	--	--	--
KS9135	1036	1129	--	75	84	--	43	4/16	--	43 t	12	--	--	--
KS9124	983	1291	--	75	85	--	42	4/15 e	--	40	10	--	--	--
KS2169	953	--	--	65	--	--	42	4/15 e	--	38 s	18	--	--	--
KS2098	899	--	--	78	--	--	55	4/16	--	46 t	15	--	--	--
Casino	884	977	836	72	80	82	48	4/16	--	40	18	--	--	--
Baldur	863	--	--	58	--	--	67	4/16	--	40	17	--	--	--
ARC2189-1	859	--	--	52	--	--	63	4/17 l	--	42	12	--	--	--
Baros	833	--	--	63	--	--	62	4/15 e	--	36 s	18	--	--	--
Kronos	820	1021	--	55	72	--	67	4/16	--	38	18	--	--	--
Sumner	814	848	851	67	77	77	45	4/15 e	--	39	17	--	--	--
ARC2180-1	814	--	--	55	--	--	57	4/16	--	42 t	17	--	--	--
KS2185	791	--	--	72	--	--	45	4/14 e	--	37 s	22	--	--	--
KS2064	773	--	--	77	--	--	40	4/15 e	--	41	20	--	--	--
Titan	772	766	--	67	77	--	73	4/16	--	40	15	--	--	--
Abilene	753	943	895	78	84	82	43	4/16	--	39	20	--	--	--
ARC92007-2	733	890	--	58	72	--	52	4/16	--	39	17	--	--	--
Virginia	728	1029	1250	53	68	72	45	4/17 l	--	36 s	15	--	--	--
KS3018	725	--	--	78	--	--	33	4/15 e	--	40	20	--	--	--
Wichita	691	949	770	70	82	80	35	4/15 e	--	36 s	13	--	--	--
KS7436	632	1045	964	62	77	79	47	4/18 l	--	39	22	--	--	--
Jetton	580	908	1083	50	64	71	53	4/16	--	37 s	13	--	--	--
Rasmus	577	823	--	65	78	--	47	4/16	--	37 s	12	--	--	--
ARC92004-1	557	706	--	48	67	--	58	4/18 l	--	41	23	--	--	--
VSX-2	512	938	--	47	67	--	50	4/16	--	35 s	12	--	--	--
Ceres	405	743	902	65	74	77	23	4/17 l	--	36 s	28	--	--	--
Plainsman	400	691	750	68	80	73	38	4/17 l	--	43 t	15	--	--	--
KS7436-055	377	--	--	43	--	--	37	4/16	--	34 s	20	--	--	--
Mean	744	858	829	64	75	76	48	4/16	--	39	17	--	--	--
LSD (0.05)	421			19			23	1	--	3	10	--	--	--
CV (%)	35			18			29	1	--	5	35	--	--	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Fremont, Ohio

Edwin Lentz, The Ohio State University

Planted after wheat on 9/15/2004 at 5.8 lb/a in 7-in. rows

Harvested on 7/11/2005

Pesticides: Select 5 oz.

Irrigation: none

Hoytville silty clay loam, pH: NA, P test: NA, K test: NA

150-150-150 lbs N-P-K fertilizer in the fall

90-0-0 lbs N-P-K fertilizer in the spring

Elevation: 636 ft, Latitude: 41°21'N

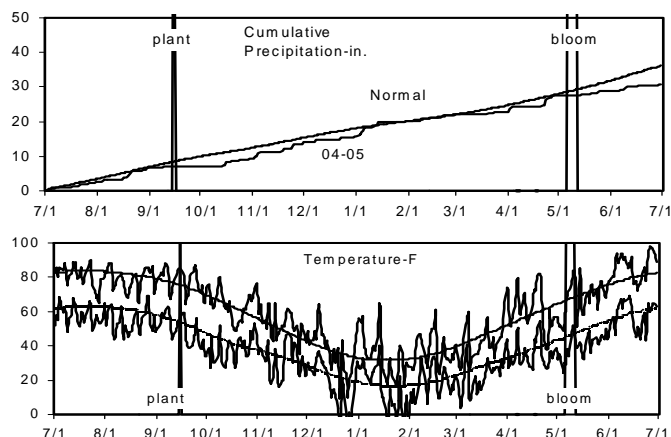


Table 11. Results from the 2005 National Winter Canola Variety Trial at Fremont, Ohio.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS2185	2586	--	--	99	--	--	65	5/8 e	--	55 s	--	--	--	39.6
KS9124	2576	2814	--	99	96	--	68	5/9 e	--	54 s	--	--	--	39.8
NPZ 0326	2533	--	--	97	--	--	67	5/9	--	57	--	--	--	40.0
ARC92004-1	2373	2641	--	90	88	--	63	5/9 e	--	60 t	--	--	--	39.2
KS2098	2332	--	--	95	--	--	70	5/9 e	--	58 t	--	--	--	40.0
KS419B	2263	--	--	96	--	--	62	5/9	--	58 t	--	--	--	39.6
Wichita	2251	2606	--	92	90	--	65	5/9 l	--	54 s	--	--	--	39.4
Baldur	2239	--	--	86	--	--	63	5/10 l	--	56	--	--	--	40.0
KS9135	2227	2765	--	99	91	--	68	5/9	--	58 t	--	--	--	39.6
Rasmus	2226	2711	--	89	87	--	62	5/10 l	--	55	--	--	--	40.1
Kronos	2217	2544	--	94	81	--	70	5/10 l	--	59 t	--	--	--	39.9
Abilene	2213	2430	--	97	99	--	67	5/10 l	--	54 s	--	--	--	39.0
KS3018	2178	--	--	100	--	--	57	5/9	--	56	--	--	--	37.5
KS7436	2164	2426	--	97	90	--	65	5/9 e	--	54 s	--	--	--	39.8
Virginia	2134	2693	--	68	73	--	65	5/9 l	--	50 s	--	--	--	39.4
Jetton	2023	2591	--	82	79	--	55	5/9 l	--	50 s	--	--	--	39.4
KS2169	2003	--	--	98	--	--	70	5/9 e	--	55	--	--	--	39.0
Sumner	1927	--	--	98	--	--	62	5/9	--	55	--	--	--	39.7
ARC2189-1	1907	--	--	65	--	--	70	5/9 l	--	58 t	--	--	--	38.0
VSX-2	1907	2600	--	62	69	--	62	5/10 l	--	52 s	--	--	--	39.8
KS2064	1889	--	--	100	--	--	60	5/9 e	--	62 t	--	--	--	39.3
KS7436-055	1816	--	--	99	--	--	57	5/10 l	--	54 s	--	--	--	40.7
ARC92007-2	1750	2092	--	77	75	--	67	5/9 e	--	61 t	--	--	--	39.6
Baros	1744	--	--	96	--	--	53	5/9 l	--	55	--	--	--	41.7
Plainsman	1639	2299	--	99	96	--	53	5/9 l	--	61 t	--	--	--	39.2
ARC2180-1	1627	--	--	96	--	--	53	5/9 l	--	58 t	--	--	--	40.1
Titan	1421	2129	--	94	91	--	40	5/10 l	--	61 t	--	--	--	39.9
Ceres	945	1871	--	96	86	--	45	5/9 e	--	56	--	--	--	39.7
Mean	2040	2467	--	91	88	--	62	5/9	--	56	--	--	--	39.6
LSD (0.05)	570			17			13	1	--	5	--	--	--	1.4
CV (%)	17			11			12	1	--	6	--	--	--	1.7

