National Winter Canola Variety Trial

Report of Progress 1080



Kansas State University Agricultural Experiment Station and Cooperative Extension Service

2012 National Winter Canola Variety Trial Table of Contents

Objectives, Procedures, Growing Conditions, Test Sites and Results	1
Variety Selection, Acknowledgments	2
Results from the 2012 National Winter Canola Variety Trials	
Auburn, AL, Table 1	3
Merdianville, AL, Table 2	4
Griffin, GA, Table 3	6
Woodstown, NJ, Table 4	8
Orange, VA, Table 5	10
Petersburg, VA, Table 6	12
Southeast Region Summary, 2007-2012, Table 7	14
Belleville, IL, Table 8	16
Carbondale, IL, Table 9	18
Princeton, KY, Table 10	20
Custar, OH, Table 11	22
Spring Hill, TN, Table 12	24
Midwest Region Summary, 2007-2012, Table 13	
Rocky Ford, CO, Table 14	
Yellow Jacket, CO, Table 15	
Belleville, KS, Table 16	32
Garden City, KS, Table 17	34
Kiowa, KS, Table 18	
Manhattan, KS, Table 19	
Columbia, MO, Table 20	40
Clovis, NM, Table 21	42
Farmington, NM, Table 22	44
Goodwell, OK, Table 23	46
Etter, TX, Table 24	48
Lubbock, TX, Table 25	
Great Plains Region Summary, 2007-2012, Table 26	
Blackleg Evaluations	
Lake Carl Blackwell, OK, Table 27	54
Seed Sources for NWCVT Entries, Table 28	55

Contribution no. 13-188-S from the Kansas Agricultural Experiment Station

2012 National Winter Canola Variety Trial

Objectives

The objectives of the National Winter Canola Variety Trial (NWCVT) are to evaluate the performance of released and experimental varieties, determine where these varieties are best adapted, and increase visibility of winter canola across the nation. Breeders, marketers, and producers use data collected from the trials. In the past decade, the number of environments and entries tested have increased. The NWCVT is planted at locations in the Great Plains, Midwest, northern U.S., and Southeast.

Procedures

Seed for the NWCVT was distributed to 42 cooperators in 21 states for the 2011-2012 growing season. The locations receiving seed are illustrated on the map on the front cover. Of the 45 entries, 29 are commercially available and 16 are experimental. These entries were provided by 10 global seed suppliers. All entries in the trial were treated with either Helix XTra or Prosper FX seed treatments to control insects and diseases through the late fall and early winter months.

Management guidelines were provided to cooperators, but previous growing experience influenced final management decisions. All trials were planted in small research plots (approximately 100 ft^2) with three or four replications. Cultural practices, site conditions, descriptions, growing and performance data are provided for each harvested location. Yield results for some locations include 2-year summaries. Results are listed alphabetically by seed supplier.

The Robert M. Kerr Food and Agricultural Products Center at Oklahoma State University performed the total protein and oil analyses for sites in Kansas. The Brassica Breeding and Research Program at the University of Idaho performed total oil analysis for all other sites.

The K-State Research and Extension North Central Experiment Field at Belleville, KS, was a new cooperator in 2011-2012. See the back cover for a list of cooperators.

The NWCVT continues in the 2013-2013 growing season and includes 50 entries. Twelve

seed suppliers contributed to the trial, and it was distributed to 40 locations in 22 states.

2011-2012 Growing Conditions

Temperature and precipitation data are shown at the top of the page for each location. Thick black lines on the temperature graphs represent long-term average high and low temperatures (°F) for the location. The upper thin line represents actual daily high temperatures, and the lower thin line represents actual daily low temperatures. On the precipitation graph, the line labeled "normal" represents long-term average precipitation, and the line labeled "11-12" represents actual precipitation. If weather data were not provided, they were taken from a nearby town.

In general, the 2011-2012 growing season saw above-normal temperatures and normal to below-normal precipitation. The above-normal temperatures resulted in virtually no winter stand loss except in the northernmost locations.

Test Sites and Results

A large number of sites, especially in the Midwest and southeastern U.S., were affected by devastating drought and severe weather. Eleven locations were not harvested because of drought, bird damage, poor establishment, winterkill, or too much precipitation. Eight locations were harvested, but the results were not included because the data quality was poor.

Twenty-three harvested locations in 14 states are included in this report of progress: Auburn and Meridianville, AL; Rocky Ford and Yellow Jacket, CO; Griffin, GA; Belleville and Carbondale, IL; Belleville, Garden City, Kiowa, and Manhattan, KS; Princeton, KY; Columbia, MO; Woodstown, NJ; Clovis and Farmington, NM; Custar, OH; Goodwell, OK; Spring Hill, TN; Etter and Lubbock, TX; and Orange and Petersburg, VA.

The "percentage of test average" yield calculation is included in this year's results. This relative yield calculation allows for some comparison of performance across environments. Entries yielding more than 100 percent of the test average across multiple locations merit some consideration. Regional summary tables were created with data from 2007 to 2012.

Overall, yields were good to excellent where moisture was abundant at planting. Yields were above average in the Great Plains despite severe drought conditions. Average to below-average yields were reported in the Midwest and southeastern U.S. because of above normal temperatures and below-normal precipitation. Winterkill was common in northern U.S. sites. Eleven sites averaged 2,000 lb/acre, three sites averaged 3,000 lb/acre, and one site averaged 4,000 lb/acre. Canola weighs 50 lb/bushel, so a 2,000 lb/acre yield is 40 bushels/acre.

Caution should be used when evaluating data from locations with coefficient of variation (CV) values greater than 20. Lower values suggest less error was observed at the trial location. Inestimable differences in soil type, weather, and environmental conditions play a part in increasing experimental error and CV values.

Variety Selection

Winter hardiness is an important trait to consider when selecting a winter canola variety. This trait has been improved over the past several years, but variability still exists where differential winterkill occurs. Winter canola varieties should show consistent survival across multiple years and locations. Other traits to consider include herbicide resistance, tolerance to carryover from sulfonylurea herbicides, maturity, disease tolerance, and yield potential. Use more than one year of data to make an informed variety selection decision.

Some sites include High Erucic Acid Rapeseed (HEAR). By definition, HEAR is not canola because it produces greater than 2% erucic acid in the processed oil. The harvested seed cannot be mixed with canola grain, and the oil can be used only for industrial purposes. If HEAR is commercially grown, it will be under contract and a delivery point must be identified before planting. View Table 28 for seed sources, brand names, and traits of the winter canola varieties and hybrids grown in the NWCVT.

Table 27 provides information on the tolerance of varieties to the blackleg fungus.

Acknowledgments

This work was funded in part by the Supplemental and Alternative Crops Competitive Grants Program, which is administered by the U. S. Department of Agriculture-National Institute of Food and Agriculture, and the Kansas Agricultural Experiment Station. Assistant scientist Scott Dooley and student workers Emma Gantz and Andi Shore assisted with organizing, packaging, planting, harvesting, and data collection. Sincere appreciation is expressed to all participating researchers and seed suppliers who have a vested interest in expanding winter canola acres and increasing production in the USA.

Auburn, Alabama

Dennis	Delaney
Auburn	University

Planted:	10/23/2011 in 7-in. rows
Irrigation:	None
Soil Test:	P=53 ppm, K=127 ppm, and pH=6.5
Fertilizer:	30-0-0 lb N-P-K fertilizer in fall
	120-0-0 lb N-P-K fertilizer in spring
Soil Type:	Compass loamy sand
Elevation:	220 ft Latitude: 32° 25'N
Comments:	Wet weather during May delayed
	harvest. Severe shattering was
	observed following a hail storm.

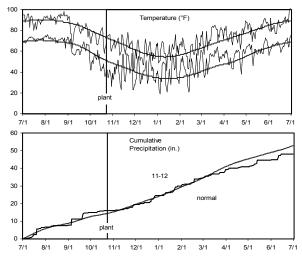


Table 1. Results for the 2012 National Winter Canola Variety Trial at	t Auburn, AL
---	--------------

				Yield (% of				Plant	50%		Test	
Name		Yield (lb/a) ¹		test avg.) Winter survival (%)			height	bloom	Moisture	weight	Oil	
	2012	2010	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%
DL Seeds Inc.	/ Rubisco	Seeds L	LC									
Baldur	860	2811	1836	59				58	78	9.4	48.4	37.9
Dynastie	1828	2995	2411	126				57	80	9.2	48.6	37.
Flash	1876	3267	2571	129				58	75	9.1	48.1	38.
Hornet	1804			124				57	76	8.8	49.1	38.
Rumba	1596			110				58	70	8.9	49.0	37.0
Safran	883	3952	2417	61				56	84	9.3	47.3	36.1
Sitro	1697	3522	2610	117				59	75	9.0	49.3	37.9
Ulura	1149			79				57	75	9.1	45.9	38.8
Visby	1144	2887	2016	79				57	76	9.0	47.0	37.
WRH 350	1542			106				60	77	9.0	49.4	37.3
Kansas State	University	'										
Wichita	636	2350	1493	44				56	80	9.4	47.8	35.9
MOMONT												
Chrome	1741	4466	3104	120				58	72	9.0	49.9	39.8
Hybrirock	1775	3702	2739	122				60	74	8.9	50.5	38.
MH06E10	1796	3771	2783	124				62	73	8.9	50.8	38.6
MH07J14	2234			154				59	78	8.8	49.8	38.3
MH09H19	1702			117				61	74	8.9	50.7	38.
Technology C	rops Inter	national										
Rossini	1966			135				61	74	8.9	49.9	38.2
TCI805	1506			104				66	76	9.0	50.3	37.
TCI806	1041			72				63	76	9.3	51.0	36.0
University of I	daho											
Amanda	276			19				58	84	8.5	48.9	37.3
Mean	1453	3322						59	76	9.0	49.1	37.
CV	24	15						5	2	2.9	1.0	3.4
LSD (0.05)	567	815						4	2	0.4	0.8	NS

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Meridianville, Alabama

Ernst Cebert Alabama A&M University

10/4/2011 at 6 lb/a in 7-in. rows 5/29/2012					
Trifluralin					
None					
Fallow					
50-50-50 lb N-P-K fertilizer in fall					
50-0-0 lb N-P-K fertilizer in spring					
Decatur silty clay loam					
624 ft Latitude: 34° 35'N					
Bloom dates were two weeks earlier					
than normal because of warm spring					
temperatures.					

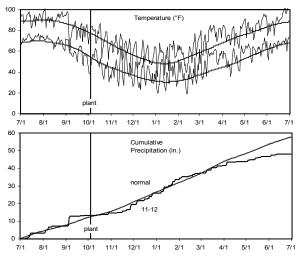


Table 2. Results for the 2012 National Winter Canola Variet	y Trial at Merdianville, AL
---	-----------------------------

				Yield (% of				Fall	50%		Test	
Name		Yield (lb	/a) ¹	test avg.)		ter surv	ival (%)	stand	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(DOY)	(%)	(lb/bu)	(%)
Croplan by Winl	Field											
HyClass 115W	1164	1577	1370	70				8	79	7.3	46.7	39.6
HyClass 125W	1194	1562	1378	72				8	79	6.5	45.5	39.3
HyClass 154W	1784	1785	1784	108				9	80	6.2	47.4	39.1
DL Seeds Inc. / I	Rubisco	Seeds L	LC									
Baldur	1681	1642	1662	101				9	80	6.6	47.7	40.2
Dynastie	2150	2391	2271	130				9	77	6.2	47.8	40.6
Flash	1887	2202	2044	114				9	78	7.0	46.8	39.8
Hornet	1706	2396	2051	103				8	76	6.5	47.8	39.5
NPZ 0903	1693			102				9	78	6.4	46.0	42.5
NPZ 1005	1914			115				9	77	6.9	47.2	42.9
Rumba	1642			99				9	77	6.6	47.5	39.7
Safran	2569	2517	2543	155				9	85	6.6	47.5	40.0
Sitro	1718	2021	1869	104				9	75	6.4	48.0	41.6
Ulura	1928			116				9	76	6.5	46.0	42.0
Visby	1471	1925	1698	89				8	77	6.7	47.1	38.8
WRH 350	1800			109				9	77	6.1	46.8	40.5
DuPont Pioneer												
46W94	1606			97				9	76	7.1	47.8	41.2
46W99	1542			93				9	75	7.1	46.6	40.8
High Plains Cro	p Develo	opment										
Claremore	1551	1960	1756	94				9	87	6.5	47.1	39.3
HPX-7228	1073	2193	1633	65				6	78	6.1	46.7	38.3
HPX-7341	1558	1190	1374	94				9	76	6.6	47.2	38.9
Kansas State Ur	niversity	,										
Kiowa	1729	2100	1915	104				9	84	6.6	47.2	37.8
KS4083	1320	1877	1598	80				8	82	7.1	47.0	38.5
KS4428	1926	1783	1854	116				9	76	7.1	47.2	38.7
KS4564	1631			98				9	77	6.4	48.2	41.9
Riley	1503	1730	1616	91				8	79	6.8	46.3	40.8
Sumner	1407	1450	1428	85				9	79	6.5	47.4	40.1
Wichita	1814	2036	1925	109				9	84	6.7	48.0	39.0
MOMONT												
Chrome	2106	2100	2103	127				9	83	6.4	48.0	41.2
Hybrirock	1999	2259	2129	121				9	76	7.0	47.3	42.3
MH06E10	1375	1952	1663	83				8	77	6.2	48.5	39.0
MH07J14	2445			148				9	79	6.9	48.4	41.8
MH09H19	1667			101				9	77	6.3	48.3	39.1

				Yield (% of				Fall	50%		Test	
Name		Yield (lb/a) ¹			Win	ter surv	ival (%)	stand	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(DOY)	(%)	(lb/bu)	(%)
Monsanto / DE	KALB											
DKW41-10	1166	1158	1162	70				10	75	6.6	48.2	40.1
DKW44-10	1638	1525	1581	99				9	77	6.6	47.0	40.9
DKW46-15	1624	1655	1639	98				9	78	6.6	45.0	42.1
DKW47-15	1313	1723	1518	79				9	80	6.6	46.0	39.6
Technology Cr	ops Inter	national										
Rossini	2367	1733	2050	143				9	75	6.3	48.5	40.5
TCI805	1311			79				9	83	6.5	47.6	37.2
TCI806	1434			87				9	77	7.2	48.7	36.4
University of Ic	laho											
05.UI.5.6.33	1521			92				9	88	7.0	47.7	38.3
06.UIWC.1	1569			95				8	82	7.1	45.5	37.4
Amanda	1580	1730	1655	95				9	83	6.9	48.1	39.1
Durola	945	1150	1047	57				7	78	6.0	46.0	42.8
Virginia State l	Jniversity	1										
Virginia	1720	1347	1534	104				9	78	6.5	48.0	40.6
VSX-3	1800	1973	1887	109				9	78	7.0	47.1	38.7
Mean	1658	1835						9	79	6.6	47.3	40.0
CV	17	21						9	3	8.9	1.8	3.5
LSD (0.05)	447	618						1	3	NS	1.4	2.9

Table 2. Results for the 2012 National Winter Canola Variety Trial at Merdianville, AL

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Griffin, Georgia

Don Day, John Gassett, Mitch Gilmer, and Gary Ware University of Georgia

Planted:		lb/a in 7-in. rows					
Harvested:	5/17/2012						
Herbicides:	Poast						
Insecticides:	Karate						
Irrigation:	None						
Previous Crop:	Fallow						
Soil Test:	P=M, K=M, and pH=5.6						
Fertilizer:	20-40-60 lb N-F	P-K fertilizer in fall					
	130-0-0 lb N-P-	-K fertilizer in spring					
Soil Type:	Cecil clay loam	l					
Elevation:	924 ft	Latitude: 33° 16'N					
Comments:	•	e winter temperatures lequate vernalization and nost entries.					