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

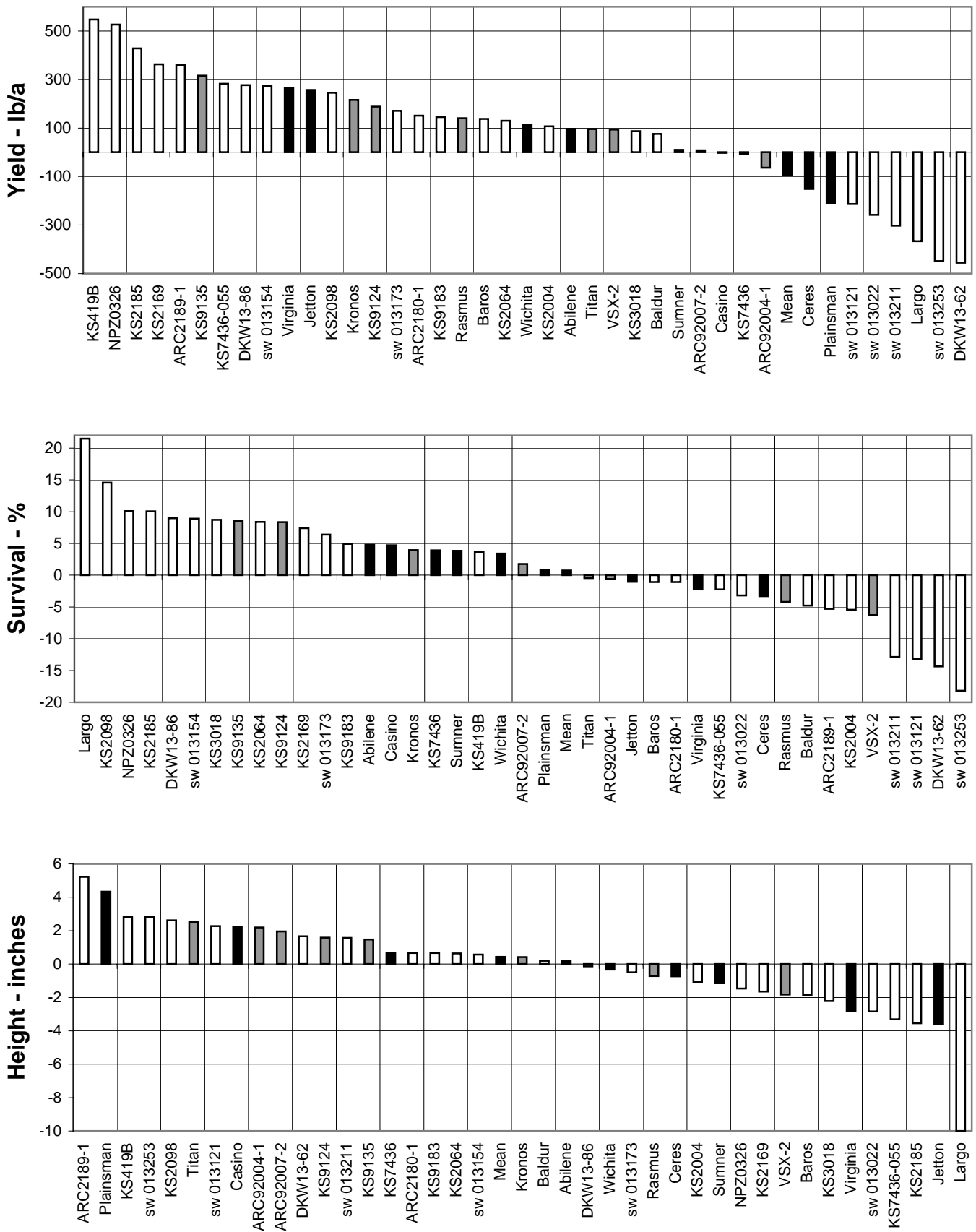
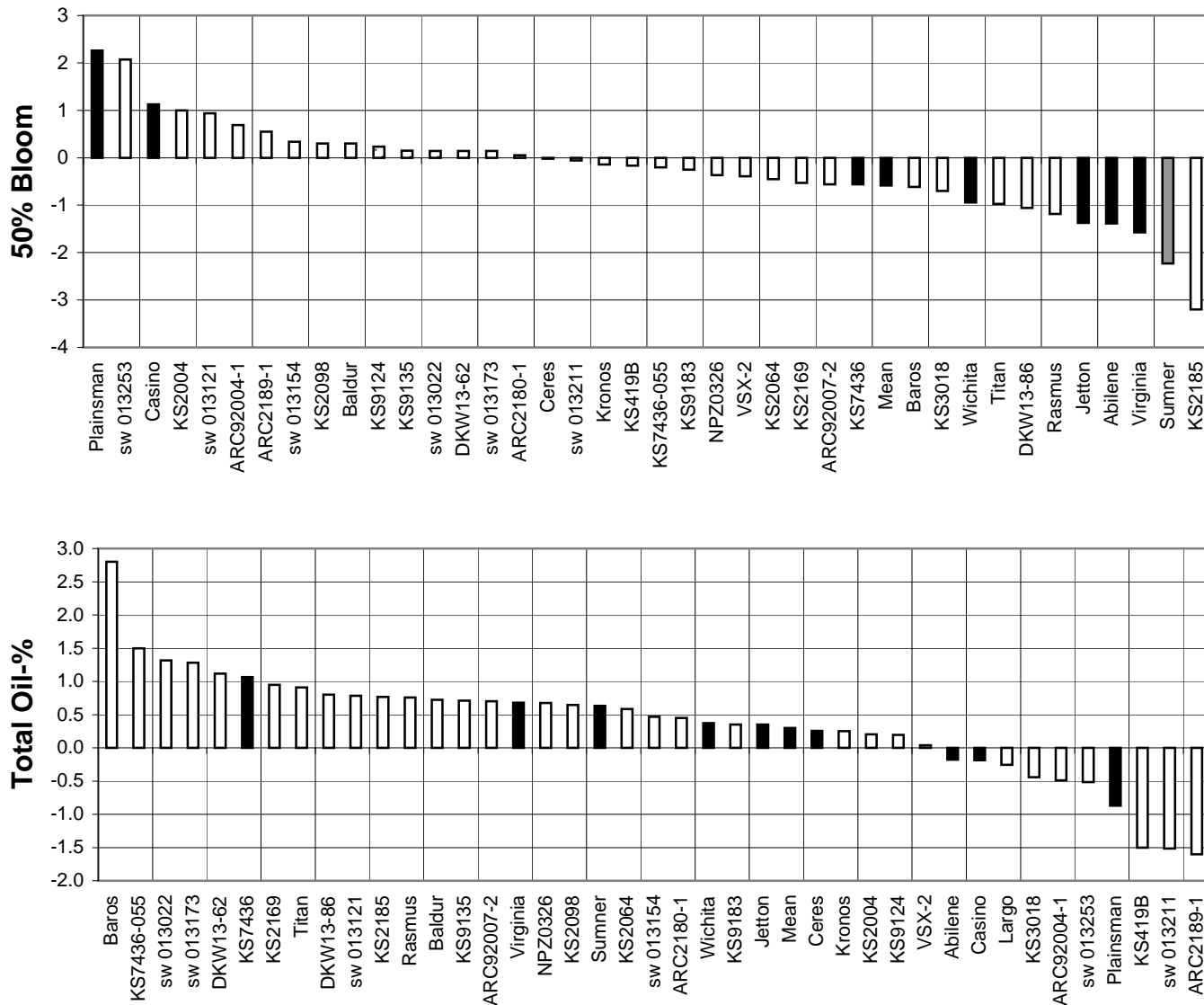


Figure 2. Midwest Winter Canola Summary, 1996-2005.



Note: Values are averages of the differences between each cultivar and the mean of Jetton, Ceres, Plainsman, and Wichita for yield (lb/a), winter survival (%), total oil content (%), plant height (inches), and 50% bloom date (days). The number of observations for each trait is represented by the different colors of the bars (as shown at right).

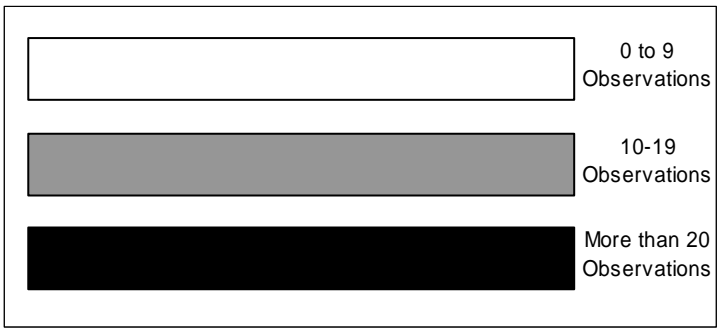


Figure 2. Midwest Winter Canola Summary, 1996-2005 (continued).

Fruita, Colorado

Calvin Pearson, Colorado State University

Planted after soybean on 9/8/2004 at 4.5 lb/a in 30-in. rows

Harvested on 7/26/2005

Pesticides: Treflan 1.5 pt/a

Irrigation: furrow irrigation

Glenton very fine sandy loam, pH: NA, P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

75-0-0 lbs N-P-K fertilizer in the spring

Elevation: 4596 ft, Latitude: 39°10.81'N

There were 10 ten days when temperatures reached or exceeded 100°F. The average growing season at Fruita is 181 days (28°F base), compared with 199 days for 2005.

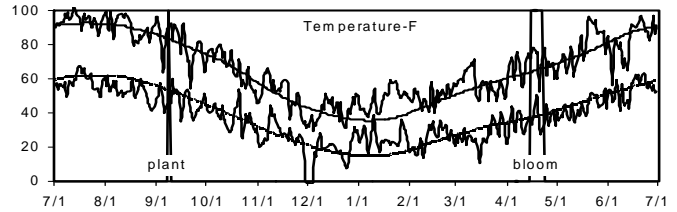
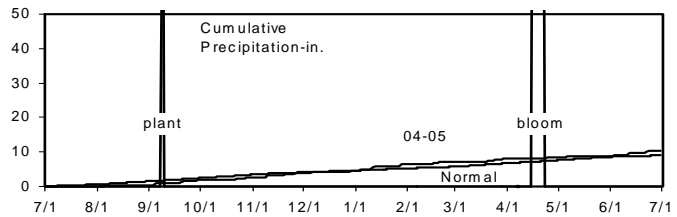


Table 12. Results from the 2005 National Winter Canola Variety Trial at Fruita, Colorado.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Baldur	3027	--	--	100	--	--	93	4/18	--	64	12	1	43.4	37.3
Rasmus	2989	--	--	100	--	--	97	4/18	--	62	3	1	39.5	36.9
Titan	2867	--	--	100	--	--	90	4/18	--	65	2	0	35.1	36.1
Kronos	2854	--	--	100	--	--	90	4/18	--	65	7	2	38.2	35.2
Jetton	2834	--	--	100	--	--	97	4/19	--	58 s	0	1	40.7	37.2
Virginia	2659	--	--	100	--	--	83	4/19	--	61 s	3	0	39.3	37.2
NPZ 0326	2602	--	--	100	--	--	100	4/19	--	64	17	2	37.7	35.5
Ceres	2587	--	--	100	--	--	77	4/19	--	70 t	0	1	37.1	37.4
Baros	2554	--	--	100	--	--	97	4/16 e	--	60 s	32	2	38.9	36.3
KS7436-055	2532	--	--	100	--	--	93	4/16 e	--	58 s	5	1	37.7	36.9
ARC92007-2	2497	--	--	100	--	--	100	4/19	--	64	14	2	36.9	37.7
ARC2189-1	2384	--	--	100	--	--	97	4/19	--	66	12	2	34.5	35.3
Sumner	2367	--	--	100	--	--	97	4/16 e	--	62	8	3	35.2	34.3
ARC92004-1	2271	--	--	100	--	--	97	4/19	--	68 t	10	4	34.2	35.6
KS2185	2244	--	--	100	--	--	93	4/15 e	--	62	3	2	35.0	33.4
ARC2180-1	2221	--	--	100	--	--	97	4/18	--	66	5	4	34.3	35.8
Abilene	2200	--	--	100	--	--	93	4/18	--	62	10	1	37.5	33.4
VSX-2	2171	--	--	100	--	--	97	4/19	--	62	20	1	38.5	36.1
Wichita	2161	--	--	100	--	--	97	4/18	--	62	8	2	32.5	34.2
KS2169	2134	--	--	100	--	--	100	4/18	--	62	12	1	35.1	33.8
KS9135	2104	--	--	100	--	--	90	4/20	--	68 t	22	2	36.9	35.9
KS7436	2087	--	--	100	--	--	87	4/18	--	60 s	4	1	36.2	36.5
KS3018	2007	--	--	100	--	--	93	4/18	--	62	3	2	29.8	33.4
Casino	1936	--	--	100	--	--	87	4/19	--	65	2	2	34.1	32.4
KS9124	1857	--	--	100	--	--	97	4/19	--	64	12	1	34.0	33.1
KS2064	1769	--	--	97	--	--	90	4/18	--	67 t	8	3	36.9	34.9
Plainsman	1597	--	--	100	--	--	97	4/22 l	--	68 t	3	1	32.1	32.9
KS2098	1543	--	--	100	--	--	97	4/20	--	68 t	10	7	30.4	33.4
Mean	2324	--	--	100	--	--	94	4/18	--	64	9	2	36.1	35.3
LSD (0.05)	533			2			12	1	--	3	19	3	4.7	2.6
CV (%)	14			1			8	1	--	3	130	106	8.0	3.6

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Walsh, Colorado

Kevin Larson, Plainsman Research Center, Colorado State University
 Planted after wheat on 9/9/2004 at 5 lb/a in 12-in. rows

Harvested on 6/28/2005
 Pesticides: Treflan 1.5 pt/a
 Irrigation: furrow, once in fall and once in spring
 Richfield silty loam, pH: 7.7, P test: 6.2ppm, K test: 490ppm
 75-0-0 lbs N-P-K fertilizer in the fall
 0-0-0 lbs N-P-K fertilizer in the spring
 Elevation: 3950 ft, Latitude: 37°26'N

Good moisture throughout the season and a mild winter resulted in excellent survival and yields. There was little pest damage, lodging, or shattering.