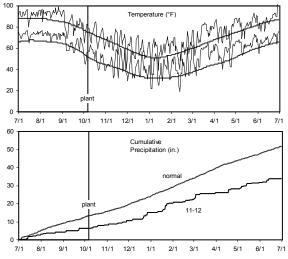


Table 3. Results for the 2012 National Winter Canola Variety Trial at Griffin, GA

				Yield (% of				Plant	50%		Test	
Name		Yield (lb	o/a) ¹	test avg.)	Wi	nter surv	vival (%)	height	bloom	Shatter	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Croplan by Win	Field											
HyClass 115W	1752	1990	1871	123				56	75	3	47.7	36.4
HyClass 125W	1290	1575	1433	91				59	77	7	47.1	34.5
HyClass 154W	1305	1989	1647	92				65	79	7	45.6	33.0
DL Seeds Inc. /	Rubisco	Seeds	LLC									
Baldur	1624	1891	1757	114				62	79	7	49.1	36.4
Dynastie	1533	2687	2110	108				60	82	2	47.0	32.9
Flash	1642	2302	1972	115				65	79	5	50.5	34.7
Hornet	1785	3119	2452	125				62	79	5	48.9	35.7
NPZ 0903	1613			113				61	78	8	44.9	35.9
NPZ 1005	1849			130				60	81	7	45.3	35.9
Rumba	2010			141				62	74	5	47.4	35.4
Safran	1498	2283	1890	105				64	84	3	49.8	30.2
Sitro	1738	2767	2253	122				60	76	8	44.2	35.3
Ulura	1729			121				66	76	12	48.6	38.2
Visby	1364	2219	1792	96				62	76	10	44.1	33.6
WRH 350	1607			113				65	78	7	44.9	35.2
DuPont Pioneer	•											
46W94	1453			102				63	76	12	47.7	35.9
46W99	1231			86				62	77	15	46.3	35.6
High Plains Cro	p Devel	opment										
Claremore	915	2077	1496	64				63	86	8	47.7	34.1
HPX-7228	1421	1834	1628	100				59	75	7	47.2	31.7
HPX-7341	1452	2093	1772	102				58	76	2	43.8	35.9
Kansas State U	niversity	y										
Kiowa	1031	1758	1394	72				63	83	8	47.1	31.8
KS4083	1151	2115	1633	81				65	80	10	46.3	34.4
KS4428	1364	2258	1811	96				62	78	7	49.4	33.6
KS4564	1199			84				55	77	5	47.3	37.2
Riley	1181	1570	1376	83				59	80	5	45.7	34.9
Sumner	1327	2135	1731	93				62	78	7	45.8	34.4
Wichita	1159	2156	1657	81				64	80	7	50.4	34.4
MOMONT								-				-
Chrome	1496	2315	1905	105				63	76	8	44.1	37.2
Hybrirock	1738	1662	1700	122				62	76	13	48.4	35.1
MH06E10	2130	2223	2176	149				67	74	7	48.4	37.4
MH07J14	1859			130				60	81	3	50.1	34.5
MH09H19	1610			113				66	76	10	45.6	35.9

				Yield (% of	-			Plant	50%		Test	
Name		Yield (II	b/a) ¹	test avg.)	Wir	nter surv	ival (%)	height	bloom	Shatter	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Monsanto / DE	KALB											
DKW41-10	1651	1315	1483	116				48	73	10	47.7	34.9
DKW44-10	1288	2019	1653	90				52	76	8	47.8	32.5
DKW46-15	840	1842	1341	59				53	78	13	46.8	35.1
DKW47-15	1383	1718	1550	97				63	79	3	47.9	35.2
University of lo	laho											
05.UI.5.6.33	527			37				62	86	5	45.4	30.9
06.UIWC.1	1325			93				62	80	5	49.4	34.3
Amanda	759	1802	1280	53				65	84	7	42.7	34.1
Virginia State I	Jniversit	у										
Virginia	1304	2123	1713	92				55	76	10	49.2	34.0
VSX-3	1310	2059	1684	92				61	78	10	47.5	33.2
Mean	1425	2015						61	78	7	47.1	34.7
CV	17	21						2	1	3	2.6	4.4
LSD (0.05)	403	684						5	2	NS	NS	3.1

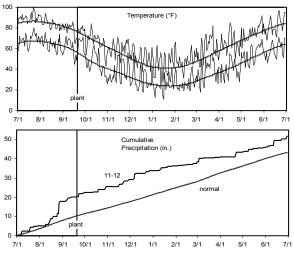
Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Woodstown, New Jersey

David Lee
Rutgers University

Planted:	9/21/2011	
Herbicides:	0.5 pt/a Treflan	
Insecticides:	None	
Irrigation:	None	
Soil Test:	NA	
Fertilizer:	97-89-0-110-5 lb N	-P-K-S-B fertilizer in fall
Soil Type:	Chillum silt loam	
Elevation:	120 ft Lat	itude: 39° 31'N
Comments:	Excellent growing or yields.	conditions and high



				Yield (% of				Plant		Test		
Name		Yield (lb	o/a)	test avg.)	Win	ter survi	val (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Croplan by Winf	ield											
HyClass 115W	2776	1635	2205	93		75		55	7.3	50.4		43.2
HyClass 125W	2906	1628	2267	98		60		55	7.2	50.9		41.4
HyClass 154W	3025	1642	2334	102		51		57	7.9	50.8		42.9
DL Seeds Inc. / I	Rubisco	Seeds L	LC									
Baldur	3105	1723	2414	104		1723		56	7.2	50.9		44.0
Dynastie	3441	1770	2606	116		1770		58	8.5	51.1		44.5
Flash	3612	1804	2708	121		1804		60	7.5	50.2		44.0
Hornet	3454	1960	2707	116		1960		59	7.3	50.7		45.2
NPZ 0903	3092			104				57	7.6	50.7		45.7
NPZ 1005	3090			104				57	7.7	51.0		46.0
Rumba	3443			116				57	9.0	50.2		43.0
Safran	3491	2461	2976	117		2461		54	6.9	51.9		41.6
Sitro	3039	1863	2451	102		1863		57	7.3	50.7		43.2
Ulura	3230			108				62	13.0	49.1		46.6
Visby	2941	1491	2216	99		1491		58	7.5	50.8		44.3
WRH 350	3192			107				60	7.5	50.9		43.1
DuPont Pioneer												
46W94	2803			94				59	7.4	51.3		43.9
46W99	2587			87				57	7.7	50.7		44.7
High Plains Crop	o Develo	opment										
Claremore	2883	1949	2416	97		63		58	7.0	50.6		41.6
HPX-7228	3014	1794	2404	101		1794		55	7.0	52.0		42.4
HPX-7341	3066	2189	2628	103		2189		54	7.1	50.8		41.8
Kansas State Un	niversity	1										
Kiowa	2712	1757	2234	91		1757		57	7.9	50.3		42.1
KS4083	2779	1744	2261	93		1744		58	8.2	50.1		41.0
KS4428	3048	2006	2527	102		2006		57	7.4	50.6		41.8
KS4564	2728			92				50	7.2	51.6		44.4
Riley	2416	1903	2160	81		1903		55	7.3	50.5		43.1
Sumner	2289	1462	1875	77		1462		51	7.2	51.3		42.3
Wichita	2601	1607	2104	87		1607		55	6.9	50.5		42.2
MOMONT												
Chrome	3115	2370	2743	105		2370		56	8.8	50.7		43.6
Hybrirock	2981	1431	2206	100		52		59	7.3	50.2		45.1
MH06E10	2338	1361	1849	79		1361		57	8.5	50.8		42.7
MH07J14	3945			132				57	8.1	51.0		44.2
MH09H19	3666			123				58	7.9	50.4		44.1

				Yield (% of				Plant		Test		
Name		Yield (lb	o/a)	test avg.)	Win	ter survi	val (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	2205	1209	1707	74		1209		45	7.0	53.0		39.3
DKW44-10	2663	1814	2238	89		1814		49	7.0	51.1		37.9
DKW46-15	2590	1627	2108	87		1627		52	6.5	51.6		41.2
DKW47-15	2764	1586	2175	93		1586		55	7.1	50.4		42.0
Technology Cr	ops Inter	national										
Rossini	3277	2222	2749	110		2222		56	6.8	50.5		46.1
TCI805	3242			109				57	6.8	50.9		44.0
TCI806	2886			97				57	6.9	50.9		44.3
University of lo	daho											
05.UI.5.6.33	3146			106				54	8.3	49.3		39.8
06.UIWC.1	2755			93				53	7.3	51.8		39.9
Amanda	2708	1903	2306	91		1903		54	7.3	52.5		40.6
Durola	2986	1229	2107	100		1229		54	7.8	50.6		45.3
Virginia State I	University	1										
Virginia	2689	1833	2261	90		1833		49	7.5	50.0		42.5
VSX-3	3268	1632	2450	110		1632		48	7.3	50.3		40.5
Mean	2978	1745				1745		55	7.6	50.8		43.0
CV	13	17				17		3	6.7	0.8		2.6
LSD (0.05)	648	476				476		3	0.8	0.6		2.3

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Orange, Virginia

Wade Thomason and Steve Gulick Virginia Tech University

Planted:	9/16/2011 at 5 lb/a in 7-in. rows						
Harvested:	6/6/2012						
Herbicides:	1 pt/a Treflan HP						
Insecticides:	None						
Irrigation:	None						
Previous Crop:	Fallow						
Soil Test:	N=15 ppm, K=105 ppm, and pH=6.4						
Fertilizer:	25-65-0 lb N-P-K fertilizer in fall						
	60-0-0 lb N-P-K fertilizer in spring						
Soil Type:	Davidson silty clay						
Elevation:	510 ft Latitude: 38° 13'N						
Comments:	The canola was three weeks early.						
	Excellent conditions resulted in high						
	yields.						

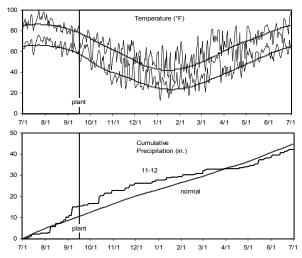


Table 5. Results for the 2012 National Winter Canola Variety Trial at Orange, VA

				Yield (% of	i			Plant	50%		Test	
Name		Yield (lb	/a) ¹	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Croplan by WinF	ield											
HyClass 115W	2925	2059	2492	95		99		63	82	10.9	49.0	41.0
HyClass 125W	2698	2113	2406	88		99		64	83	11.3	48.7	39.4
HyClass 154W	2747	3012	2879	89		99		63	85	14.5	47.7	40.5
DL Seeds Inc. / F	Rubisco	Seeds L	LC									
Baldur	3544	2792	3168	115		99		64	84	14.0	48.7	42.4
Dynastie	2666	3468	3067	87		99		64	85	14.1	49.6	40.0
Flash	2622	2645	2633	85		99		65	83	16.0	48.2	41.2
Hornet	3049	3114	3081	99		99		64	84	12.5	49.8	42.3
NPZ 0903	3378			110				65	83	13.6	48.8	44.0
NPZ 1005	3384			110				64	84	14.6	48.6	43.0
Rumba	3410			111				64	82	13.8	48.4	41.4
Safran	3969	2800	3384	129		99		65	87	13.5	49.0	42.0
Sitro	2722	3134	2928	89		99		64	83	11.5	50.0	39.3
Ulura	2765			90				65	83	17.0	47.4	45.6
Visby	3982	2971	3477	130		99		64	82	10.6	48.9	42.0
WRH 350	3645			119				65	85	13.2	49.1	40.5
DuPont Pioneer												
46W94	2499			81				64	83	14.5	49.0	41.8
46W99	3028			99				63	82	12.0	48.8	41.2
High Plains Crop	o Develo	opment										
Claremore	3082	2720	2901	100		99		62	87	12.5	48.6	38.8
HPX-7228	3593	2935	3264	117		99		63	83	10.6	49.7	39.3
HPX-7341	3396	2827	3111	111		99		65	82	10.7	49.3	39.7
Kansas State Un	iversity	,										
Kiowa	2434	2793	2614	79		99		65	85	16.0	48.0	36.8
KS4083	2652	2720	2686	86		99		61	83	13.6	48.9	39.2
KS4428	3058	2756	2907	100		99		64	84	12.5	48.0	40.3
KS4564	2852			93				63	85	11.7	49.7	40.4
Riley	3063	2602	2833	100		99		63	84	12.8	48.0	38.8
Sumner	2950	2511	2731	96		99		64	84	10.2	50.0	39.3
Wichita	3015	2887	2951	98		99		64	85	10.9	49.5	39.3
Chrome	3721	3408	3565	121		99		64	82	14.2	48.6	41.5
MOMONT												
Hybrirock	3572	3096	3334	116		99		63	82	12.4	49.5	41.3
MH06E10	3473	3262	3367	113		99		64	82	12.9	48.8	41.6
MH07J14	3220			105				65	85	16.6	47.9	40.7
MH09H19	3978			130				64	82	14.5	48.9	41.9