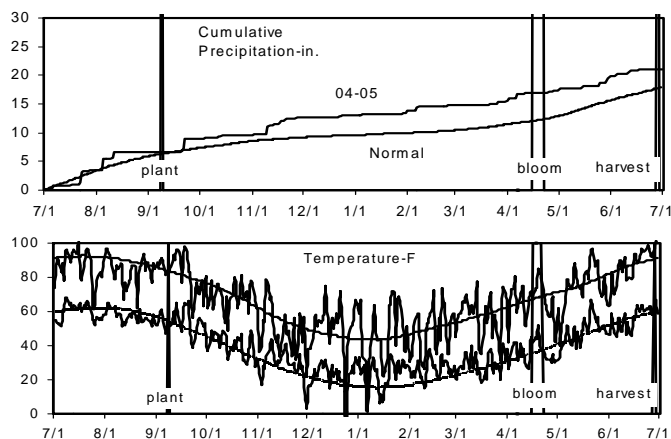


Table 13. Results from the 2005 National Winter Canola Variety Trial at Walsh, Colorado.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
NPZ 0326	2482	--	--	100	--	--	83	4/20	--	67	--	--	--	35.9
Kronos	2462	--	--	100	--	--	57	4/19	--	61	--	--	--	36.1
ARC2189-1	2409	--	--	100	--	--	52	4/19	--	60	--	--	--	36.4
Baldur	2402	--	--	100	--	--	42	4/18	--	59	--	--	--	37.6
Wichita	2366	--	--	100	--	--	47	4/17	--	57	--	--	--	36.2
ARC92007-2	2290	--	--	100	--	--	70	4/19	--	63	--	--	--	37.5
Abilene	2129	--	--	100	--	--	43	4/19	--	63	--	--	--	36.9
KS9135	2125	--	--	100	--	--	57	4/20	--	64	--	--	--	36.2
KS2064	2109	--	--	100	--	--	42	4/18	--	58	--	--	--	36.0
KS2169	2092	--	--	100	--	--	50	4/18	--	56	--	--	--	36.1
ARC2180-1	2033	--	--	100	--	--	85	4/19	--	68	--	--	--	34.6
Rasmus	2000	--	--	100	--	--	35	4/18	--	58	--	--	--	36.3
KS9124	1941	--	--	100	--	--	45	4/20	--	58	--	--	--	36.4
Titan	1881	--	--	100	--	--	38	4/18	--	60	--	--	--	37.8
Jetton	1875	--	--	100	--	--	62	4/20	--	59	--	--	--	36.0
Casino	1862	--	--	100	--	--	25	4/20	--	61	--	--	--	36.5
VSX-2	1808	--	--	100	--	--	53	4/19	--	60	--	--	--	35.5
ARC92004-1	1775	--	--	100	--	--	55	4/20	--	61	--	--	--	36.0
Baros	1703	--	--	100	--	--	63	4/17	--	57	--	--	--	37.7
KS2098	1689	--	--	100	--	--	48	4/21	--	68	--	--	--	35.7
KS7436	1676	--	--	100	--	--	40	4/19	--	58	--	--	--	37.4
Plainsman	1617	--	--	100	--	--	37	4/21	--	68	--	--	--	36.3
KS2185	1610	--	--	100	--	--	32	4/17	--	54	--	--	--	36.6
KS7436-055	1599	--	--	100	--	--	23	4/19	--	52	--	--	--	37.1
Virginia	1544	--	--	100	--	--	23	4/20	--	52	--	--	--	35.9
Sumner	1518	--	--	100	--	--	42	4/16	--	53	--	--	--	36.3
KS3018	1300	--	--	100	--	--	43	4/18	--	63	--	--	--	34.8
Ceres	436	--	--	100	--	--	5	4/20	--	52	--	--	--	34.1
Mean	1883	--	--	100	--	--	46	4/18	--	60	--	--	--	36.3
LSD (0.05)	532			NS			29	--	--	--	--	--	--	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
 e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
 * 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Hutchinson, Kansas

Bill Heer and Vic Martin, Kansas State University South Central Experiment Field

Planted on 9/15/2004 at 5 lb/a in 8-in. rows

Harvested on 6/22/2005

Pesticides: Treflan

Irrigation: none

Ost silt loam, pH: NA, P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 1570 ft, Latitude: 37°56'N

Heavy rains and high winds delayed harvest and caused extensive shattering.

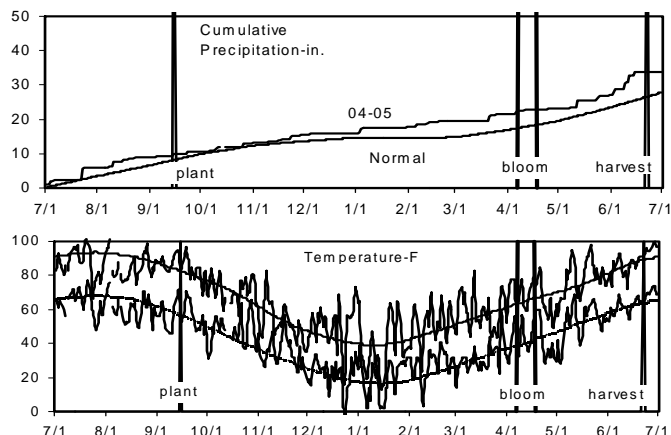


Table 14. Results from the 2005 National Winter Canola Variety Trial at Hutchinson, Kansas.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Abilene	1472	2281	2722	100	100	100	99	4/10	--	52	0	4	48.8	38.3
KS2185	1342	--	--	100	--	--	100	4/8 e	--	46	2	15	48.9	39.3
Titan	1322	2339	--	99	100	--	98	4/10	--	51	0	12	49.3	40.7
Kronos	1308	2286	--	100	100	--	100	4/10	--	49	0	5	49.0	38.4
KS9124	1285	2159	--	100	100	--	99	4/11	--	50	0	7	48.2	38.9
Wichita	1282	2295	2684	100	100	100	98	4/10	--	48	0	4	48.8	38.6
KS7436-055	1282	--	--	99	--	--	97	4/9	--	45 s	0	4	48.7	39.5
SW 013022	1263	1847	--	99	100	--	99	4/11	--	42 s	0	15	46.6	38.9
NPZ 0326	1248	--	--	100	--	--	100	4/10	--	46	0	13	48.7	39.7
KS9135	1246	2140	--	100	100	--	97	4/11	--	54	0	7	48.6	39.2
KS2169	1233	--	--	100	--	--	100	4/9	--	46	0	20	48.9	38.3
KS420B	1232	--	--	100	--	--	100	4/11	--	47	0	2	47.6	38.6
KS7436	1226	2115	2445	100	100	100	100	4/11	--	49	0	7	48.4	39.5
KS419	1206	--	--	100	--	--	99	4/11	--	50	0	17	47.9	38.8
Rasmus	1191	2115	--	100	100	--	97	4/10	--	49	0	10	46.4	38.6
Sumner	1181	2108	2371	100	100	100	99	4/8	--	48	2	17	49.6	38.9
Jetton	1176	2095	2627	100	100	100	98	4/11	--	44 s	0	4	47.4	37.9
KS2064	1118	--	--	99	--	--	99	4/10	--	52	0	27	49.2	39.1
Plainsman	1110	1871	2328	100	100	100	99	4/13	--	59 t	0	30	48.7	40.0
ARC2180-1	1103	--	--	98	--	--	100	4/11	--	50	0	12	47.5	38.8
DKW13-62	1098	1787	--	97	98	--	99	4/12	--	49	1	4	48.7	39.7
VSX-2	1095	2166	--	95	98	--	98	4/11	--	44 s	0	6	47.1	38.3
DKW13-86	1066	2060	--	99	100	--	100	4/10	--	47	0	11	48.0	39.3
Virginia	1048	2076	2553	98	99	99	97	4/10	--	47	0	5	48.1	38.5
ARC2189-1	1046	--	--	99	--	--	100	4/11	--	51	0	22	47.5	38.8
KS2098	998	--	--	100	--	--	100	4/14	--	52	0	13	47.8	39.6
Baros	932	--	--	100	--	--	99	4/7 e	--	50	0	43	46.8	41.6
ARC92007-2	905	1934	--	100	100	--	99	4/10	--	48	0	15	47.6	38.1
SW 013121	841	1875	--	98	99	--	96	4/17 l	--	51	0	50	48.0	37.2
SW 013173	815	1832	--	99	100	--	98	4/13	--	50	0	68	47.5	39.6
Baldur	787	--	--	100	--	--	97	4/9	--	49	7	22	48.9	40.0
ARC92004-1	760	1767	--	100	100	--	99	4/12	--	51	5	28	48.4	38.5
Ceres	754	1729	2224	99	100	100	70	4/12	--	53	0	8	49.1	40.1
SW 013253	754	1569	--	98	99	--	99	4/13	--	54	0	37	47.4	38.5
SW 013154	573	1711	--	100	100	--	99	4/15	--	47	2	70	45.7	38.3
SW 013211	539	1457	--	77	88	--	99	4/12	--	49	7	30	48.9	37.0
Mean	1079	1987	2314	99	99	100	98	4/11	--	49	1	18	48.1	39.0
LSD (0.05)	305			11			8	1	--	4	4	19	1.3	1.6
CV (%)	17			7			5	1	--	5	335	63	1.7	2.0