				Yield (% of				Plant	50%		Test	
Name		Yield (lb	/a) ¹	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Monsanto / DE	KALB											
DKW41-10	1889	1912	1900	61		99		57	80	9.3	50.0	38.3
DKW44-10	2118	2185	2151	69		99		64	85	12.1	48.4	37.2
DKW46-15	2757	1911	2334	90		99		64	84	8.7	49.1	42.2
DKW47-15	3547	2749	3148	116		99		65	84	11.1	49.0	39.1
Technology C	rops Inter	national										
Rossini	3654	2534	3094	119		99		65	81	10.5	49.5	42.3
TCI805	2870			93				65	83	12.9	48.6	40.6
TCI806	3111			101				64	83	11.2	49.9	38.0
University of le	daho											
05.UI.5.6.33	2923			95				63	87	15.0	47.7	37.9
06.UIWC.1	3614			118				63	84	11.7	49.6	36.9
Amanda	3432	2655	3043	112		99		63	86	14.8	49.9	40.4
Durola	2645	1982	2314	86		99		63	85	11.8	48.3	42.8
Virginia State	University	1										
Virginia	1898	2670	2284	62		99		64	83	12.7	48.0	39.4
VSX-3	2639	2998	2819	86		99		63	83	12.1	48.7	39.7
Mean	3071	2653				0		64	84	12.7	48.9	40.4
CV	22	14				0		3	1	12.3	1.9	2.8
LSD (0.05)	1086	616				0		NS	2	2.5	2.9	2.4

Table 5. Results for the 2012 National Winter Canola Variety Trial at Orange, VA

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Petersburg, Virginia

Harbans Bhardwaj Virginia State University

Planted:	10/5/2011 in 15	5-in. rows						
Harvested:	6/19/2012							
Soil Type:	Abell sandy loam							
Elevation:	134 ft	Latitude: 37° 15'N						
Comments:	Warm winter te	emperatures resulted in						
	early flowering.							

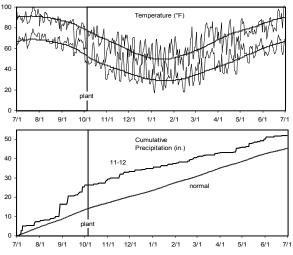


Table 6. Results for the 2012 National Winter Canola Variety Trial at Petersburg, VA

				Yield (% of	,			Plant		Test		
Name		Yield (lb	/a) ¹	test avg.)	Win	ter surv	ival (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Croplan by Win	ield		<u> </u>				-		<u> </u>			`
HyClass 115W	1168	1037	1103	78								38.1
HyClass 125W	1328	1379	1353	89								39.2
HyClass 154W	1470	984	1227	98								38.8
DL Seeds Inc. / I	Rubisco	Seeds L	LC									
Baldur	1516	1462	1489	101								40.1
Dynastie	1839	1107	1473	123								40.5
Flash	1747	576	1161	117								38.9
Hornet	1538	1125	1332	103								40.2
NPZ 0903	1767			118								42.2
NPZ 1005	1546			103								44.2
Rumba	1565			105								39.8
Safran	1815	671	1243	121								39.8
Sitro	1967	947	1457	131								41.3
Ulura	1436			96								42.1
Visby	1093	790	942	73								37.5
WRH 350	1544			103								37.3
DuPont Pioneer												
46W94	1880			126								42.7
46W99	1370			92								39.1
High Plains Crop	p Develo	opment										
Claremore	1475	1296	1385	98								37.6
HPX-7228	1244	1119	1182	83								40.0
HPX-7341	1564	797	1181	104								38.8
Kansas State Un	niversity											
Kiowa	1470	740	1105	98								36.2
KS4083	1285	1072	1179	86								37.8
KS4428	1258	792	1025	84								37.9
KS4564	1369			91								41.9
Riley	1128	1191	1160	75								38.7
Sumner	1170	992	1081	78								38.6
Wichita	1280	1231	1255	85								37.9
MOMONT												
Chrome	1880	1144	1512	126								40.5
Hybrirock	1598	1090	1344	107								43.3
MH06E10	1760	533	1147	118								39.7
MH07J14	2143			143								40.1
MH09H19	2130			142								38.9

				Yield (% of				Plant		Test		
Name		Yield (lb	/a) ¹	test avg.)	Win	ter surv	ival (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	980	765	873	65								38.8
DKW44-10	1114	780	947	74								37.1
DKW46-15	1416	1023	1219	95								40.5
DKW47-15	1246	838	1042	83								39.2
Technology Cr	ops Inter	national										
Rossini	1668	1080	1374	111								42.1
TCI805	1182			79								41.3
TCI806	1634			109								38.7
University of lo	laho											
05.UI.5.6.33	1409			94								36.3
06.UIWC.1	1131			76								36.1
Amanda	1143	788	966	76								36.6
Durola	1447	967	1207	97								40.3
Virginia State	Jniversity	1										
Virginia	1792	1250	1521	120								39.5
VSX-3	1870	1399	1635	125								37.7
Mean	1497	993										39.4
CV	22	24										1.7
LSD (0.05)	546	379										1.4

Table 6. Results for the 2012 National Winter Canola Variety Trial at Petersburg, VA

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Table 7. Southeast Region Summary Table

		Number of		Number of			Number of		Number of
Name	Yield	observations	Oil	observations	Name	Yield	observations	Oil	observations
	(lb/a)		(%)			(lb/a)		(%)	
Croplan by Win	Field				MOMONT				
HyClass 115W	1804	10	40.0	27	Chrome	2579	16	41.6	15
HyClass 125W	1762	40	39.0	10	Hybrirock	1965	43	41.7	15
HyClass 154W	1898	42	39.3	39	MH06E10	2341	16	41.0	15
DL Seeds Inc. /	Rubisco	Seeds LLC			MH07J14	2641	6	39.9	6
Baldur	1806	43	40.0	41	MH09H19	2459	6	39.8	6
Dynastie	2451	19	41.3	17	Monsanto / DE	KALB			
Flash	1978	39	40.4	37	DKW41-10	1433	29	38.7	28
Hornet	2277	11	40.5	11	DKW44-10	1714	10	37.5	10
NPZ 0903	2308	5	42.1	5	DKW46-15	1573	29	40.9	28
NPZ 1005	2357	5	42.4	5	DKW47-15	1713	29	39.6	28
Rumba	2278	6	39.5	6	Technology Cr	ops Intern	ational		
Safran	2209	32	40.1	31	Rossini	2339	10	42.5	9
Sitro	2042	38	40.2	37	TCI805	2022	5	40.1	5
Ulura	2040	6	42.2	6	TCI806	2021	5	38.7	5
Visby	1934	36	40.2	34	University of Ic	laho			
WRH 350	2222	6	39.0	6	05.UI.5.6.33	1905	5	36.6	5
DuPont Pioneer	,				06.UIWC.1	2079	5	36.9	5
46W94	2048	5	41.1	5	Amanda	1821	12	38.7	11
46W99	1952	5	40.3	5	Durola	1732	9	43.1	8
High Plains Cro	p Develo	oment			Virginia State L	Jniversity			
Claremore	1861	28	39.9	27	Virginia	1836	40	39.3	38
HPX-7228	2123	14	39.9	13	VSX-3	2167	11	38.7	10
HPX-7341	2091	14	39.9	13	Mean	1818	43	39.9	41
Kansas State U	niversity								
Kiowa	1687	29	38.7	37	Data averaged of	over a 6 ye	ar period from 20	07 - 20	12.
KS4083	1885	14	38.7	10	Ũ				
KS4428	2188	9	38.9	10	¹ Number of mea	in observat	tions, not average	e value o	of observations
KS4564	2045	9	41.2	5	per entry.				
Riley	1788	32	40.3	31					
Sumner	1627	35	39.2	34					
Wichita	1757	43	39.5	41					

Belleville, Illinois

Mike Schmidt and Cathy Schmidt Southern Illinois University

Planted:	9/21/2011							
Harvested:	6/5/2012							
Soil Type:	Winfield silt loa	m						
Elevation:	415 ft	Latitude: 37° 47'N						
Comments:	Above normal v	winter temperatures and						
	average moisture through harvest.							

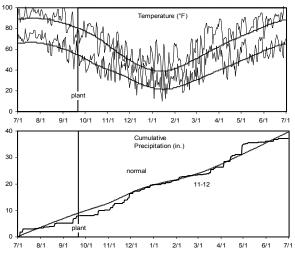


Table 8. Results for the 2012 National Winter Canola Variety Trial at Belleville, IL

				Yield (% of				Plant	50%		Test	
Name		Yield (lt	o/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
DL Seeds Inc.	/ Rubisco	Seeds L	LC									
Baldur	2068	1695	1881	96		86			84			41.3
Dynastie	2288	2468	2378	106		88			83			41.4
Flash	2724	2187	2456	126		92			83			43.5
Hornet	2486	2609	2547	115		100			84			43.3
NPZ 0903	1586			73					83			44.0
NPZ 1005	2053			95					83			45.3
Rumba	2625			121					83			42.5
Safran	3035	2219	2627	140		90			84			41.4
Sitro	2338	2231	2284	108		98			83			43.1
Ulura	2149			99					83			46.4
Visby	2303	2156	2230	107		97			83			41.9
WRH 350	2759			128					84			41.3
High Plains C	rop Develo	opment										
Claremore	2541	1787	2164	118		87			87			40.1
HPX-7228	1138	1650	1394	53		99			83			39.9
HPX-7341	1835	2106	1971	85		100			84			40.9
Kansas State	University	1										
Kiowa	2169	1476	1823	100		96			86			40.1
KS4083	1533	1691	1612	71		100			85			40.6
KS4428	2230	1916	2073	103		98			84			42.1
KS4564	1301			60					83			41.1
Riley	1992			92					84			41.5
Sumner	1748			81					83			40.9
Wichita	2477			115					84			40.2
MOMONT												
Chrome	2445	2332	2389	113		98			84			43.0
Hybrirock	2698	2181	2439	125		97			85			42.6
MH06E10	2715	1837	2276	126		98			83			42.8
MH07J14	3055			141					83			42.6
MH09H19	2567			119					83			42.7
Technology C	rops Inter	national										
Rossini	1667			77					83			44.3
TCI805	2256			104					84			39.4
TCI806	1966			91					83			37.3

Table 8. Results for the 2012 National Winter Canola Variety Trial at Belleville, IL

				Yield (% of				Plant	50%		Test	
Name		Yield (II	o/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
University of Id	laho											
05.UI.5.6.33	2073			96					86			39.8
06.UIWC.1	1365			63					84			39.2
Amanda	1917	1401	1659	89		100			87			39.3
Durola	1859	1349	1604	86		97			84			44.8
Virginia State L	Jniversity	1										
Virginia	2245	1485	1865	104		68			83			40.0
VSX-3	1588	1685	1637	74		92			83			39.9
Mean	2161	1910				95			84			41.7
CV	19	19				10			1			2.2
LSD (0.05)	670	580				NS			2			1.9

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Carbondale, Illinois

Mike Schmidt and Cathy Schmidt Southern Illinois University

Planted: Harvested: Soil Type:	9/9/2011 6/6/2012 Stoy silt loam	
Elevation:	400 ft	Latitude: 38° 30'N
Comments:	stands. No win	gatively affected by poor terkill was observed. ere much earlier than

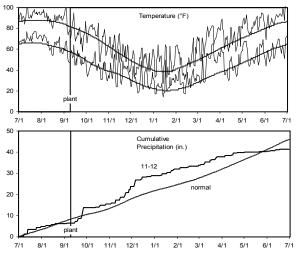


Table 9. Results for the 2012 National Winter Canola Variety Trial at Carbondale, IL

				Yield (% of				Spring	50%		Test	
Name		Yield (lb	/a) ¹	test avg.)		ter surv	ival (%)	stand	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(DOY)	(%)	(lb/bu)	(%)
DL Seeds Inc.	/ Rubisco	Seeds L	LC							· · ·		
Baldur	1623	2508	2066	100	100			7	78			
Dynastie	1228	2890	2059	76	100			4	79			
Flash	2181	2855	2518	135	100			7	79			
Hornet	1350	3187	2269	83	100			4	79			
NPZ 0903	1957			121	100			8	77			
NPZ 1005	1830			113	100			8	78			
Rumba	923			57	100			5	78			
Safran	2068	3234	2651	128	100			6	81			
Sitro	2526	3327	2927	156	100			8	77			
Ulura	1205			74	100			6	77			
Visby	1185	2355	1770	73	100			4	79			
WRH 350	1975			122	100			8	81			
High Plains Cr	op Develo	opment										
Claremore	1693	2615	2154	104	100			7	83			
HPX-7228	1269	2046	1657	78	100			6	78			
HPX-7341	1342	1783	1562	83	100			6	78			
Kansas State L	Jniversity	'										
Kiowa	2010	2314	2162	124	100			8	80			
KS4083	1150	2075	1613	71	100			5	81			
KS4428	1228	2385	1807	76	100			4	80			
KS4564	511			32	100			3	81			
Riley	1533			95	100			7	79			
Sumner	1255			77	100			5	79			
Wichita	1603			99	100			8	79			
MOMONT												
Chrome	1769	3041	2405	109	100			6	80			
Hybrirock	1891	2420	2155	117	100			7	77			
MH06E10	1170	2204	1687	72	100			4	78			
MH07J14	2463			152	100			8	79			
MH09H19	1876			116	100			8	78			
Technology Cr	ops Inter	national										
Rossini	2021			125	100			8	76			
TCI805	2222			137	100			8	78			
TCI806	1870			115	100			7	78			

Table 9. Results for the 2012 National Winter Canola Variety Trial at Carbondale, IL

				Yield (% of				Spring	50%		Test		
Name		Yield (lb	/a) ¹	test avg.)	Win	iter survi	val (%)	stand	bloom	Moisture	weight	Oil	
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(DOY)	(%)	(lb/bu)	(%)	
University of lo	daho												
05.UI.5.6.33	1562			96	100			6	83				
06.UIWC.1	1574			97	100			6	79				
Amanda	1809	2504	2156	112	100			7	83				
Durola	1609	1937	1773	99	100			7	80				
Virginia State I	University	1											
Virginia	1316	2726	2021	81	100			5	78				
VSX-3	1554	1943	1748	96	100			8	79				
Mean	1621	2471			100			6	79				
CV	24	14			0			18	2				
LSD (0.05)	628	575			NS			2	2				

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Princeton, Kentucky

Brian Caldbeck Caldbeck Consulting

Planted: Harvested:	10/3/2011 at 5 lb/a in 7-in. rows 5/25/2012
Herbicides:	Treflan
Insecticides:	None
Irrigation:	None
Previous Crop:	Grass
Soil Test:	NA
Fertilizer:	54-138-0-1 lb N-P-K-B fertilizer in fall
	110-0-0 lb N-P-K fertilizer in spring
Soil Type:	Zanesville silt loam
Elevation:	482 ft Latitude: 37° 6'N
Comments:	Warm winter temperatures resulted in early bloom dates.