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Kalispell, Montana

Duane Johnson, Montana State University

Planted on 9/10/2004 at 5 lb/a in 6-in. rows

Swathed on 7/25/2005

Harvested on 8/1/2005

Pesticides: NA

Irrigation: none

P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 2970 ft, Latitude: 48°19'N

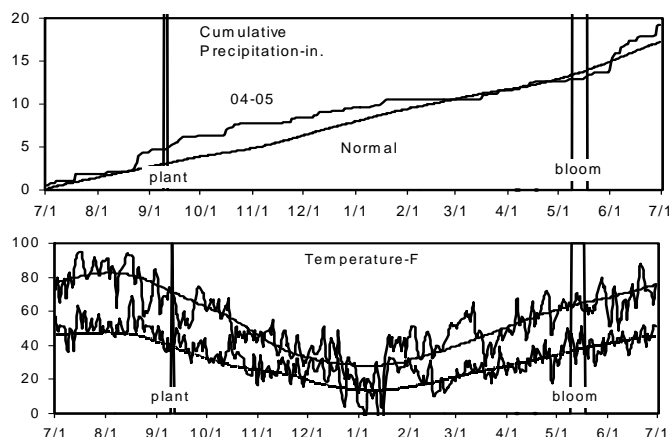


Table 15. Results from the 2005 National Winter Canola Variety Trial at Kalispell, Montana.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Kronos	5023	--	--	85	--	--	100	5/13	7/30 l	59	92	--	53.9	--
NPZ 0326	4428	--	--	82	--	--	100	5/14	7/28 e	55	20	--	52.9	--
ARC92007-2	3629	--	--	81	--	--	100	5/14	7/26 e	61	60	--	53.1	--
KS9135	3578	--	--	75	--	--	100	5/15	7/29 l	63 t	62	--	53.7	--
Titan	3401	--	--	94	--	--	83	5/14	7/28 e	59	20	--	52.9	--
ARC2189-1	3388	--	--	98	--	--	100	5/14	7/30 l	59	53	--	53.5	--
ARC2180-1	3363	--	--	88	--	--	100	5/14	7/28 e	58	83	--	53.5	--
KS3018	3361	--	--	91	--	--	100	5/12	7/31 l	61	38	--	53.6	--
Baldur	3283	--	--	87	--	--	87	5/12	7/27 e	54 s	23	--	53.1	--
ARC92004-1	3262	--	--	87	--	--	100	5/15 l	7/28 e	62	83	--	53.3	--
KS9124	3194	--	--	91	--	--	100	5/15 l	8/1 l	58	75	--	53.1	--
Baros	3147	--	--	90	--	--	99	5/15	7/28 e	55 s	58	--	52.9	--
Wichita	3130	--	--	89	--	--	100	5/11	7/27 e	50 s	67	--	53.4	--
Jetton	3127	--	--	90	--	--	98	5/13	7/29 l	48 s	20	--	53.0	--
Abilene	3113	--	--	95	--	--	81	5/14	7/28 e	56	75	--	53.8	--
VSX-2	3106	--	--	82	--	--	100	5/14	7/31 l	53 s	30	--	53.3	--
KS2169	3073	--	--	64	--	--	100	5/13	7/29 l	59	30	--	53.3	--
KS2098	3005	--	--	75	--	--	100	5/16 l	7/31 l	61	75	--	53.0	--
Sumner	2899	--	--	89	--	--	83	5/10 e	7/27 e	56	53	--	53.6	--
KS7436-055	2897	--	--	83	--	--	59	5/13	7/31 l	50 s	20	--	52.7	--
KS2185	2890	--	--	72	--	--	100	5/10 e	7/28 e	50 s	68	--	52.8	--
Ceres	2885	--	--	79	--	--	48	5/14	7/31 l	59	20	--	53.7	--
KS2064	2867	--	--	100	--	--	90	5/14	7/29 l	57	83	--	53.1	--
KS7436	2848	--	--	67	--	--	99	5/15 l	7/31 l	54 s	60	--	53.1	--
KS2004	2721	--	--	62	--	--	100	5/15	7/28 e	62	60	--	52.9	--
Virginia	2518	--	--	98	--	--	83	5/13	8/1 l	57	17	--	53.5	--
Plainsman	2339	--	--	64	--	--	93	5/16 l	7/31 l	69 t	17	--	53.4	--
Casino	2002	--	--	57	--	--	95	5/14	8/1 l	58	52	--	53.9	--
Rasmus	1738	--	--	76	--	--	57	5/11 e	7/31 l	54 s	45	--	53.0	--
Mean	3111	--	--	82	--	--	92	5/14	7/30	57	50	--	53.3	--
LSD (0.05)	838			25			14	1	3	7	39	--	0.8	--
CV (%)	16			19			9	1	1	7	47	--	0.9	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Lincoln, Nebraska

Lenis Nelson, University of Nebraska

Planted after oats on 9/16/2004 at 5 lb/a in 9-in. rows

Harvested on 7/7/2005

Pesticides: Treflan

Irrigation: none

Crete silt loam, pH: NA, P test: NA, K test: NA

60-0-0 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 1217 ft, Latitude: 48°8'N

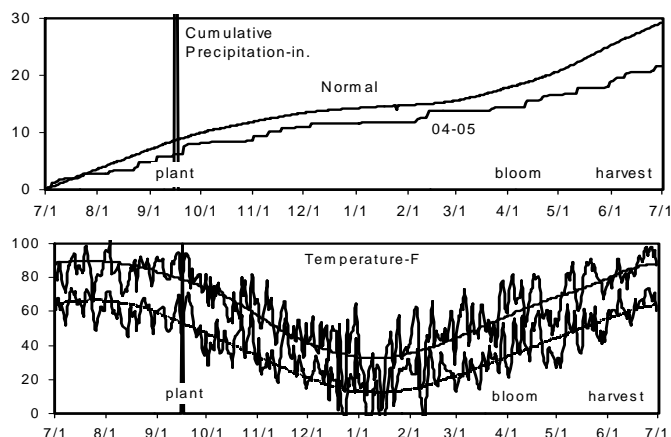


Table 16. Results from the 2005 National Winter Canola Variety Trial at Lincoln, Nebraska.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Baldur	1681	--	--	100	--	--	97	--	--	52	0	15	49.0	35.5
Titan	1505	1893	--	100	98	--	98	--	--	57 t	0	15	48.4	35.8
Rasmus	1489	1543	--	98	87	--	87	--	--	50 s	0	15	46.4	36.1
Virginia	1465	--	--	97	--	--	100	--	--	51	0	15	48.5	34.8
ARC2180-1	1451	--	--	100	--	--	100	--	--	54	0	15	46.9	34.8
VSX-2	1363	1927	--	98	97	--	100	--	--	50 s	0	15	48.0	35.5
KS9135	1354	1853	--	100	96	--	100	--	--	56 t	0	15	49.3	34.6
KS2185	1254	--	--	100	--	--	100	--	--	51	0	15	48.8	34.2
NPZ 0326	1239	--	--	100	--	--	100	--	--	56 t	0	15	48.7	34.5
KS7436-055	1203	--	--	100	--	--	97	--	--	52	15	15	49.9	35.9
KS9124	1202	1582	--	100	98	--	88	--	--	57 t	0	15	48.4	35.6
Jetton	1198	1509	2192	100	99	99	100	--	--	48 s	0	15	48.1	34.7
SW 013211	1195	1621	--	97	98	--	100	--	--	55	0	22	49.8	34.3
Abilene	1194	1655	1969	97	96	97	100	--	--	52	0	15	49.1	34.1
Kronos	1189	1921	--	100	99	--	100	--	--	53	3	15	48.6	34.2
DKW13-86	1179	1562	--	100	99	--	100	--	--	50 s	0	15	49.2	35.8
KS7436	1173	1830	2323	100	100	100	92	--	--	53	0	15	49.3	36.0
Casino	1137	1537	1959	100	97	98	98	--	--	56 t	0	15	49.3	35.2
ARC2189-1	1126	--	--	100	--	--	100	--	--	53	3	15	47.1	35.3
SW 013253	1115	1501	--	100	99	--	100	--	--	52	0	15	48.6	34.6
DKW13-62	1099	1371	--	100	100	--	100	--	--	52	0	15	48.9	36.8
Ceres	1087	1449	1992	100	95	96	75	--	--	56	0	15	48.2	33.7
SW 013121	1055	1643	--	100	97	--	90	--	--	48 s	0	15	48.4	34.1
KS2098	1044	--	--	93	--	--	100	--	--	54	0	15	48.3	35.6
Sumner	1043	1516	1857	98	95	97	100	--	--	53	8	15	49.6	35.0
ARC92007-2	977	1423	--	100	100	--	100	--	--	53	0	15	48.5	34.8
Wichita	974	1549	1976	100	99	99	100	--	--	51	27	15	50.3	34.4
ARC92004-1	921	1251	--	100	99	--	100	--	--	55	0	15	47.6	33.0
KS3018	862	--	--	100	--	--	93	--	--	54	0	15	49.0	33.8
KS2169	855	--	--	97	--	--	100	--	--	52	3	15	48.7	35.3
Baros	851	--	--	100	--	--	100	--	--	49 s	0	15	49.0	35.6
KS2004	841	1205	--	100	99	--	97	--	--	58 t	0	15	48.5	34.5
SW 013022	835	1146	--	98	99	--	100	--	--	47 s	0	15	46.1	34.1
KS2064	822	--	--	98	--	--	100	--	--	53	5	15	49.0	34.8
Plainsman	771	1145	1544	100	99	99	95	--	--	60 t	10	15	48.4	34.5
SW 013173	767	1281	--	98	99	--	100	--	--	46 s	0	30	48.6	35.9
SW 013154	594	924	--	100	94	--	97	--	--	48 s	0	15	46.6	35.6
Mean	1111	1518	1987	99	97	98	97	--	--	53	2	16	48.5	34.9
LSD (0.05)	185			4			8	--	--	4	13	3	0.9	1.4
CV (%)	10			2			5	--	--	5	382	12	1.1	1.9

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Sidney, Nebraska

David Baltensperger, University of Nebraska

Planted after potato on 9/10/2004 at 8 lb/a in 12-in. rows

Harvested on 7/15/2005

Pesticides: Treflan

Irrigation: 10 in. during trial period

Tripp fine sandy loam, pH: NA, P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