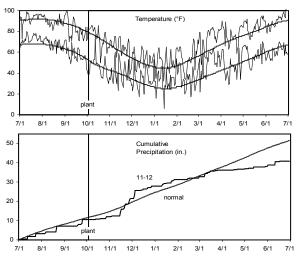


Table 10. Results for the 2012 National Winter Canola Variety Trial at Princeton, KY

					· ·			Plant	50%		Test	
Name		Yield (lb	/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	e weight (lb/bu) C (9 51.4 38 50.6 40 50.0 42 53.8 42 51.8 42 51.6 42 51.6 42 51.6 42 51.7 44 51.9 40 51.0 42 52.9 42 51.0 42 52.9 42 51.7 42 51.7 42 52.7 44 51.2 42 52.7 44 51.2 42 52.7 44 53.3 40 52.2 40 53.1 38 53.1 38 53.8 39 51.4 42 53.2 44 53.4 42 53.7 44 51.3 42 53.7 44	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Croplan by WinF	ield											
HyClass 115W	1542			63				48	80	10.6	51.4	39.0
HyClass 125W	1848			75				46	80	10.4	50.6	40.4
HyClass 154W	2312			94				46	83	11.2	50.0	42.6
DL Seeds Inc. / F	Rubisco	Seeds L	LC									
Baldur	2689			109				51	81	10.5	53.8	42.7
Dynastie	2921			119				49	81	11.1	51.8	42.4
Flash	2541			103				52	81	10.2	52.2	42.4
Hornet	2867			117				54	80	11.9	51.6	43.6
NPZ 0903	2708			110				53	79	11.1	53.4	44.4
NPZ 1005	2729			111				49	80	11.3	51.5	44.5
Rumba	2563			104				53	78	12.4	51.9	40.1
Safran	3470			141				49	81	13.6	51.0	41.6
Sitro	3044			124				53	79	10.2	52.9	42.6
Ulura	2591			105				55	79	10.1	52.6	45.1
Visby	2745			112				51	80	11.7	51.7	41.7
WRH 350	2954			120				52	80	11.0	51.1	42.2
DuPont Pioneer												
46W94	2501			102				55	79	11.0	52.7	41.7
46W99	2120			86				50	79	8.8	51.2	43.9
High Plains Crop) Develo	opment										
Claremore	2253			92				51	87	12.9	55.2	41.5
HPX-7228	2002			81				50	81	10.2	53.3	40.1
HPX-7341	2210			90				46	81	8.9	52.2	40.8
Kansas State Un	iversity											
Kiowa	3206			130				50	83	12.1		39.8
KS4083	2483			101				53	82	13.7	53.8	39.9
KS4428	2749			112				48	81	10.7	51.4	41.3
KS4564	2129			87				47	81	9.1	52.8	42.3
Riley	2124			86				43	83	9.3	53.2	41.3
Sumner	1718			70				45	82	9.1	53.4	42.0
Wichita	1917			78				47	82	8.7	53.7	41.2
MOMONT												
Chrome	3080			125				48	82	9.1	51.3	43.9
Hybrirock	3186			130				53	80	10.6	50.9	42.6
MH06E10	2733			111				51	79	10.5	52.8	42.6
MH07J14	2955			120				49	82	14.3	52.3	41.5
MH09H19	2890			117				52	80	11.4	51.8	43.8

Table 10. Results for the 2012 National Winter Canola Variety Trial at Princeton, KY

				Yield (% of				Plant	50%		Test	
Name		Yield (lt	o/a)	test avg.)	Win	ter survi	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Monsanto / DEP	(ALB											
DKW41-10	1182			48				44	76	9.3	52.2	38.8
DKW44-10	1552			63				46	80	16.4	50.1	35.0
DKW46-15	1966			80				46	81	8.6	52.1	39.9
DKW47-15	2174			88				46	81	8.6	51.3	40.1
University of Id	aho											
05.UI.5.6.33	2494			101				45	83	12.5	51.0	42.1
06.UIWC.1	2423			99				49	82	14.9	52.5	37.7
Amanda	2876			117				47	85	14.7	51.8	41.8
Virginia State U	niversity	1										
Virginia	2155			88				43	81	10.3	52.3	40.0
VSX-3	2285			93				43	81	10.9	50.5	39.2
Mean	2460							49	81	11.1	52.1	41.5
CV	15									10.5	2.2	2.6
LSD (0.05)	601									1.9	1.9	2.2

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Custar, Ohio

Edwin Lentz
The Ohio State University

Planted:	9/6/2011 at 6 lb/a in 7-in. rows	5
Harvested:	6/15/2012	
Herbicides:	None	
Insecticides:	None	
Irrigation:	None	
Previous Crop:	Oats	
Soil Test:	N=53 ppm, K=195 ppm, and p	H=6.7
Fertilizer:	120-0-0 lb N-P-K fertilizer in sp	pring
Soil Type:	Hoytville clay	
Elevation:	797 ft Latitude: 41° 1	3'N
Comments:	Plants were two feet shorter the normal. Flowering occured a meanlier and seedpods were new affected by late cold temperate	nonth gatively

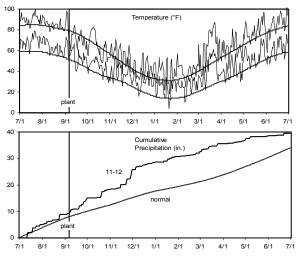


Table 11. Results for the 2012 National Winter Canola Variety Trial at Custar, OH

				Yield (% of				Fall	Plant	50%		Test
Name	•	Yield (lb	/a) ¹	test avg.)	Win	ter surv	ival (%)	stand	height	bloom	Moisture	weight
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(in.)	(DOY)	(%)	(lb/bu)
Croplan by WinFi	eld											
HyClass 115W	2285	1156	1721	112	94	100	97	9	29	92		
HyClass 125W	1748	1159	1453	86	96	100	98	10	29	95		
HyClass 154W	1474	1698	1586	72	96	100	98	10	28	95		
DL Seeds Inc. / R	ubisco	Seeds L	LC									
Baldur	1833	1415	1624	90	93	100	97	10	29	92		
Dynastie	2329	1569	1949	114	93	100	97	10	31	93		
Flash	1926	1740	1833	94	94	100	97	10	31	93		
Hornet	2001	1203	1602	98	94	100	97	9	33	95		
NPZ 0903	2719			133	95			10	32	91		
NPZ 1005	2136			105	96			9	31	95		
Rumba	2160			106	90			9	32	91		
Safran	2531	1486	2009	124	96	100	98	10	31	96		
Sitro	2150	1493	1821	105	95	100	97	9	31	93		
Ulura	2481			121	97			9	34	93		
Visby	2081	1282	1682	102	90	87	89	10	30	91		
WRH 350	2393			117	97			9	35	95		
DuPont Pioneer								-				
46W94	1934			95	91			10	30	93		
46W99	2146			105	95			9	29	90		
High Plains Crop		pment										
Claremore	2236	1203	1719	109	95	98	97	10	31	96		
HPX-7228	1769	1085	1427	87	90	100	95	10	27	93		
HPX-7341	2078	1251	1664	102	89	100	95	9	27	95		
Kansas State Univ	versity											
Kiowa	2109	1179	1644	103	95	100	98	10	33	97		
KS4083	2153	1290	1722	105	96	98	97	9	34	95		
KS4428	2039	1344	1691	100	94	100	97	10	31	94		
KS4564	1504			74	95			10	28	93		
Riley	2314	1346	1830	113	95	100	98	10	28	94		
Sumner	2003	2094	2049	98	89	100	94	10	27	94		
Wichita	2301	1270	1785	113	97	100	99	10	32	94		
MOMONT												
Chrome	2290	819	1555	112	92	100	96	10	30	96		
Hybrirock	2512	1869	2190	123	95	95	95	10	30	93		
MH06E10	2078	1662	1870	102	91	90	91	9	33	92		
MH07J14	1916			94	95			10	30	96		
MH09H19	2944			144	97			10	33	92		

				Yield (% of				Fall	Plant	50%		Test
Name		Yield (lb	/a) ¹	test avg.)	Win	ter surv	ival (%)	stand	height	bloom	Moisture	weight
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(in.)	(DOY)	(%)	(lb/bu)
Monsanto / DEI	KALB											
DKW41-10	1928	1139	1534	94	96	100	98	10	28	89		
DKW44-10	886	1549	1218	43	87	100	93	10	26	97		
DKW46-15	1149	1418	1284	56	95	100	98	9	27	95		
DKW47-15	1426	1295	1361	70	93	100	97	10	30	92		
Technology Cro	ops Inter	national										
Rossini	2142	1384	1763	105	95	100	98	10	31	89		
TCI805	2313			113	93			10	31	93		
TCI806	2194			107	92			10	32	91		
University of Id												
05.UI.5.6.33	1855			91	91			10	28	97		
06.UIWC.1	1647			81	94			10	28	93		
Amanda	2579	1012	1795	126	95	92	94	10	29	97		
Durola	1679	1819	1749	82	91	93	92	10	28	95		
Virginia State U												
Virginia	1646	1687	1667	81	85	100	93	9	27	91		
VSX-3	1939	1379	1659	95	92	88	90	10	24	94		
Mean	2043	1426			93	99		10	30	94		
CV	23	26			4	6		5	6	1		
LSD (0.05)	772	NS			6	NS		NS	3	2		

Table 11. Results for the 2012 National Winter Canola Variety Trial at Custar, OH

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Spring Hill, Tennessee

Dennis West University of Tennessee

Planted: Harvested: Herbicides:	10/4/2011 at 6 lb/a in 7-in. rows 5/31/2012 None
Insecticides:	None
Irrigation:	None
Previous Crop:	Soybean
Soil Test:	N=H, K=H, and pH=6.4
Fertilizer:	30-0-0 lb N-P-K fertilizer in fall
	101-0-0-23 lb N-P-K-S fertilizer in spring
Soil Type:	Moundview silt loam
Elevation:	706 ft Latitude: 36° 32'N
Comments:	Excellent yields were recorded despite dry conditions.