50-0-52 lbs N-P-K fertilizer in the spring

Elevation: 3967 ft, Latitude: 41°9'N

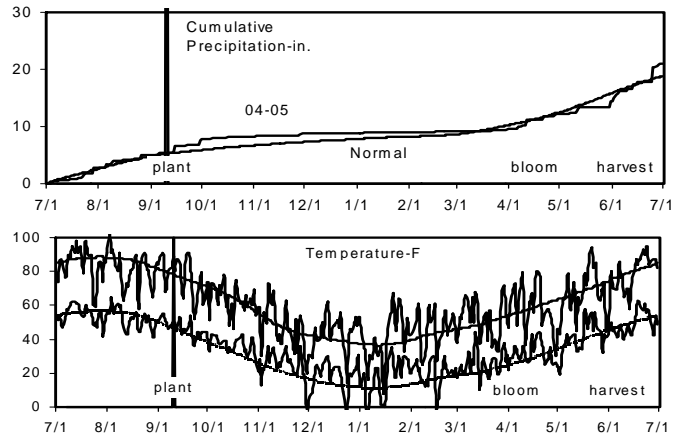


Table 17. Results from the 2005 National Winter Canola Variety Trial at Sidney, Nebraska.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS7436-055	3258	--	--	100	--	--	--	--	--	50 s	--	--	52.2	37.7
Rasmus	3217	3706	--	100	100	--	--	--	--	57 t	--	--	50.2	36.5
KS2185	3151	--	--	100	--	--	--	--	--	48 s	--	--	52.4	36.4
Titan	3117	3881	--	100	100	--	--	--	--	58 t	--	--	51.1	37.3
Jetton	3057	3473	2903	100	100	94	--	--	--	48 s	--	--	50.5	35.2
Abilene	3055	3447	2915	100	100	83	--	--	--	53 t	--	--	51.2	36.1
Virginia	3045	--	--	100	--	--	--	--	--	52 s	--	--	50.6	35.8
Kronos	3036	3944	--	100	100	--	--	--	--	58 t	--	--	52.7	36.0
NPZ 0326	3020	--	--	100	--	--	--	--	--	53 t	--	--	51.5	36.3
KS9124	3014	3347	--	100	100	--	--	--	--	56 t	--	--	50.9	36.0
KS2004	2951	3370	--	100	100	--	--	--	--	57 t	--	--	50.2	35.5
KS9135	2839	3320	--	100	100	--	--	--	--	54 t	--	--	51.5	35.8
Wichita	2782	3791	3101	100	100	81	--	--	--	48 s	--	--	50.9	36.9
Baros	2735	--	--	100	--	--	--	--	--	57 t	--	--	49.7	38.2
V SX-2	2732	3333	--	100	100	--	--	--	--	53 t	--	--	51.3	35.1
ARC92004-1	2695	3307	--	100	100	--	--	--	--	57 t	--	--	49.2	35.7
Plainsman	2684	3010	2050	100	100	--	--	--	--	53 t	--	--	50.1	35.5
KS7436	2661	3266	2808	100	100	91	--	--	--	58 t	--	--	52.3	37.1
KS2064	2633	--	--	100	--	--	--	--	--	54 t	--	--	50.8	36.5
ARC2180-1	2627	--	--	100	--	--	--	--	--	53 t	--	--	51.2	34.7
ARC2189-1	2624	--	--	100	--	--	--	--	--	54 t	--	--	51.0	35.5
Baldur	2578	--	--	100	--	--	--	--	--	57 t	--	--	48.3	37.2
KS2169	2561	--	--	100	--	--	--	--	--	53 t	--	--	51.5	35.7
KS3018	2468	--	--	100	--	--	--	--	--	52 s	--	--	50.5	35.0
ARC92007-2	2419	3340	--	100	100	--	--	--	--	50 s	--	--	51.8	36.4
Ceres	2403	2867	2141	100	100	71	--	--	--	58 t	--	--	52.8	36.4
Sumner	2387	3367	2876	100	100	86	--	--	--	49 s	--	--	51.2	36.5
KS2098	2294	--	--	100	--	--	--	--	--	57 t	--	--	51.8	35.9
Casino	2279	3227	2567	100	100	83	--	--	--	52 s	--	--	51.8	35.6
Mean	2753	3332	2763	100	100	84	--	--	--	54	--	--	51.1	36.1
LSD (0.05)	545			NS			--	--	--	6	--	--	1.3	0.8
CV (%)	12			--			--	--	--	5	--	--	1.6	1.1

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Enid, Oklahoma

Gene McVay/John Lamle, Johnston Seed Co.

Planted after wheat on 9/16/2004 at 5 lb/a in 8-in. rows

Harvested on 6/22/2005

Pesticides: NA

Irrigation: none

P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

90-0-0 lbs N-P-K fertilizer in the spring

Elevation: 1227 ft, Latitude: 36°26'N

Heavy rains and high winds delayed harvest and caused extensive shattering.

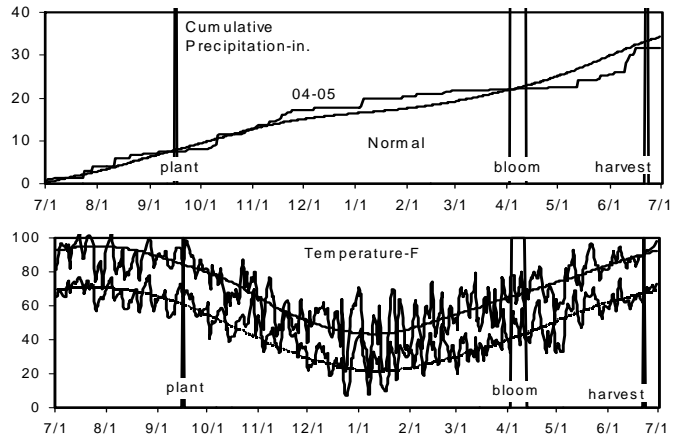


Table 18. Results from the 2005 National Winter Canola Variety Trial at Enid, Oklahoma.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS7436-055	1566	--	--	95	--	--	83	4/4 e	--	41	0	22	51.0	38.6
KS2185	1484	--	--	100	--	--	97	4/3 e	--	45	0	25	50.2	37.1
NPZ 0326	1356	--	--	93	--	--	93	4/5 e	--	43	0	28	49.5	38.9
Wichita	1337	--	--	98	--	--	93	4/4 e	--	46	0	22	49.8	37.4
KS9124	1333	--	--	95	--	--	90	4/6	--	43	0	25	49.9	38.5
Abilene	1278	--	--	98	--	--	98	4/5	--	48	0	18	50.0	37.8
Rasmus	1219	--	--	94	--	--	78	4/4 e	--	43	0	13	48.8	37.7
Plainsman	1195	--	--	92	--	--	85	4/8 l	--	51 t	0	28	49.9	36.6
KS2064	1189	--	--	98	--	--	93	4/4 e	--	51 t	0	37	49.7	36.4
KS9135	1149	--	--	95	--	--	95	4/5	--	47	0	23	49.7	38.5
KS7436	1114	--	--	95	--	--	88	4/5 e	--	46	0	28	50.6	38.0
Titan	1046	--	--	95	--	--	97	4/8 l	--	48	2	18	50.3	36.7
KS2098	1039	--	--	98	--	--	90	4/7	--	54 t	0	37	49.0	36.2
KS2169	1029	--	--	87	--	--	77	4/4 e	--	45	10	32	48.4	36.8
KS419	1026	--	--	96	--	--	93	4/4 e	--	48	0	37	49.2	38.7
Baldur	973	--	--	85	--	--	93	4/6	--	41	7	32	50.2	38.6
ARC2180-1	947	--	--	94	--	--	97	4/7	--	45	5	27	48.3	35.8
VSX-2	932	--	--	97	--	--	93	4/4 e	--	42	0	18	49.0	37.4
Baros	930	--	--	100	--	--	93	4/3 e	--	47	3	83	49.0	41.4
Sumner	905	--	--	97	--	--	92	4/4 e	--	46	7	33	50.7	38.4
DKW13-86	899	--	--	96	--	--	90	4/6	--	41	3	53	49.7	37.5
SW 013253	858	--	--	95	--	--	93	4/9 l	--	48	0	37	49.6	35.7
Virginia	848	--	--	95	--	--	83	4/5	--	42	0	15	47.7	36.3
Jetton	830	--	--	97	--	--	92	4/5 e	--	36 s	0	18	48.5	37.3
Ceres	821	--	--	92	--	--	67	4/6	--	40	0	53	50.7	37.6
DKW13-62	819	--	--	95	--	--	95	4/10 l	--	41	5	20	49.7	36.4
ARC2189-1	808	--	--	95	--	--	97	4/6	--	46	0	30	48.0	37.2
ARC92004-1	789	--	--	97	--	--	97	4/6	--	46	3	40	49.9	37.0
KS420B	775	--	--	95	--	--	97	4/7	--	46	0	15	48.1	35.5
ARC92007-2	764	--	--	93	--	--	97	4/7	--	45	7	57	48.7	36.5
Kronos	697	--	--	94	--	--	97	4/7	--	42	20	43	49.6	36.1
SW 013154	640	--	--	95	--	--	92	4/10 l	--	46	0	67	47.7	36.6
SW 013121	628	--	--	88	--	--	88	4/10 l	--	39 s	10	42	47.9	35.0
SW 013173	614	--	--	93	--	--	87	4/8 l	--	42	0	63	48.2	37.2
SW 013211	592	--	--	82	--	--	93	4/9 l	--	41	3	35	49.5	35.8
SW 013022	423	--	--	67	--	--	92	4/8 l	--	34 s	2	17	47.4	36.0
Mean	968	--	--	94	--	--	91	4/6	--	44	2	33	49.3	37.2
LSD (0.05)	293			9			11	2	--	5	11	21	1.3	1.9
CV (%)	19			6			7	1	--	6	269	39	1.6	2.5