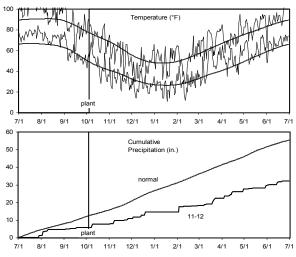


Table 12. Results for the 2012 National Winter Canola Variety Trial at Spring Hill, TN

				Yield (% of	· ·			Fall		Test		
Name		Yield (It	o/a)	test avg.)	Win	ter surv	ival (%)	stand	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(%)	(lb/bu)	(%)	(%)
Croplan by Winf	Field											
HyClass 115W	2266	861	1563	84				9	9.9	48.5		42.6
HyClass 125W	2535	1113	1824	94				8	10.8	49.2		43.0
HyClass 154W	2670	1569	2120	99				9	12.1	48.9		42.8
DL Seeds Inc. / I	Rubisco	Seeds I	LLC									
Baldur	2540	1319	1929	94				8	10.3	49.3		44.0
Dynastie	2955	2185	2570	109				8	12.8	49.3		45.4
Flash	3334	1895	2614	123				9	12.8	48.8		42.9
Hornet	2893	1717	2305	107				8	10.6	49.3		43.4
NPZ 0903	3105			115				9	9.8	48.8		46.8
NPZ 1005	3049			113				9	10.7	49.2		46.7
Rumba	2753			102				8	12.1	48.5		43.3
Safran	3244	1639	2442	120				9	10.3	49.5		42.8
Sitro	3227	1908	2568	120				9	9.9	49.0		43.3
Ulura	2429			90				8	11.9	48.3		45.8
Visby	2884	1450	2167	107				8	11.1	48.7		42.3
WRH 350	3504			130				8	11.0	49.0		42.3
DuPont Pioneer												
46W94	2589			96				9	11.5	48.6		42.6
46W99	2849			106				9	10.3	49.1		42.0
High Plains Crop	p Develo	opment										
Claremore	2830	2022	2426	105				9	9.9	49.1		41.6
HPX-7228	2674	1873	2273	99				8	9.6	49.9		41.1
HPX-7341	2302	1337	1819	85				8	10.1	48.9		40.3
Kansas State Un	niversity	,										
Kiowa	2395	1954	2175	89				8	11.5	49.0		41.2
KS4083	2249	1710	1980	83				8	11.7	48.7		44.2
KS4428	2317	1804	2061	86				8	10.9	49.1		43.8
KS4564	2468			91				9	10.5	50.4		42.3
Riley	2397	1346	1872	89				9	10.3	49.1		43.4
Sumner	2380	1527	1954	88				8	9.6	49.9		44.3
Wichita	2600	1857	2228	96				9	9.1	49.7		43.8
MOMONT												
Chrome	3888	1963	2925	144				9	12.5	48.8		43.4
Hybrirock	2590	2047	2319	96				9	11.1	48.8		45.0
MH06E10	2792	1716	2254	103				8	11.6	48.9		42.7
MH07J14	3589			133				9	12.6	49.1		42.8
MH09H19	3086			114				9	11.2	48.7		42.1

				Yield (% of				Fall		Test		
Name		Yield (lb	o/a)	test avg.)	Win	ter survi	val (%)	stand	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	2312	1373	1842	86				9	9.9	50.6		44.8
DKW44-10	2152	1516	1834	80				8	11.9	48.0		41.9
DKW46-15	2009	877	1443	74				8	8.5	49.2		43.2
DKW47-15	2670	844	1757	99				9	10.0	48.2		45.7
Technology Cro	ops Inter	national										
Rossini	3049	1200	2124	113				9	9.6	49.4		43.1
TCI805	2642			98				9	11.6	48.9		43.1
TCI806	2646			98				9	10.2	49.7		40.1
University of Id	aho											
05.UI.5.6.33	2457			91				8	14.1	47.4		41.1
06.UIWC.1	2782			103				9	10.8	49.4		40.2
Amanda	2500	1085	1792	93				9	11.3	49.7		43.2
Durola	1943	1458	1700	72				8	10.4	48.8		46.7
Virginia State U	Iniversity	1										
Virginia	2186	1999	2093	81				8	9.8	48.9		43.1
VSX-3	2792	1970	2381	103				9	10.2	48.7		43.0
Mean	2701	1563						8	10.9	49.1		43.2
CV	14	23						9	8.0	0.6		3.0
LSD (0.05)	605	576						1	1.4	0.5		2.6

Table 12. Results for the 2012 National Winter Canola Variety Trial at Spring Hill, TN

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Table 13. Midwest Region Summary Table

		Number of		Number of			Number of		Number of
Name	Yield	observations	Oil	observations	Name	Yield	observations	Oil	observations
	(lb/a)		(%)			(lb/a)		(%)	
Croplan by Win	Field				MOMONT				
HyClass 115W	1691	25	40.2	23	Chrome	2396	22	42.8	19
HyClass 125W	1584	7	39.6	6	Hybrirock	2336	22	42.3	19
HyClass 154W	2022	33	40.3	30	MH06E10	2102	22	41.8	19
DL Seeds Inc. /	Rubisco	Seeds LLC			MH07J14	2796	5	43.1	3
Baldur	2011	42	41.2	38	MH09H19	2673	5	43.1	3
Dynastie	2406	22	42.2	19	Monsanto / DE	KALB			
Flash	2466	41	41.7	37	DKW41-10	1554	28	39.5	25
Hornet	2089	12	41.1	10	DKW44-10	1343	7	38.1	6
NPZ 0903	2415	5	45.0	3	DKW46-15	1611	28	41.4	25
NPZ 1005	2359	5	45.5	3	DKW47-15	1695	28	40.2	25
Rumba	2205	5	42.0	3	Technology Cr	ops Intern	ational		
Safran	2577	35	41.2	32	Rossini	1891	8	41.3	6
Sitro	2481	42	41.3	38	TCI805	2358	4	41.2	2
Ulura	2171	5	45.8	3	TCI806	2169	4	38.7	2
Visby	2175	33	41.1	29	University of Id	laho			
WRH 350	2717	5	41.9	3	05.UI.5.6.33	2088	5	41.0	3
DuPont Pioneer	,				06.UIWC.1	1958	5	39.0	3
46W94	2341	3	42.4	2	Amanda	1862	12	40.3	10
46W99	2372	3	44.8	2	Durola	1662	11	42.5	9
High Plains Cro	p Develo	pment			Virginia State L	Iniversity			
Claremore	2136	33	40.5	29	Virginia	2083	40	40.4	36
HPX-7228	1805	20	41.0	17	VSX-3	1797	12	39.8	10
HPX-7341	1887	20	41.2	17	Mean	2075	42	41.0	38
Kansas State U	niversity								
Kiowa	2048	42	40.2	38	Data averaged of	over a 6 ye	ar period from 20	07 - 20	12.
KS4083	1765	12	39.6	10	-				
KS4428	1888	12	40.3	10	¹ Number of mea	in observat	tions, not average	value	of observations
KS4564	1583	5	42.5	3	per entry.		,		
Riley	2059	33	41.8	29					
Sumner	1943	40	40.9	36					
Wichita	2104	40	40.7	36					

Rocky Ford, Colorado

Jeff Davidson and Kevin Tanabe Colorado State University

Planted: Harvested:	8/25/2011 6/20/2012
Herbicides:	1.5 pt/a Treflan, 2 pt/a Poast
Insecticides:	None
Irrigation:	Flood
Previous Crop:	Wheat
Soil Test:	NA
Fertilizer:	22-104-0 lb N-P-K fertilizer in fall
	92-0-0 lb N-P-K fertilizer in spring
Soil Type:	Rocky Ford silty clay loam
Elevation:	4178 ft Latitude: 38° 02'N
Comments:	Yields were very good overall, but late aphid pressure may have affected yields slightly.

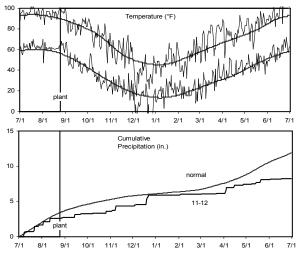


Table 14. Results for the 2012 National Winter Canola Variety Trial at Rocky Ford, CO

				Yield (% of				Fall	50%		Test	
Name		Yield (It	o/a)	test avg.)	Win	ter surv	ival (%)	stand	bloom	Moisture	weight	Oil
	2012	2010	2-yr.	2012	2012	2011	2-yr.	(0-10)	(DOY)	(%)	(lb/bu)	(%)
Croplan by Winf	Field											
HyClass 115W	3236			108				8	103	9.8	47.7	38.7
HyClass 125W	2249			75				9	103	8.1	44.3	42.9
HyClass 154W	2398	1403	1901	80				9	107	11.1	46.6	39.3
DL Seeds Inc. / I	Rubisco	Seeds I	LC									
Baldur	3206	1813	2510	107				9	104	8.3	50.2	42.7
Dynastie	3048	1475	2262	101				9	104	8.9	46.5	43.2
Flash	2113	1207	1660	70				9	109	13.5	46.6	40.1
Hornet	3132			104				9	102	7.7	46.0	43.0
Rumba	2995			100				8	102	11.2	47.8	43.7
Safran	3286	2025	2655	109				9	105	10.6	46.5	39.6
Sitro	3043	1625	2334	101				9	102	9.3	45.5	42.1
Ulura	2601			86				8	104	12.5	46.4	42.9
Visby	2872	1723	2298	95				8	99	7.9	43.6	43.6
WRH 350	3240			108				9	103	7.6	45.8	41.7
DuPont Pioneer												
46W94	3298			110				9	105	9.3	46.9	43.1
46W99	3106			103				8	102	11.4	47.6	40.4
High Plains Cro	p Develo	opment										
Claremore	2499	1425	1962	83				8	110	9.4	43.2	39.1
HPX-7228	3368	1979	2673	112				9	102	8.8	48.1	39.5
HPX-7341	2657	1623	2140	88				9	103	7.1	43.2	38.3
Kansas State Ur	niversity	,										
Riley	3694	1711	2702	123				9	100	7.8	48.9	42.7
Wichita	3552	1616	2584	118				8	103	8.0	47.2	39.1
MOMONT												
Chrome	3455	1683	2569	115				9	106	10.5	47.8	40.7
Hybrirock	3118	1223	2170	104				9	107	8.2	45.4	43.0
MH06E10	3286	1638	2462	109				9	106	9.3	49.1	38.8
MH07J14	2530			84				9	108	13.3	44.2	42.1
MH09H19	3482			116				9	106	13.6	48.1	40.8
Monsanto / DEK												
DKW41-10	2972			99				9	99	7.6	46.1	36.2
DKW44-10	2706			90				9	107	11.6	46.2	40.2
DKW46-15	3611			120				8	105	6.3	48.1	41.1
DKW47-15	2786			93				8	105	8.0	46.2	39.5

				Yield (% of	-		-	Fall	50%		Test	
Name		Yield (lb	/a)	test avg.)	Win	ter survi	val (%)	stand	bloom	Moisture	weight	Oil
	2012	2010	2-yr.	2012	2012	2011	2-yr.	(0-10)	(DOY)	(%)	(lb/bu)	(%)
Technology Cr	ops Interi	national										
Rossini	3074			102				9	101	6.8	47.7	43.5
TCI805	2762			92				9	108	9.9	45.0	38.5
TCI806	3832			127				9	104	5.9	49.9	39.0
University of Id	aho											
05.UI.5.6.33	2840			94				8	105	10.4	45.8	41.7
06.UIWC.1	2395			80				8	106	10.7	42.1	37.0
Amanda	3096			103				9	110	13.1	48.6	38.5
Durola	2724			91				9	107	9.2	46.3	47.4
Mean	3007	1584	2296					9	104	9.5	46.5	40.9
CV	16	17						6	2	21.1	5.7	4.7
LSD (0.05)	793	448						1	4	3.3	NS	3.9

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Yellow Jacket, Colorado

Abdel Berrada Colorado State University

Planted:	9/2/2011 at 5 l	b/a
Harvested:	7/2012	
Herbicides:	None	
Insecticides:	None	
Irrigation:	None	
Previous Crop:	Fallow	
Soil Test:	NA	
Fertilizer:	0-0-0 lb N-P-K	fertilizer in fall
	0-0-0 lb N-P-K	fertilizer in spring
Soil Type:	Wetherill loam	
Elevation:	6928 ft	Latitude: 37° 32'N
Comments:	was 61% of no	ion from rain and snow rmal. Precipitation from June was 0.7 in. or 19%

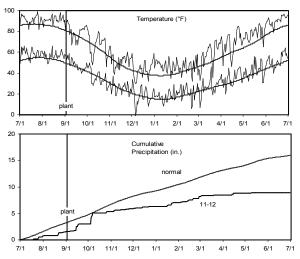


Table 15. Results for the 2012 National Winter Canola Variety Trial at Yellow Jacket, CO

				Yield (% of				Plant	50%		Test	
Name		Yield (lb)/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Croplan by WinF	ield											
HyClass 115W	801			85	97			35	128	6.1	52.0	35.9
HyClass 125W	857			91	100			34	128	5.9	50.8	36.5
HyClass 154W	777			82	99			35	128	6.2	51.3	34.9
DL Seeds Inc. / F	Rubisco	Seeds L	LC									
Baldur	1103	2029	1566	117	99	97	98	38	128	6.2	53.2	36.3
Dynastie	903	2029	1466	96	82	90	86	40	128	5.8	50.9	36.9
Flash	943	1449	1196	100	98	98	98	42	129	6.0	52.0	35.7
Hornet	876	1376	1126	93	96	97	96	38	128	5.8	52.2	35.2
Rumba	777			82	97			37	128	5.9	52.7	35.6
Safran	1055	1684	1370	112	96	95	96	36	128	5.9	51.0	36.9
Sitro	1052	1809	1430	111	97	93	95	36	128	6.1	51.5	36.2
Ulura	879			93	97			41	128	6.0	53.2	36.4
Visby	943	2374	1659	100	92	98	95	39	128	5.9	51.8	36.0
WRH 350	992			105	96			36	128	5.9	51.1	35.1
DuPont Pioneer												
46W94	797			84	97			37	128	6.0	52.7	34.9
46W99	772			82	90			35	128	6.0	51.9	35.4
High Plains Crop	o Develo	opment										
Claremore	607	1648	1128	64	100	98	99	36	128	6.0	50.7	36.3
HPX-7228	1311	2280	1795	139	97	98	98	40	126	6.1	52.6	33.9
HPX-7341	880	1982	1431	93	99	100	100	36	128	6.1	51.8	36.2
Kansas State Un	niversity	,										
Riley	1116	1769	1442	118	100	97	98	34	128	5.9	51.5	36.3
Wichita	940	1998	1469	99	98	97	97	37	128	6.0	51.5	36.4
MOMONT												
Chrome	1009	1753	1381	107	99	98	99	34	128	5.9	51.6	37.1
Hybrirock	1135			120	96			39	128	6.1	52.3	35.7
MH06E10	927			98	99			38	129	6.1	52.7	36.6
MH07J14	1086			115	100			37	128	6.1	51.6	35.5
MH09H19	1239			131	100			39	128	5.9	51.8	36.4
Monsanto / DEK	ALB											
DKW41-10	911			96	99			31	125	6.0	52.2	34.6
DKW44-10	903			96	100			34	128	6.2	52.5	34.9
DKW46-15	798			84	90			37	128	5.9	51.3	35.6
DKW47-15	780			83	99			34	128	6.1	51.5	35.1

Name		Yield (% of						Plant	50%		Test	
		Yield (lb/a)			test avg.) Winter si			height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Technology Cr	ops Interi	national										
Rossini	1075			114	99			34	123	5.8	51.3	36.9
TCI805	1124			119	100			36	128	6.1	51.2	36.5
TCI806	1021			108	97			37	128	5.8	51.1	35.6
University of lo	daho											
05.UI.5.6.33	912			97	96			37	128	5.8	50.1	34.5
06.UIWC.1	1065			113	100			35	126	5.9	52.5	35.2
Amanda	858	1693	1276	91	100	98	99	33	129	6.0	52.3	35.4
Durola	802	1792	1297	85	98	93	96	37	128	6.1	50.7	39.2
Mean	945	1702			97	96		37	128	6.0	52.0	35.9
CV	13	21			5	6		6	1	3.8	1.8	1.9
LSD (0.05)	199	595			8	NS		4	1	NS	1.5	1.3

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Belleville, Kansas

Randall Nelson Kansas State University

Planted:	9/7/2011 at 5 lb/a in 9-in. rows					
Swathed:	6/5/2012					
Harvested:	6/12/2012					
Herbicides:	Treflan, Assure II					
Insecticides:	None					
Irrigation:	None					
Previous Crop:	Wheat					
Soil Test:	N=29 lb/a, P=34 ppm, K=438 ppm, pH=6.2					
Fertilizer:	30-30-30 lb N-P-K fertilizer in fall					
	60-0-0 lb N-P-K fertilizer in spring					
Soil Type:	Crete silt loam					
Elevation:	1530 ft Latitude: 39° 48'N					
Comments:	Exceptional yields were recorded at this location. The crop looked impressive throughout the season.					

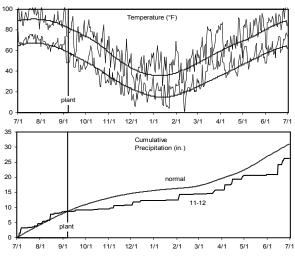


Table 16. Results for the 2012 National Winter Canola Variety Trial at Belleville, KS

				Yield (% of				Fall		Test		
Name		Yield (lb)/a)	test avg.)	Win	ter survi	val (%)	stand	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(%)	(lb/bu)	(%)	(%)
Croplan by WinF	ield								· · ·			
HyClass 115W	3552			89	100			9	7.5	49.0	25.6	41.8
HyClass 125W	3725			94	100			9	7.8	49.5	27.1	40.9
HyClass 154W	3604			91	100			9	8.7	50.1	26.1	40.4
DL Seeds Inc. / F	Rubisco	Seeds L	LC									
Baldur	3689			93	100			10	8.1	50.1	24.2	40.9
Dynastie	4328			109	100			9	9.3	49.5	25.4	41.3
Flash	3765			95	100			10	9.7	49.2	27.3	39.6
Hornet	3804			96	100			10	7.6	49.5	23.5	42.8
NPZ 0903	3998			100	100			9	7.4	50.2	22.5	43.5
NPZ 1005	4846			122	100			10	7.9	50.2	24.5	42.8
Rumba	4382			110	100			10	7.4	50.3	24.4	41.7
Safran	4392			110	100			9	8.2	49.4	25.2	41.7
Sitro	3892			98	100			9	7.3	49.8	25.7	40.8
Ulura	4384			110	100			10	9.3	50.1	24.7	43.0
Visby	4174			105	100			9	6.8	49.9	25.7	40.7
WRH 350	3888			98	100			10	8.3	50.0	25.4	40.3
DuPont Pioneer												
46W94	4249			107	100			9	8.8	49.6	23.9	43.7
46W99	3851			97	100			9	9.0	49.6	25.7	41.1
High Plains Crop	o Develo	opment										
Claremore	3040			76	100			9	7.7	50.0	27.1	41.5
HPX-7228	3768			95	100			9	6.8	49.7	26.4	40.9
HPX-7341	3910			98	100			10	8.2	49.7	27.7	40.5
Kansas State Un	niversity											
Kiowa	3258			82	100			9	8.2	49.0	26.2	40.7
KS4083	3558			89	100			10	9.0	49.6	26.8	40.9
KS4428	4029			101	100			9	7.8	49.7	23.9	43.0
KS4564	3571			90	100			8	6.8	49.4	25.7	42.7
Riley	4310			108	100			9	8.2	49.8	26.9	40.8
Sumner	4063			102	100			9	8.9	49.4	28.9	40.0
Wichita	3470			87	100			10	8.4	49.9	26.4	41.6
MOMONT												
Chrome	4663			117	100			10	8.9	50.5	25.8	41.2
Hybrirock	3792			95	100			9	7.6	50.0	25.1	41.4
MH06E10	4459			112	100			9	9.3	49.8	26.9	40.4
MH07J14	4767			120	100			10	8.1	49.8	26.6	40.8
MH09H19	4719			119	100			9	8.8	49.6	24.8	42.6

				Yield (% of				Fall		Test		
Name		Yield (lt	o/a)	test avg.)	Win	ter surv	ival (%)	stand	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(0-10)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	3332			84	100			9	6.8	48.7	29.1	39.1
DKW44-10	4296			108	100			9	7.7	49.9	28.2	38.7
DKW46-15	3650			92	100			10	8.1	47.9	26.6	41.8
DKW47-15	3923			99	100			9	7.8	49.1	27.1	40.6
Technology Cr	ops Inter	national										
Rossini	4306			108	100			10	6.9	49.6	25.3	42.6
TCI805	3881			98	100			10	7.3	49.1	25.6	41.9
TCI806	3978			100	100			9	8.3	50.4	30.9	37.3
University of lo	laho											
05.UI.5.6.33	4013			101	100			10	8.2	49.3	26.1	40.8
06.UIWC.1	3753			94	100			9	7.4	49.8	25.3	40.7
Amanda	4035			101	100			9	10.1	50.7	26.3	39.8
Durola	3789			95	100			9	8.4	50.2	27.4	42.0
Virginia State I	Jniversity	1										
Virginia	3948			99	100			9	9.3	48.9	25.7	40.6
VSX-3	4228			106	100			10	8.9	47.9	24.9	41.8
Mean	3978				100			9	8.2	49.6	26.0	41.2
CV	11				0			5	14.0	1.9	4.9	2.8
LSD (0.05)	735				NS			1	1.9	NS	2.6	2.4

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Garden City, Kansas

Johnathon Holman Kansas State University

Planted: Harvested [:]	9/7/2011 at 5 lb 6/19/2012	o/a in 8-in. rows					
Herbicides:	3 pt/a Prowl						
Insecticides:	None						
Irrigation:	16.05 in.						
Previous Crop:	Corn						
Soil Test:	P=38 ppm, K=s	sufficient, pH=8.0					
Fertilizer:	0-0-0 lb N-P-K	fertilizer in fall					
	110-0-0 lb N-P-	K fertilizer in spring					
Soil Type:	Ulyssess-Richf	ield silt loam					
Elevation:	2835 ft	Latitude: 37° 99'N					
Comments:	Plants grew vig	orously in the fall.					
	Shattering was	observed but did not					
	affect yields significantly. Plot average						
	has been 2,300) lb/a for three years.					

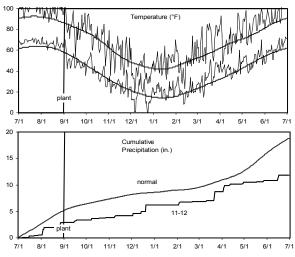


Table 17. Results for the 2012 National Winter Canola Variety Trial at Garden City, KS

Yield (I 2011	b/a)	test avg.)								
2011		icoi avy.)	Win	ter survi	ival (%)	height	Moisture	weight	Protein	Oil
	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
2045	1793	66	100	100	100	57	7.5	51.8	28.4	38.9
2269	1861	63	100	96	98	56	7.0	51.9	26.8	40.3
1853	2196	109	100	100	100	57	8.4	52.7	27.4	38.2
o Seeds	LLC									
2702	2485	98	100	100	100	57	7.7	52.8	25.8	39.8
2606	2915	139	100	100	100	57	7.5	51.7	24.2	42.3
2198	2686	137	100	100	100	60	7.3	51.9	25.3	41.6
2411	2763	134	100	100	100	59	7.9	52.4	25.0	41.1
		107	100			56	9.7	51.9	24.5	41.6
		105	100			56	7.8	52.2	24.9	42.2
		128	100			54	8.4	52.1	25.5	40.3
2978	3177	146	100	100	100	56	9.3	51.5	24.7	41.4
2737	2914	133	100	100	100	56	7.4	52.2	25.8	41.0
		88	100			59	10.1	51.8	26.5	40.9
2680	2669	115	100	100	100	54	7.6	51.7	25.2	40.3
		131	100			56	7.3	52.4	25.0	40.0
		91	100			56	7.2	51.5	25.1	42.1
		97	100			56	8.4	51.8	24.9	42.1
lopment										
1973	1793	70	100	89	95	56	7.3	52.5	28.9	39.0
2812	2579	101	100	100	100	54	7.0	52.9	26.7	40.1
2853	2344	79	100	100	100	58	8.0	52.5	27.6	39.9
у										
2128	2070	87	100	96	98	58	8.0	52.4	28.4	38.2
2546	2231	83	100	100	100	59	8.3	52.0	27.5	39.7
2919	2561	95	100	97	98	58	7.4	52.5	27.3	39.6
		88	100			53	6.9	52.5	26.8	41.7
2661	2490	100	100	100	100	58	7.5	52.1	27.0	40.3
2361	2012	72	100	96	98	55	7.3	52.2	28.5	40.3
2797	2573	101	100	100	100	54	7.1	52.3	27.5	40.3
3016	2892	119	100	100	100	57	6.9	52.7	25.3	41.9
2351	2659	128	100	96	98	57	7.4	52.1	26.3	40.4
2252	2614	128	100	78	89	58	8.4	52.5	26.3	40.3
		151	100			57	8.2	52.2	25.3	41.1
		127	100			57	7.0	52.1	25.4	40.6
	3 2269 3 1853 co Seeds a 2702 b 2606 5 2198 5 2411 3 5 2978 2737 3 3 2680 3 3 2680 3 3 2812 5 2812 5 2812 5 2812 5 2812 5 2546 3 2919 2661 4 2351 2 2351 2 2351 2 2252	3 2269 1861 3 1853 2196 5 2702 2485 4 2606 2915 5 2198 2686 5 2198 2686 5 2198 2686 5 2198 2686 5 2198 2686 5 21978 3177 2737 2914 3 3 4 3 2680 2669 3 4 5 2812 2579 5 2853 2344 ty 2 2128 2070 5 2546 2231 3 2919 2561 2 2661 2490 4 2361 2012 5 2361 2012	3 2269 1861 63 3 1853 2196 109 o Seeds LLC 9 2702 2485 98 4 2606 2915 139 5 2198 2686 137 5 2198 2686 137 5 2411 2763 134 107 105 3 105 3 128 5 2978 3177 146 2737 2914 133 9 88 3 2680 2669 115 3 91 3 97 Hopment 97 101 3 2853 2344 79 4 88 9 2661 2490 100 4 22128 2070 87	3 2269 1861 63 100 3 1853 2196 109 100 co Seeds LLC	3 2269 1861 63 100 96 3 1853 2196 109 100 100 co Seeds LLC	3 2269 1861 63 100 96 98 3 1853 2196 109 100 100 100 or Seeds LLC	3 2269 1861 63 100 96 98 56 3 1853 2196 109 100 100 100 57 xo Seeds LLC 139 100 100 100 57 x 2606 2915 134 100 100 100 59 x 107 100 56 x 105 100 56 x 88 100 59 3 2680 2669 115 100 100 100 54 x 131 100	3 2269 1861 63 100 96 98 56 7.0 3 1853 2196 109 100 100 100 57 8.4 or Seeds LLC	3 2269 1861 63 100 96 98 56 7.0 51.9 3 1853 2196 109 100 100 100 57 8.4 52.7 o Seeds LLC	3 2269 1861 63 100 96 98 56 7.0 51.9 26.8 3 1853 2196 109 100 100 100 57 8.4 52.7 27.4 o Seeds LLC

Table 17. Results for the 2012 National Winter Canola Variety	/ Trial at Garden City. KS

				Yield (% of				Plant		Test		
Name		Yield (lb)/a)	test avg.)	Win	ter surv	ival (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	1282	1861	1572	55	100	100	100	42	8.3	51.6	29.4	39.2
DKW44-10	1339	2191	1765	58	100	100	100	54	7.6	51.5	28.7	37.5
DKW46-15	1165	2386	1775	50	100	96	98	53	7.1	51.4	25.3	42.3
DKW47-15	1779	1696	1737	77	100	100	100	56	6.6	51.9	28.1	39.2
Technology Cr	ops Inter	national										
Rossini	2954	1693	2323	127	100	100	100	51	6.4	52.1	26.6	41.7
TCI805	1755			76	100			58	6.4	52.7	27.8	39.2
TCI806	2207			95	100			57	6.8	52.9	30.1	38.2
University of lo	laho											
05.UI.5.6.33	2514			108	100			53	8.4	52.1	27.9	38.6
06.UIWC.1	2484			107	100			54	7.1	52.7	27.8	38.2
Amanda	1689	2571	2130	73	100	96	98	56	6.7	53.4	26.7	39.4
Durola	1582	2276	1929	68	100	96	98	58	8.7	50.5	27.4	40.8
Virginia State I	University	1										
Virginia	2277	2236	2257	98	100	100	100	54	7.8	51.9	26.8	39.5
VSX-3	2117	2365	2241	91	100	100	100	54	7.1	52.2	27.0	39.7
Mean	2320	2300			100	97		56	7.7	52.1	26.7	40.2
CV	11	15			0	5		3	13.4	0.6	2.6	1.7
LSD (0.05)	408	557			NS	8		3	1.7	0.5	1.4	1.4

Kiowa, Kansas

Bob	Schrock
-----	---------

Planted: Swathed: Harvested:	9/28/2011 at 5 lb/a in 9-in. rows 5/15/2012 5/21/2012
Herbicides:	Assure II
Insecticides:	Spring application for variegated cutworm
Irrigation:	None
Previous Crop:	Wheat
Soil Test:	P=sufficient, pH=6.2
Fertilizer:	65-0-0 lb N-P-K fertilizer in fall
	25-0-0-10 lb N-P-K-S fertilizer in spring
Soil Type:	Pond Creek silt loam
Elevation:	1300 ft Latitude: 36° 58'N
Comments:	Plant maturity was accelerated because
	of high temperatures. Severe lodging
	occured after a thunderstorm. Some
	stem canker was observed.