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Goodwell, Oklahoma

Rick Kochenower, Oklahoma State University

Planted on 9/29/2004 at 5 lb/a in 7.5-in. rows

Harvested on 6/29/2005

Pesticides: NA

Irrigation: none

Richfield clay loam, pH: NA, P test: NA, K test: NA

75-40-0 lbs N-P-K fertilizer in the fall

125-0-0 lbs N-P-K fertilizer in the spring

Elevation: 3239 ft, Latitude: 36°36'N

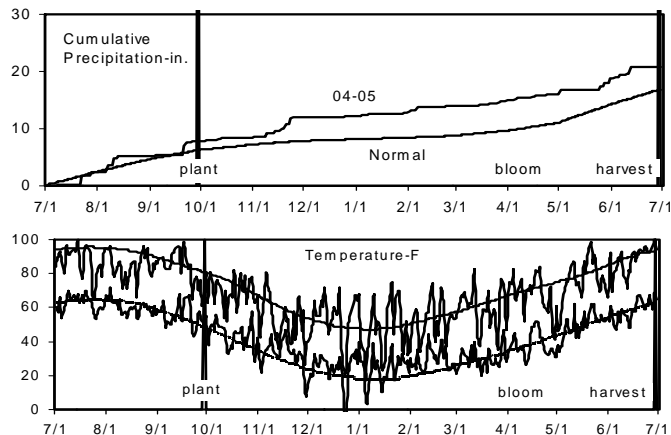


Table 19. Results from the 2005 National Winter Canola Variety Trial at Goodwell, Oklahoma.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Titan	2299	2412	--	100	99	--	83	--	--	--	37	7	50.2	--
KS2169	2271	--	--	100	--	--	100	--	--	--	60	8	50.3	--
Abilene	2263	1756	1563	100	92	94	87	--	--	--	32	7	48.5	--
DKW13-86	2263	1930	--	100	96	--	97	--	--	--	13	22	50.6	--
ARC2180-1	2243	--	--	100	--	--	93	--	--	--	50	10	47.9	--
Wichita	2230	2204	1983	100	100	100	80	--	--	--	33	12	50.2	--
KS7436	2228	1921	1897	100	90	93	97	--	--	--	58	3	49.7	--
Virginia	2207	2236	2161	100	98	98	83	--	--	--	63	3	47.7	--
KS420B	2162	--	--	100	--	--	100	--	--	--	85	0	47.3	--
Ceres	2071	1409	1348	100	87	90	93	--	--	--	33	7	48.2	--
Sumner	2065	1780	1683	100	94	95	93	--	--	--	30	12	49.4	--
Rasmus	2025	1710	--	100	97	--	100	--	--	--	67	0	47.7	--
Plainsman	2010	1432	1291	100	94	95	87	--	--	--	17	3	48.2	--
Kronos	1887	2364	--	100	100	--	73	--	--	--	63	10	49.8	--
KS419	1872	--	--	100	--	--	100	--	--	--	43	0	47.1	--
ARC92007-2	1821	1551	--	100	91	--	100	--	--	--	97	8	47.8	--
NPZ 0326	1810	--	--	100	--	--	100	--	--	--	63	0	48.2	--
KS2064	1805	--	--	100	--	--	93	--	--	--	3	12	49.8	--
KS2185	1796	--	--	100	--	--	97	--	--	--	33	17	48.2	--
KS9135	1763	1653	--	100	96	--	97	--	--	--	68	3	48.5	--
KS7436-055	1724	--	--	100	--	--	83	--	--	--	57	10	49.3	--
Baros	1722	--	--	100	--	--	97	--	--	--	97	0	48.5	--
KS9124	1686	1823	--	100	97	--	97	--	--	--	57	3	49.1	--
VSX-2	1674	1913	--	100	98	--	97	--	--	--	97	0	47.6	--
SW 013121	1655	1431	--	100	90	--	80	--	--	--	47	8	50.2	--
Jetton	1569	1706	1788	100	96	97	53	--	--	--	58	10	50.2	--
SW 013022	1560	1038	--	100	75	--	100	--	--	--	63	7	47.7	--
ARC2189-1	1560	--	--	100	--	--	97	--	--	--	67	10	45.8	--
ARC92004-1	1559	1260	--	100	91	--	97	--	--	--	60	13	46.9	--
DKW13-62	1483	1246	--	100	91	--	100	--	--	--	77	0	48.3	--
SW 013211	1463	1333	--	100	89	--	97	--	--	--	100	0	49.7	--
SW 013253	1401	1323	--	100	90	--	90	--	--	--	67	17	47.6	--
Baldur	1380	--	--	100	--	--	97	--	--	--	77	0	49.1	--
KS2098	1342	--	--	100	--	--	100	--	--	--	87	0	46.8	--
SW 013154	1226	1034	--	100	89	--	90	--	--	--	67	7	45.9	--
SW 013173	1192	1170	--	100	89	--	97	--	--	--	87	3	47.9	--
Mean	1814	1645	1596	100	93	95	92	--	--	--	59	6	48.5	--
LSD (0.05)	650			NS			10	--	--	--	72	17	2.0	--
CV (%)	22			--			7	--	--	--	76	158	2.6	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Chillicothe, Texas

David Bordovsky, Texas A&M University

Planted after canola on 10/15/2004 at 5 lb/a in 10-in. rows

Harvested on 6/6/2005

Pesticides: Treflan

Irrigation: 6 in pre-plant

Abilene clay loam, pH: NA, P test: NA, K test: NA

60-0-0 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 1401 ft, Latitude: 34°11'N

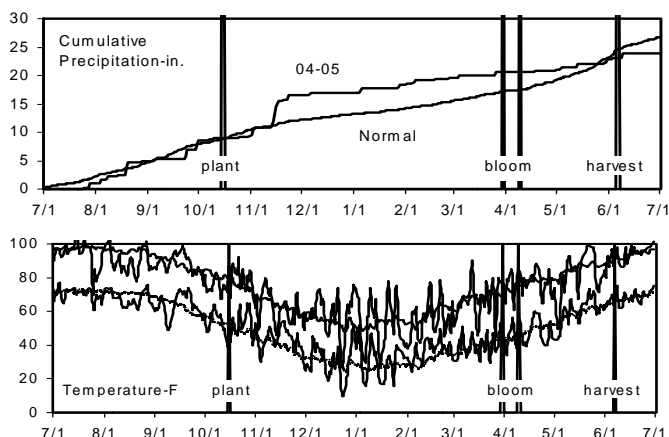


Table 20. Results from the 2005 National Winter Canola Variety Trial at Chillicothe, Texas.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
KS2185	2149	--	--	100	--	--	52	3/23 e	--	42 s	--	2	52.2	40.0
Wichita	2064	1834	1352	100	100	100	48	3/31	--	45	--	5	52.1	39.4
KS7436-055	2007	--	--	100	--	--	39	3/30	--	43 s	--	12	52.3	38.1
Jetton	1905	1665	1243	100	99	99	45	3/30	--	40 s	--	2	51.4	39.1
DKW13-86	1895	1667	--	100	99	--	48	3/31	--	46	--	7	52.2	39.7
NPZ 0326	1888	--	--	100	--	--	53	3/31	--	49	--	5	51.5	39.2
KS420B	1884	--	--	100	--	--	45	3/30	--	42 s	--	2	51.5	39.4
VSX-2	1836	1608	--	100	99	--	51	3/31	--	41 s	--	3	51.8	39.3
KS7436	1809	1668	1263	100	100	100	45	3/31	--	48	--	5	52.7	39.9
KS9124	1809	1613	--	100	100	--	51	4/2	--	47	--	3	51.8	39.0
Kronos	1803	1201	--	100	100	--	53	4/1	--	51 t	--	8	52.9	37.6
Baldur	1786	--	--	100	--	--	43	3/30	--	49 t	--	7	51.8	39.4
KS2169	1754	--	--	100	--	--	44	3/30	--	48	--	8	51.8	38.4
Virginia	1733	1546	1176	100	100	100	40	3/30	--	42 s	--	2	51.4	37.8
Titan	1708	1539	--	100	100	--	38	3/30	--	50 t	--	7	52.1	39.9
Rasmus	1690	1524	--	100	98	--	42	3/30	--	42 s	--	3	50.9	39.2
KS419	1672	--	--	100	--	--	56	3/30	--	47	--	17	51.6	39.4
KS2064	1665	--	--	100	--	--	47	3/31	--	47	--	17	51.8	39.4
ARC2189-1	1664	--	--	100	--	--	48	3/31	--	47	--	13	51.2	38.7
DKW13-62	1638	1262	--	100	92	--	51	4/8 l	--	48	--	7	51.9	38.0
Abilene	1621	1382	1084	100	99	99	43	3/31	--	49 t	--	12	52.0	38.8
ARC92007-2	1596	1656	--	100	100	--	49	3/30	--	48	--	10	51.3	39.4
Sumner	1483	1472	1079	100	100	100	48	3/30	--	44 s	--	12	52.4	37.3
KS9135	1466	1341	--	100	100	--	53	4/1	--	50 t	--	7	51.5	38.0
KS2098	1434	--	--	100	--	--	50	4/2	--	48	--	10	49.6	38.2
ARC2180-1	1417	--	--	100	--	--	53	3/30	--	50 t	--	10	51.3	38.4
Plainsman	1317	1297	924	100	99	99	38	4/4	--	52 t	--	10	51.1	37.2
ARC92004-1	1306	1296	--	100	99	--	55	3/30	--	54 t	--	22	50.8	39.4
Ceres	1294	1249	907	100	99	99	37	4/3	--	47	--	8	51.6	37.5
SW 013121	1236	1205	--	100	93	--	45	4/9 l	--	43 s	--	8	51.5	35.1
SW 013253	1217	884	--	100	100	--	48	4/8 l	--	51 t	--	18	52.9	36.7
SW 013211	1194	917	--	100	94	--	42	4/3	--	46	--	12	52.8	36.5
SW 013022	1164	1097	--	100	85	--	52	4/2	--	41 s	--	7	51.7	38.4
Baros	1133	--	--	100	--	--	44	3/23 e	--	49 t	--	32	51.7	41.2
SW 013154	1050	1061	--	100	98	--	47	4/5	--	46	--	18	50.6	36.1
SW 013173	989	961	--	100	94	--	51	4/7	--	46	--	15	51.2	37.6
Mean	1591	1388	1048	100	98	99	47	4/1	--	47	--	10	51.7	38.5
LSD (0.05)	435			NS			8	2	--	5	--	10	0.8	2.0
CV (%)	17			--			11	1	--	7	--	66	1.0	2.5

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.
e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.
* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005. 2003 data from Munday.