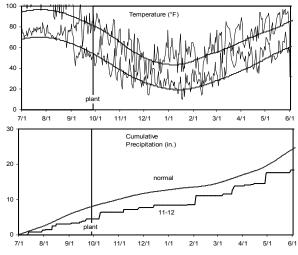


Table 18. Results for the 2012 National Winter Canola Variety Trial at Kiowa, KS

20122Croplan by WinFieldHyClass 115W1728	ield (lb/a 2011	/	Yield (% of test avg.)	Win	• • • • • • • • •						
Croplan by WinField HyClass 115W 1728	2011	, 			ter surv	val (%)	bloom	Moisture	weight	Protein	Oil
HyClass 115W 1728		2-yr.	2012	2012	2011	2-yr.	(DOY)	(%)	(lb/bu)	(%)	(%)
,								· · ·			
•			82	100			84	6.0	49.5	30.6	37.1
HyClass 125W 1989			94	100			84	7.2	51.2	29.8	37.3
HyClass 154W 2193			104	100			86	7.4	51.9	29.3	37.4
DL Seeds Inc. / Rubisco S	eeds LL	С									
Baldur 1946			92	100			84	6.7	51.9	28.0	37.6
Dynastie 1830			86	100			86	7.3	50.8	28.3	39.3
Flash 1859			88	100			85	6.3	51.1	28.7	38.1
Hornet 2120			100	100			84	6.6	50.9	28.8	37.1
NPZ 0903 2309			109	100			83	6.8	52.4	26.9	39.7
NPZ 1005 2701			128	100			84	7.3	52.4	27.8	39.2
Rumba 2497			118	100			83	7.4	52.3	28.0	38.6
Safran 2222			105	100			85	7.0	52.4	29.1	37.4
Sitro 2585			122	100			83	6.5	52.5	29.7	37.3
Ulura 2483			117	100			84	7.2	51.6	28.4	39.1
Visby 2236			106	100			84	7.1	48.2	28.0	38.7
WRH 350 2425			115	100			85	6.9	52.2	27.8	38.1
DuPont Pioneer											
46W94 2367			112	100			84	6.5	51.6	28.5	38.7
46W99 2614			123	100			84	6.8	51.0	27.7	40.1
High Plains Crop Develop	ment										
Claremore 1670			79	100			89	7.1	51.8	30.8	37.5
HPX-7228 1960			93	100			83	7.2	52.6	29.5	37.4
HPX-7341 1931			91	100			84	6.7	50.1	29.7	38.3
Kansas State University											
Kiowa 1728			82	100			85	6.8	51.3	30.6	36.4
KS4083 1873			88	100			85	7.0	51.8	30.5	36.9
KS4428 1786			84	100			85	6.8	50.3	29.0	37.9
KS4564 1626			77	100			85	6.8	51.9	29.9	38.1
Riley 1946			92	100			85	7.1	51.0	29.6	38.5
Sumner 2033			96	100			83	6.9	52.9	31.1	37.5
Wichita 2018			95	100			86	6.6	50.6	29.3	38.7
MOMONT											
Chrome 2701			128	100			84	7.4	52.5	28.3	38.8
Hybrirock 2991			141	100			83	7.1	52.4	29.2	37.8
MH06E10 2178			103	100			83	6.4	51.5	30.0	36.8
MH07J14 2149			102	100			84	6.7	50.0	29.3	38.1
MH09H19 2817			133	100			84	6.8	52.6	29.1	38.2

				Yield (% of				50%		Test		
Name		Yield (lb/a)			test avg.) Winter survival (%)				Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(DOY)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	1859			88	100			82	6.1	49.1	32.4	37.2
DKW44-10	1946			92	100			86	7.0	51.5	31.4	35.5
DKW46-15	1757			83	100			85	6.2	51.3	29.3	38.3
DKW47-15	1975			93	100			86	7.0	51.3	30.8	36.9
Technology Cr	ops Inter	national										
Rossini	2309			109	100			83	6.5	50.2	30.5	38.1
TCI805	2381			112	100			84	6.6	52.1	30.9	36.9
TCI806	1830			86	100			84	6.7	52.2	31.3	35.9
University of Id	laho											
05.UI.5.6.33	1728			82	100			85	7.4	51.8	29.7	36.6
06.UIWC.1	2105			99	100			86	7.4	52.9	28.9	37.9
Amanda	2004			95	100			86	7.2	48.3	28.1	38.8
Durola	1583			75	100			86	9.0	50.0	29.7	40.2
Virginia State L	Jniversity	'										
Virginia	2120			100	100			85	7.0	51.6	30.7	37.1
VSX-3	2163			102	100			84	7.0	51.9	31.2	35.1
Mean	2117				100			84	6.9	51.4	29.5	37.8
CV	20				0			1	9.2	3.3	2.5	2.1
LSD (0.05)	677				NS			1	1.0	2.8	1.5	1.6

Manhattan, Kansas

Michael Stamm and Scott Dooley Kansas State University

Planted: Harvested:	9/15/2011 at 5 l 6/13/2012	b/a in 9-in. rows
Herbicides:		
	Treflan, Assure	11
Insecticides:	None	
Irrigation:	None	
Previous Crop:	Soybean	
Soil Test:	N=150 lb/a, P=4	43 ppm, K=212 ppm, pH=7.0
Fertilizer:	0-0-0 lb N-P-K f	ertilizer in fall
	50-0-0 lb N-P-K	fertilizer in spring
Soil Type:	Belvue silt loam	I
Elevation:	1034 ft	Latitude: 39° 08'N
Comments:	The trial was re	planted with little
	improvement in	stand. Above-normal
	temperatures re	esulted in 100% winter
	survival.	

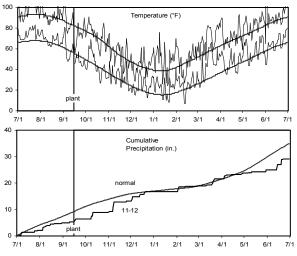


Table 19. Results for the 2012 National Winter Canola Variety Trial at Manhattan, KS

				Yield (% of				Plant	50%			
Name		Yield (lb	o/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(%)	(%)
Croplan by WinF	ield											
HyClass 115W	2069	1951	2010	108	100	100	100	49	85	7.0	25.5	38.5
HyClass 125W	1652	2277	1964	86	100	100	100	53	87	7.7	25.5	37.5
HyClass 154W	2360	2590	2475	124	100	98	99	57	87	7.7		
DL Seeds Inc. / F	Rubisco	Seeds L	LC									
Baldur	2505	2590	2548	131	100	99	100	56	86	7.8	26.5	39.0
Dynastie	1688	2672	2180	88	100	100	100	51	87	7.7	25.4	40.6
Flash	1742	2602	2172	91	100	100	100	53	86	8.7	25.9	39.9
Hornet	1742	2439	2091	91	100	100	100	53	88	7.1	26.5	37.2
NPZ 0903	2632			138	100			57	84	7.2	26.9	39.1
NPZ 1005	2595			136	100			56	85	6.9	26.7	39.4
Rumba	2577			135	100			55	84	8.1	27.5	38.6
Safran	2650	2544	2597	139	100	100	100	52	86	7.2	30.7	36.6
Sitro	1906	2474	2190	100	100	99	100	58	84	7.0	27.1	38.2
Ulura	2741			144	100			60	86	10.6	24.8	40.6
Visby	2196	2858	2527	115	100	99	100	50	85	7.1	28.0	36.7
WRH 350	2559			134	100			55	85	7.2	26.0	39.6
DuPont Pioneer												
46W94	2468			129	100			55	85	7.6	26.3	39.4
46W99	1416			74	100			52	88	11.5	26.2	37.7
High Plains Crop	Develo	pment										
Claremore	1470	2312	1891	77	100	99	100	53	88	6.6	23.8	39.7
HPX-7228	2450	2463	2456	128	100	100	100	51	86	7.4	24.1	38.8
HPX-7341	1851	2405	2128	97	100	99	100	57	86	7.1	27.0	34.7
Kansas State Un	iversity											
Kiowa	2105	2219	2162	110	100	100	100	63	86	9.4	25.2	39.5
KS4083	2632	2625	2628	138	100	100	100	63	86	7.7	25.4	38.0
KS4428	2577	2730	2654	135	100	100	100	58	87	7.4	25.4	38.5
KS4564	1960			103	100			54	86	7.9	27.3	38.2
Riley	2323	2602	2463	122	100	100	100	56	86	7.2	27.8	38.4
Sumner	1416	2207	1811	74	100	100	100	55	84	6.3	27.1	37.4
Wichita	1688	2927	2308	88	100	100	100	54	84	6.6	27.1	39.1
MOMONT												
Chrome	2559	2300	2430	134	100	99	99	54	85	8.5	26.5	40.1
Hybrirock	3557	2323	2940	186	100			57	85	7.5	26.2	39.2
MH06E10	2378	2416	2397	125	100	90	95	60	86	7.7		
MH07J14	3231			169	100			59	86	8.2	26.8	39.3
MH09H19	3249			170	100			58	84	8.5	25.8	39.6

				Yield (% of				Plant	50%			
Name		Yield (lb/a)			test avg.) Winter survival (%)				bloom	Moisture	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	1343	1777	1560	70	100	100	100	45	84	6.6	25.7	39.3
DKW44-10	2232	2021	2127	117	100	100	100	47	88	7.1	25.4	38.8
DKW46-15	1888	1905	1896	99	100	100	100	48	86	5.2	27.0	39.7
DKW47-15	1869	2126	1998	98	100	100	100	53	85	5.8	26.6	38.5
Technology Cr	ops Inter	national										
Rossini	2269	2219	2244	119	100	100	100	51	83	5.1	26.1	37.3
TCI805	1761	1975	1868	92	100	98	99	57	84	2.7	25.1	37.6
TCI806	2015	2614	2314	105	100	98	99	58	87	6.2	25.2	38.6
University of Ic	laho											
05.UI.5.6.33	1888			99	100			59	87	6.5	26.8	38.0
06.UIWC.1	1742			91	100			50	85	6.8	26.3	36.3
Amanda	2450	2149	2300	128	100	100	100	53	88	7.7	25.7	36.7
Durola	1888	1557	1722	99	100	98	99	56	86	6.5	29.5	37.8
Virginia State U	Jniversity	1										
Virginia	1960	1905	1933	103	100	99	100	51	85	7.6	27.6	38.7
VSX-3	2323	2381	2352	122	100	99	100	53	85	7.8	28.2	37.7
Mean	2191	2316			100	99		55	85	7.4	26.4	38.4
CV	19	15			0	2		5	1	12.2	2.5	2.7
LSD (0.05)	856	576			NS	3		5	2	1.8	1.5	2.4

Columbia, Missouri

William Wiebold and Howard Mason University of Missouri

Planted:	9/12/2011
Harvested:	6/1/2012
Herbicides:	Treflan
Insecticides:	None
Irrigation:	None
Previous Crop:	Wheat
Soil Test:	NA
Fertilizer:	120-0-0 lb N-P-K fertilizer in spring
Soil Type:	Mexico silt loam
Elevation:	870 ft Latitude: 38° 32'N
Comments:	An early harvest was the result of above-normal winter tempertures.

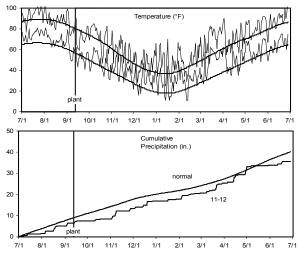


Table 20. Results for the 2012 National Winter Canola Variety Trial at Columbia, MO

				Yield (% of				Plant		Test		
Name		Yield (lb)/a)	test avg.)	Win	ter surv	ival (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Croplan by Winf	ield						-	<u> </u>	<u> </u>	· · ·		`
HyClass 115W	1967			112								43.8
HyClass 125W	1167			66								44.4
HyClass 154W	1899			108								44.7
DL Seeds Inc. / I	Rubisco	Seeds L	LC									
Baldur	1837			104								45.3
Dynastie	1895			108								45.8
Flash	1739			99								46.0
Hornet	2033			115								46.1
NPZ 0903	2075			118								46.9
NPZ 1005	2015			114								48.0
Rumba	1774			101								44.4
Safran	1879			107								45.0
Sitro	1959			111								46.2
Ulura	1702			97								46.6
Visby	1970			112								44.7
WRH 350	1689			96								42.1
DuPont Pioneer												
46W94	1880			107								45.8
46W99	1214			69								45.2
High Plains Cro	p Develo	opment										
Claremore	1456			83								42.4
HPX-7228	1869			106								42.5
HPX-7341	1812			103								43.5
Kansas State Ur	niversity	1										
Kiowa	1573			89								42.1
KS4083	1634			93								41.2
KS4428	1574			89								43.3
KS4564	1449			82								44.9
Riley	1835			104								44.5
Sumner	1686			96								44.4
Wichita	1509			86								44.2
MOMONT												
Chrome	1920			109								46.3
Hybrirock	2001			114								44.5
MH06E10	2191			124								43.4
MH07J14	2095			119								47.0
MH09H19	2181			124								45.3

Table 20. Results for the 2012 National Winter Canola Variet	v Trial at Columbia MO
Table 20. Results for the 2012 National Winter Canola Variet	y mai al conumbia, NO

				Yield (% of				Plant		Test		
Name		Yield (lb)/a)	test avg.)	Win	ter surv	ival (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	1513			86								39.9
DKW44-10	1390			79								41.6
DKW46-15	1443			82								44.8
DKW47-15	1802			102								43.9
Technology Cr	ops Interi	national										
Rossini	2036			116								47.8
TCI805	1875			106								45.7
TCI806	1875			106								43.3
University of Id	laho											
05.UI.5.6.33	1538			87								40.8
06.UIWC.1	1690			96								41.7
Amanda	1498			85								42.5
Durola	1437			82								46.9
Virginia State L	Jniversity	'										
Virginia	1748			99								42.1
VSX-3	1917			109								43.2
Mean	1761											44.3
CV	16											2.7
LSD (0.05)	468											2.4