Lingle, Wyoming

Jim Krall, University of Wyoming

Planted after wheat on 8/30/2004 at 10 lb/a in 14-in. rows

Harvested on 8/2/2005

Pesticides: Treflan

Irrigation: lateral sprinkler

P test: NA, K test: NA

50-50-0 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 4180 ft, Latitude: 42°07'N

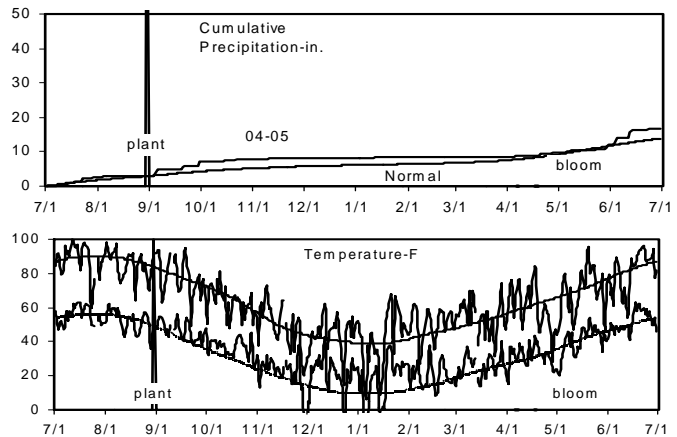


Table 21. Results from the 2005 National Winter Canola Variety Trial at Lingle, Wyoming.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Ceres	1201	878	1054	100	64	76	87	--	--	--	--	--	--	--
KS7436-055	1044	--	--	100	--	--	99	--	--	--	--	--	--	--
KS9135	1036	1315	--	100	92	--	99	--	--	--	--	--	--	--
KS9124	1012	1115	--	100	92	--	96	--	--	--	--	--	--	--
Titan	992	1015	--	100	91	--	93	--	--	--	--	--	--	--
Kronos	979	1181	--	100	100	--	100	--	--	--	--	--	--	--
KS2169	975	--	--	100	--	--	95	--	--	--	--	--	--	--
KS7436	940	966	1419	100	88	92	100	--	--	--	--	--	--	--
KS2004	913	1016	--	100	85	--	95	--	--	--	--	--	--	--
Baldur	905	--	--	100	--	--	98	--	--	--	--	--	--	--
Plainsman	895	871	678	100	79	85	98	--	--	--	--	--	--	--
Casino	894	601	930	100	63	75	99	--	--	--	--	--	--	--
KS3018	855	--	--	100	--	--	96	--	--	--	--	--	--	--
Rasmus	843	757	--	100	63	--	90	--	--	--	--	--	--	--
Wichita	843	1111	1261	100	96	97	97	--	--	--	--	--	--	--
KS2098	816	--	--	100	--	--	95	--	--	--	--	--	--	--
Sumner	815	760	936	100	77	84	90	--	--	--	--	--	--	--
Abilene	813	880	1083	100	77	84	100	--	--	--	--	--	--	--
KS2064	792	--	--	100	--	--	95	--	--	--	--	--	--	--
ARC2189-1	789	--	--	100	--	--	98	--	--	--	--	--	--	--
ARC92007-2	747	859	--	100	88	--	97	--	--	--	--	--	--	--
NPZ 0326	739	--	--	100	--	--	100	--	--	--	--	--	--	--
Virginia	689	975	1235	100	90	93	94	--	--	--	--	--	--	--
VSX-2	670	744	--	100	85	--	100	--	--	--	--	--	--	--
ARC2180-1	654	--	--	100	--	--	98	--	--	--	--	--	--	--
Jetton	585	767	1232	100	91	94	99	--	--	--	--	--	--	--
Baros	573	--	--	100	--	--	99	--	--	--	--	--	--	--
ARC92004-1	482	948	--	100	93	--	100	--	--	--	--	--	--	--
KS2185	399	--	--	100	--	--	99	--	--	--	--	--	--	--
Mean	824	886	1178	100	83	88	97	--	--	--	--	--	--	--
LSD (0.05)	320			NS			8	--	--	--	--	--	--	--
CV (%)	24			--			5	--	--	--	--	--	--	--

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005. 2004 and 2003 data from Torrington.

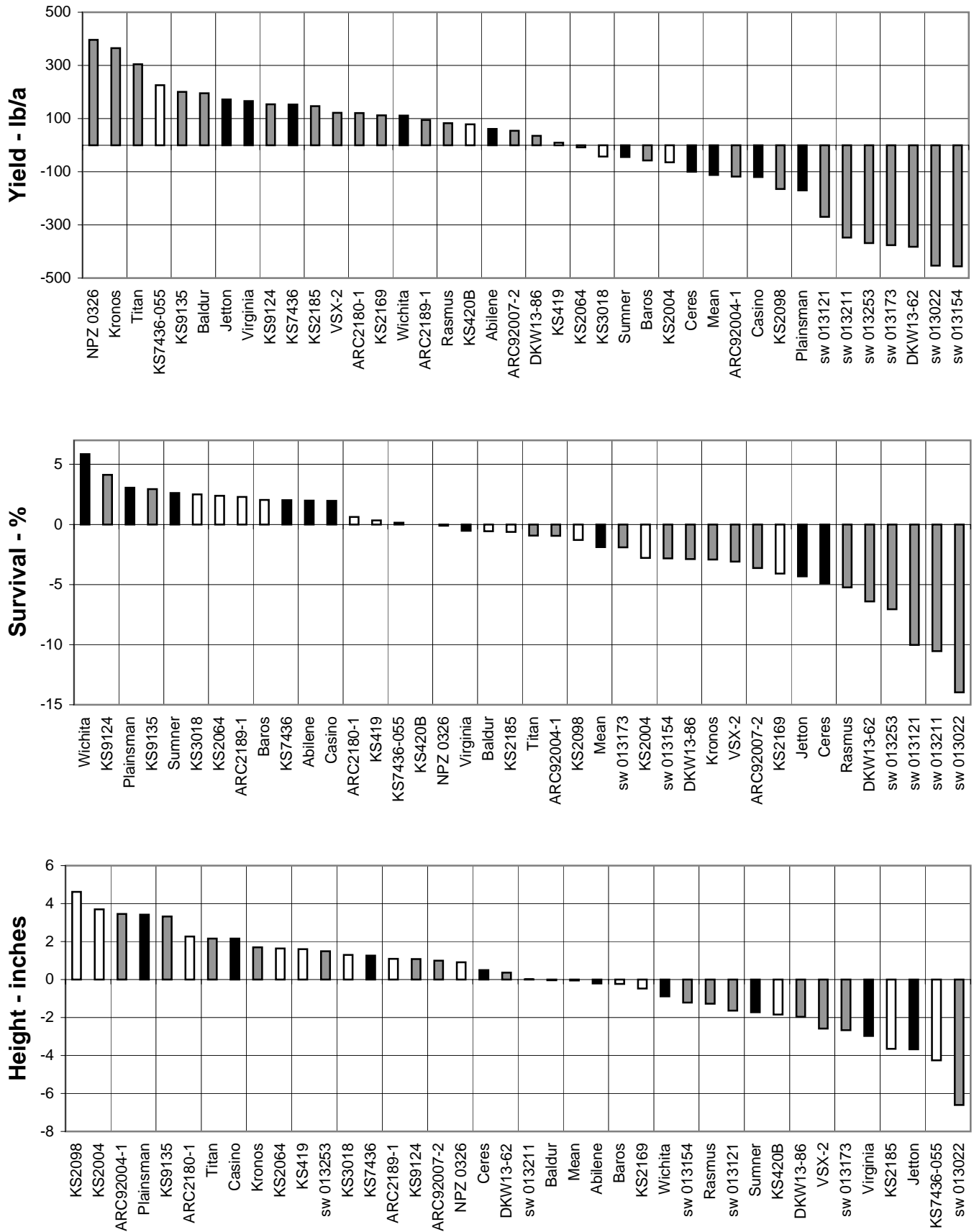
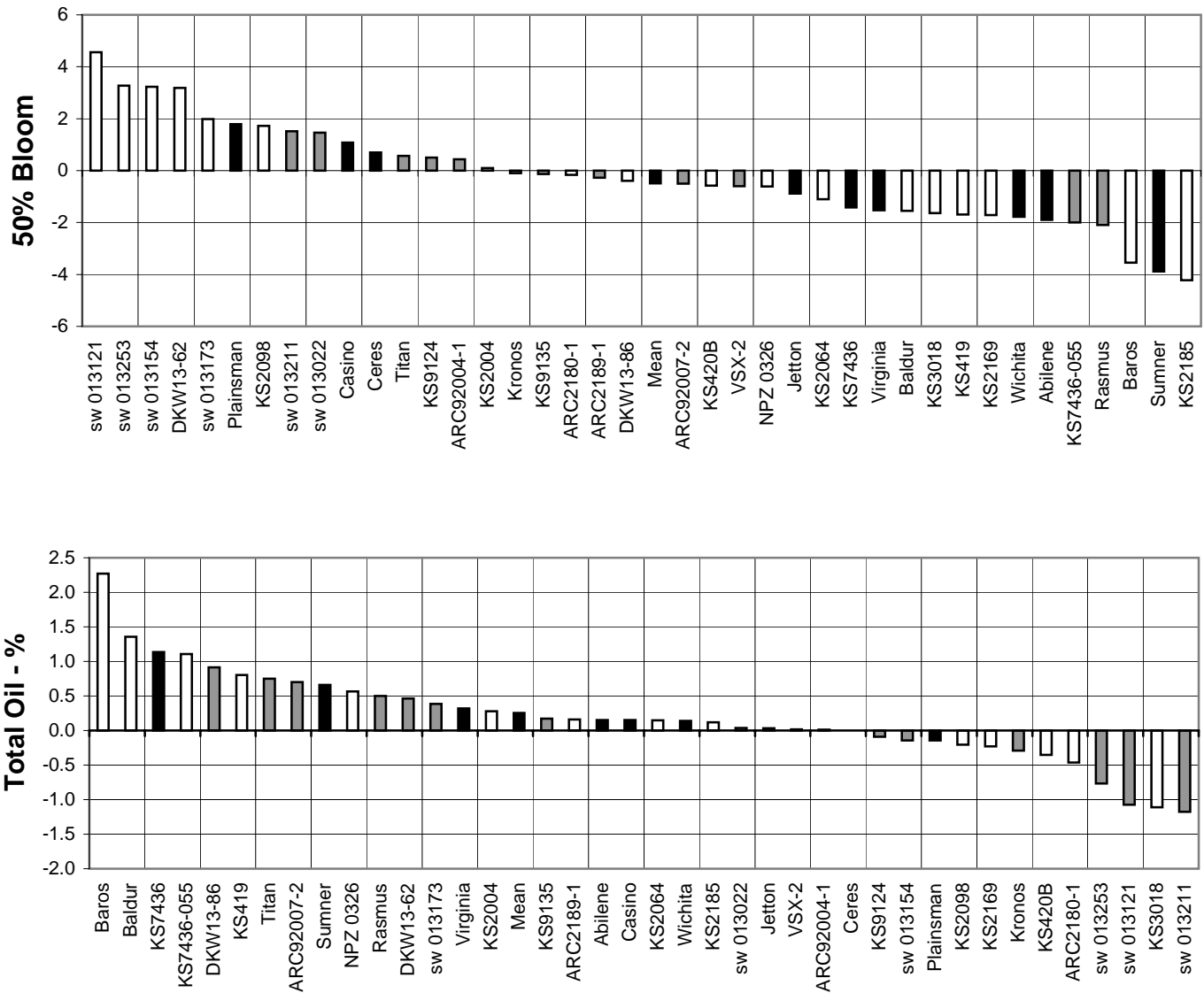


Figure 3. Great Plains Winter Canola Summary, 1996-2005.



Note: Values are averages of the differences between each cultivar and the mean of Jetton, Ceres, Plainsman, and Wichita for yield (lb/a), winter survival (%), total oil content (%), plant height (inches), and 50% bloom date (days). The number of observations for each trait is represented by the different colors of the bars (as shown at right).

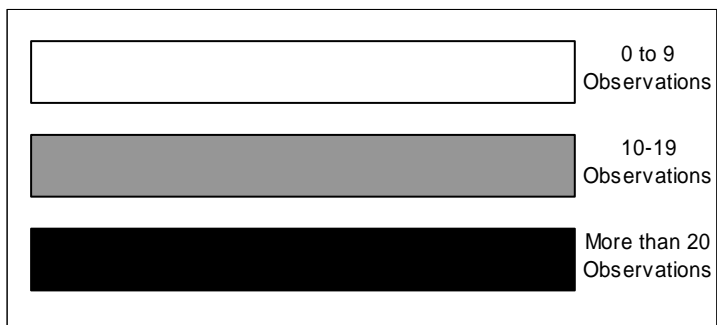


Figure 3. Great Plains Winter Canola Summary, 1996-2005 (continued).

Pendelton, Oregon

Don Wysocki, Oregon State University

Planted on 9/14/2004

Swathed on 6/21/2005

Harvested on 7/6/2005

Pesticides: NA

Irrigation: none

P test: NA, K test: NA

0-0-0 lbs N-P-K fertilizer in the fall

0-0-0 lbs N-P-K fertilizer in the spring

Elevation: 1513 ft, Latitude: 45°42'N

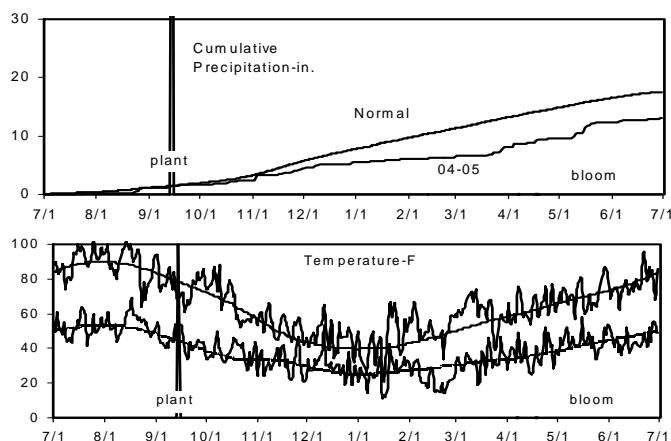


Table 22. Results from the 2005 National Winter Canola Variety Trial at Pendelton, Oregon.

Line	Yield*			Winter Survival*			Fall Stand	50% Bloom	Maturity	Plant Height	Lodging	Shattering	Test Weight	Total Oil
	2005	2yr	3yr	2005	2yr	3yr								
	-----lb/ac-----			-----%-----			%	date	date	in.	%	%	lb/bu	%
Titan	3048	--	--	--	--	--	--	--	--	--	--	--	--	--
ARC2180-1	2932	--	--	--	--	--	--	--	--	--	--	--	--	--
Kronos	2923	--	--	--	--	--	--	--	--	--	--	--	--	--
Baldur	2914	--	--	--	--	--	--	--	--	--	--	--	--	--
Jetton	2833	--	--	--	--	--	--	--	--	--	--	--	--	--
Wichita	2817	--	--	--	--	--	--	--	--	--	--	--	--	--
ARC92007-2	2742	--	--	--	--	--	--	--	--	--	--	--	--	--
KS9135	2726	--	--	--	--	--	--	--	--	--	--	--	--	--
Sumner	2664	--	--	--	--	--	--	--	--	--	--	--	--	--
VSX-2	2627	--	--	--	--	--	--	--	--	--	--	--	--	--
KS7436	2622	--	--	--	--	--	--	--	--	--	--	--	--	--
ARC92004-1	2587	--	--	--	--	--	--	--	--	--	--	--	--	--
KS7436-055	2565	--	--	--	--	--	--	--	--	--	--	--	--	--
Baros	2529	--	--	--	--	--	--	--	--	--	--	--	--	--
Virginia	2511	--	--	--	--	--	--	--	--	--	--	--	--	--
Rasmus	2491	--	--	--	--	--	--	--	--	--	--	--	--	--
KS3018	2484	--	--	--	--	--	--	--	--	--	--	--	--	--
Abilene	2442	--	--	--	--	--	--	--	--	--	--	--	--	--
Athena	2426	--	--	--	--	--	--	--	--	--	--	--	--	--
ARC2189-1	2320	--	--	--	--	--	--	--	--	--	--	--	--	--
KS2064	2285	--	--	--	--	--	--	--	--	--	--	--	--	--
KS419B	2256	--	--	--	--	--	--	--	--	--	--	--	--	--
KS2169	2241	--	--	--	--	--	--	--	--	--	--	--	--	--
NPZ 0326	2230	--	--	--	--	--	--	--	--	--	--	--	--	--
KS2185	2227	--	--	--	--	--	--	--	--	--	--	--	--	--
Plainsman	2163	--	--	--	--	--	--	--	--	--	--	--	--	--
KS9124	2088	--	--	--	--	--	--	--	--	--	--	--	--	--
Ericka	2032	--	--	--	--	--	--	--	--	--	--	--	--	--
Ceres	1983	--	--	--	--	--	--	--	--	--	--	--	--	--
KS2098	1969	--	--	--	--	--	--	--	--	--	--	--	--	--
Salute	760	--	--	--	--	--	--	--	--	--	--	--	--	--
Mean	2433	--	--	--	--	--	--	--	--	--	--	--	--	--
LSD (0.05)	570													
CV (%)	14													

Bold - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

e - not statistically different from earliest, l - not different from latest; s - not different from shortest, t - not different from tallest.

* 2yr means include data from 2004 and 2005, 3yr means include data from 2003, 2004, and 2005.

Table 23. Sources for Seed and Blackleg Ratings for Entries in the National Winter Canola Variety Trial.

Seed Source Line	Type ¹	Herbicide ² Tolerance	Blackleg Rating ³			Seed Source Line	Type ¹	Herbicide ² Tolerance	Blackleg Rating ³		
			2005	2yr	3yr				2005	2yr	3yr
Kansas State University Throckmorton Plant Sciences Center Manhattan KS 66506-5501						Svalöv Weibull S-268 81 Svalöv Sweden					
Abilene	OP	--	10	12	13	Casino	OP	--	--	--	--
KS2004	OP	--	--	--	--	SW 013022	OP	RR	--	--	--
KS2064	OP	--	20	--	--	SW 013121	OP	RR	--	--	--
KS2098	OP	--	17	--	--	SW 013154	OP	RR	--	--	--
KS2169	OP	--	27	--	--	SW 013173	OP	RR	--	--	--
KS2185	OP	--	43	--	--	SW 013211	OP	RR	--	--	--
KS3018	OP	--	43	--	--	SW 013253	OP	RR	--	--	--
KS419	OP	IMI	43	--	--	University of Arkansas Department of Crop, Soil, and Environmental Sciences Fayetteville AR 72701					
KS420B	OP	IMI	--	--	--						
KS7436	OP	--	20	17	15						
KS7436-055	OP	--	13	--	--						
KS9124	OP	--	23	18	--						
KS9135	OP	--	13	13	--	ARC2180-1	OP	--	13	--	--
Plainsman	OP	--	7	17	22	ARC2189-1	OP	--	10	--	--
Sumner	OP	SU	10	--	--	ARC92004-1	OP	--	17	15	--
Wichita	OP	--	7	14	12	ARC92007-2	OP	--	13	18	--
Monsanto 800 North Lindberg Boulevard St. Louis MO 63167						Virginia State University Agricultural Experiment Station Petersburg VA 23806					
DKW13-62	OP	RR	--	--	--	Virginia	OP	--	13	10	13
DKW13-86	OP	RR	--	--	--	VSX-2	OP	--	13	12	--
Norddeutsche Pflanzenzucht (NPZ) Hans-Georg Lembke KG Hohenlieth Germany D-24363 Holtsee						LSD (0.10) Mean					
Baldur	H	--	10	--	--	--	--	--	15	--	--
Baros	OP	--	10	--	--	--	--	--	22	--	--
Ceres	OP	--	20	19	13						
Jetton	OP	--	17	12	12						
Kronos	H	--	23	20	--						
NPZ 0326	H	--	13	--	--						
Rasmus	OP	--	17	19	--						
Titan	H	--	13	15	--						

¹ OP = open pollinated, H = hybrid.

² SU = sulfonylurea, IMI = imidazolinone, RR = glyphosate.

³ **Bold** - Superior LSD group - Differences among values in bold are not statistically significant at the 0.05 level.

Blackleg rated as total percentage of plants killed by blackleg or having severe basal stem canker.

Data collected at Griffin, GA, by D.V. Phillips and D. Spradlin.

Nurseries were located on, or adjacent to, fields infected with Phoma blackleg the previous season.

2yr means include data from 2004 and 2005; 3yr means include data from 2003, 2004, and 2005.

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**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 66506

SRP 954

Feb. 2006

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