Clovis, New Mexico

Sangu Angadi New Mexico State University

Planted:	9/22/2011 at 6 lb/a in 6-in. rows						
Harvested:	6/11/2012						
Herbicides:	2 pt/a Treflan HP						
Insecticides:	Intrepid, Congan, Dimethoate						
Irrigation:	18 in.						
Previous Crop:	Corn						
Soil Test:	29-33-606 ppm N-P-K, pH=7.5						
Fertilizer:	90-35-0-14 lb N-P-K-S fertilizer in fall						
Soil Type:	Olton clay loam						
Elevation:	4437 ft Latitude: 34° 36'N						
	Excellent yields under irrigation. Very						
	little precipitation during the growing						
	season						

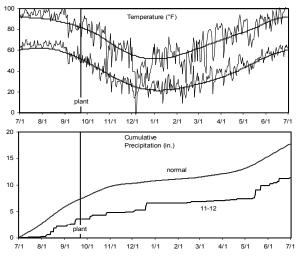


Table 21. Results for the 2012 National Winter Canola Variety Trial at Clovis, NM

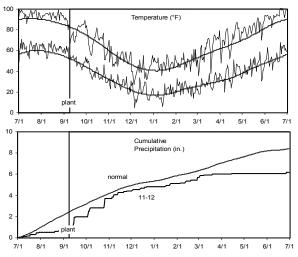
				Yield (% of			•	Plant	50%		Test	
Name		Yield (lb)/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Croplan by Winl	Field											
HyClass 115W	2662	1162	1912	98	96	95	96	48	89	7.9	49.6	36.5
HyClass 125W	2567	1371	1969	95	97	93	95	48	88	6.4	49.2	37.5
HyClass 154W	2521	2067	2294	93	95	93	94	52	93	13.7	48.4	35.4
DL Seeds Inc. /	Rubisco	Seeds L	LC									
Baldur	2631	1966	2298	97	97	95	96	47	88	9.7	51.1	37.2
Dynastie	2976	1993	2484	110	97	95	96	51	91	11.1	45.5	37.6
Flash	3505	1804	2654	129	98	93	96	53	93	8.0	43.6	38.3
Hornet	3214	1938	2576	119	97	95	96	50	87	8.2	44.5	37.2
NPZ 0903	3122			115	98			49	91	8.4	48.8	38.2
NPZ 1005	2042			75	98			47	91	14.3	51.5	37.9
Rumba	2584			95	98			47	91	13.0	49.9	36.7
Safran	3930	2256	3093	145	95	93	94	48	93	8.9	46.5	37.5
Sitro	3437	2141	2789	127	96	95	96	49	88	8.0	47.0	36.9
Ulura	2405			89	98			51	91	15.0	49.2	39.4
Visby	2976	1952	2464	110	97	95	96	48	91	11.1	46.4	38.1
WRH 350	3624			134	98			50	91	8.1	46.5	38.4
DuPont Pioneer												
46W94	2270			84	98			47	91	10.4	49.5	37.4
46W99	1994			74	98			50	91	10.1	49.2	36.4
High Plains Cro	p Develo	opment										
Claremore	2388	1784	2086	88	98	95	97	52	96	8.4	47.6	37.7
HPX-7228	2923	1871	2397	108	96	95	96	47	89	8.7	50.0	36.9
HPX-7341	2464	1851	2157	91	95	95	95	49	93	9.3	47.7	37.5
Kansas State Ur	niversity	1										
Kiowa	2736	1803	2269	101	97	95	96	48	92	8.9	47.7	35.3
KS4083	2836	1966	2401	105	97	95	96	51	91	9.6	48.0	37.2
KS4428	2500	2074	2287	92	97	95	96	50	91	14.0	49.4	37.3
KS4564	2542			94	95			48	91	8.6	49.6	37.0
Riley	2407	2229	2318	89	95	90	93	49	89	9.2	46.9	37.8
Sumner	2178	2040	2109	80	97	93	95	47	91	7.2	49.6	36.0
Wichita	2017	1743	1880	74	97	95	96	47	91	9.0	49.7	35.8
MOMONT									• ·			
Chrome	2901	2094	2497	107	98	93	96	52	92	16.0	45.7	34.3
Hybrirock	3231	2303	2767	119	98	95	97	50	91	10.5	48.6	37.6
MH06E10	3046	1959	2502	112	98	93	96	53	89	10.0	47.9	35.5
MH07J14	3488			129	98			49	91	8.1	45.0	37.7
MH09H19	2672			99	98			47	91	9.7	45.1	35.8
	2012			55	00			-11		0.1	40.1	00.0

				Yield (% of				Plant	50%		Test	
Name		Yield (lb)/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Monsanto / DE	KALB											
DKW41-10	1563	608	1086	58	98	95	97	38	83	7.8	44.4	35.7
DKW44-10	2350	1432	1891	87	97	95	96	44	88	7.5	44.8	35.8
DKW46-15	2320	1878	2099	86	95	93	94	50	88	6.0	48.9	38.6
DKW47-15	2768	1310	2039	102	95	95	95	49	91	7.3	46.0	37.4
Technology Cr	ops Inter	national										
Rossini	3208	1466	2337	118	98	92	95	46	85	4.7	50.7	38.9
TCI805	2311			85	98			49	91	9.2	47.4	36.7
TCI806	3094			114	98			50	87	7.4	45.8	34.5
University of Ic	laho											
05.UI.5.6.33	2522			93	95			50	92	15.2	49.0	35.5
06.UIWC.1	2257			83	95			47	91	12.0	49.5	34.1
Amanda	1716	2162	1939	63	97	95	96	46	94	8.9	53.4	36.4
Durola	2940	2236	2588	109	95	96	96	52	94	15.3	46.1	39.2
Virginia State L	Jniversity	1										
Virginia	2753	1499	2126	102	97	92	94	49	89	8.0	45.5	36.7
VSX-3	3270	1256	2263	121	95	93	94	48	93	8.3	48.1	35.7
Mean	2708	1759			97	94		49	90	9.7	47.9	36.9
CV	19	18			1	2		5	0	23.7	6.1	3.6
LSD (0.05)	849	525			2	NS		4	0	3.7	4.7	2.7

Farmington, New Mexico

Curtis Owen and Mick O'Neill New Mexico State University

Planted:	9/8/2011 at 5 lb/a in 10-in. rows
Harvested:	7/16/2012
Herbicides:	None
Insecticides:	None
Irrigation:	29 in.
Previous Crop:	Fallow
Soil Test:	NA
Fertilizer:	10-52-60-14 lb N-P-K-S fertilizer in fall
	90-0-0 lb N-P-K fertilizer in spring
Soil Type:	Doak sandy loam
Elevation:	5640 ft Latitude: 36° 108'N
Comments:	Excellent winter canola yields.



Name Yield (lb/a) test avg.) Winter survival (%) height bloom Moisture weight Oil Coroplan by WinFleid 2012 2011 2011 2yr. (in.) (DOY) (%) (ib/bu) (%) Hyclass 115W 3971 1771 2871 94 100 44 107 8.6 49.5 38.5 Hyclass 15W 4066 2238 3152 96 100 44 106 8.4 51.3 39.5 Du Seeds Inc. / Rubisco Seeds LLC Baldur 4264 2783 3524 100 -44 106 8.4 51.3 39.5 Piash 4332 3047 3790 107 100 45 106 8.8 51.2 30.4 NPZ 003 4835 114 100 45 106 8.8 51.1 38.9 Safran 5026 3107					Yield (% of	· ·		ž	Plant	50%		Test		
Croplan by WinField Hyclass 115W 39 107 8.3 50.2 37.5 Hyclass 125W 366 42.1 107 8.3 50.2 37.5 Hyclass 125W 366 42.1 107 6.4 10.3 32.5 DL Seeds Inc. / Rubics Seeds LLC Baldur 42.64 27.83 32.4 10.4 33.9 107 3.3 9.2 44.4 107 107 10.5 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 3.3 <th co<="" th=""><th>Name</th><th></th><th>Yield (It</th><th>o/a)</th><th>test avg.)</th><th>Win</th><th>ter surv</th><th>ival (%)</th><th>height</th><th>bloom</th><th>Moisture</th><th>weight</th><th>Oil</th></th>	<th>Name</th> <th></th> <th>Yield (It</th> <th>o/a)</th> <th>test avg.)</th> <th>Win</th> <th>ter surv</th> <th>ival (%)</th> <th>height</th> <th>bloom</th> <th>Moisture</th> <th>weight</th> <th>Oil</th>	Name		Yield (It	o/a)	test avg.)	Win	ter surv	ival (%)	height	bloom	Moisture	weight	Oil
Gropian by WinField Hyclass 115W 391 1771 2871 94 100 39 107 8.3 50.2 37.5 Hyclass 154W 4066 2234 2975 87.5 Hyclass 154W 4066 23.5 DL Seeds LC Baldur 240 208 44 100 44 107 9.2 49.4 39.5 Dynastie 5332 3857 100 44 107 9.2 49.4 39.5 Filash 430 7.5 50.0 38.7 PUP of PUP and PUP		2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)	
Hyclass 125W 367 2324 2995 87 100 44 107 8.6 49.5 38.5 Hyclass 154W 4066 2238 3152 96 100 46 107 7.9 51.0 38.2 DLSeeds ILC Feath 2238 3524 101 100 44 106 8.4 51.3 39.9 Flash 4333 3047 3790 107 100 45 106 8.8 51.2 40.7 PV2 0903 4835 114 100 45 106 8.8 51.2 40.7 Rumba 4039 114 100 45 106 8.8 51.2 40.7 Rumba 4039 114 100 45 106 8.6 51.1 38.9 Sitro 4725 3107 310 112 <	Croplan by Win	Field												
Hyclass 154W 4066 2238 3152 96 100 46 107 7.9 51.0 38.2 DL Seeds Inc. / Rubisco Seeds LLC Baldur 4264 2783 3524 101 100 44 107 9.1 49.8 39.9 Flash 4332 3862 3867 102 100 44 107 9.1 49.8 39.9 Flash 4332 3867 102 100 45 107 9.2 49.4 39.2 Hornet 4633 3047 3790 107 100 45 106 8.8 51.2 40.7 NP2 1005 4808 114 100 45 106 8.8 51.2 40.7 Rumba 4039 95 100 43 107 11.0 49.2 39.6 39.9 Vibry 4750 2839	Hyclass 115W	3971	1771	2871	94	100			39	107	8.3	50.2	37.5	
DL Seeds Inc. / Rubisco Seeds LLC Baldur 4264 2783 3524 101 100 44 106 8.4 51.3 39.5 Dynastie 5240 2906 4074 124 100 44 107 9.1 49.8 39.9 Flash 4332 382 3857 102 100 445 107 9.2 49.4 39.2 Hornet 4533 3047 3790 107 100 45 106 8.8 51.2 40.7 NPZ 1005 4808 114 100 45 105 9.5 50.0 36.9 Safran 5026 3437 4232 119 100 4 43 107 11.0 49.2 39.6 Ulura 3488 82 1	Hyclass 125W	3667	2324	2995	87	100			44	107	8.6	49.5	38.5	
Baldur 4264 2783 3524 101 100 44 106 8.4 51.3 39.5 Dynastie 5240 2908 4074 124 100 44 107 9.1 49.8 39.9 Hornet 4533 3047 3790 107 100 46 108 9.2 49.4 39.2 Hornet 4533 3047 3790 107 100 46 108 9.2 49.4 39.7 NPZ 1005 4808 114 100 45 106 8.8 51.2 40.7 Rumba 4039 195 100 42 108 9.6 51.1 38.9 Sitro 4725 3107 3916 112 100 -42 106 7.8 50.1 38.5 Ulura 3488 107 100	Hyclass 154W	4066	2238	3152	96	100			46	107	7.9	51.0	38.2	
Dynastie 5240 2908 4074 124 100 44 107 9.1 49.8 39.9 Flash 4332 3823 3857 102 100 45 107 9.2 49.4 39.2 NPZ 9003 4835 114 100 43 104 7.9 49.4 39.7 NPZ 1005 4808 114 100 45 106 8.8 51.2 40.7 NPZ 1005 4808 114 100 -45 106 8.8 51.2 40.7 Rumba 4039 82 100 -42 108 9.6 51.1 38.9 Ulura 3488 113 100 42 106 8.6 50.7 3	DL Seeds Inc. /	Rubisco	Seeds L	LC										
Flash 4332 3382 3857 102 100 45 107 9.2 49.4 39.2 Hornet 4533 3047 3790 107 100 46 108 9.2 50.3 39.4 NPZ 9003 4835 114 100 43 104 7.9 49.4 39.7 NPZ 1005 4808 114 100 45 106 8.8 51.2 40.7 Rumba 4039 95 100 45 105 9.5 50.0 36.9 Sitro 4726 3437 4232 119 100 43 107 11.0 49.2 39.6 Ulura 3488 82 100 43 107 8.6 50.1 38.9 Visby 4768 101 100	Baldur	4264	2783	3524	101	100			44	106	8.4	51.3	39.5	
Hornet 4533 3047 3790 107 100 46 108 9.2 50.3 39.4 NPZ 1005 4808 114 100 43 104 7.9 49.4 39.7 NPZ 1005 4808 114 100 45 106 8.8 51.2 40.7 Rumba 4039 95 100 42 108 9.6 51.1 38.9 Sitro 4725 3107 3916 112 100 49 106 8.7 49.8 39.9 Visby 4750 2839 3794 112 100 42 106 7.8 50.1 38.5 WRH 350 4768 107 100 44 107 8.6 50.7 38.9 DuPont Pioneer 46W94 4547 <td>Dynastie</td> <td>5240</td> <td>2908</td> <td>4074</td> <td>124</td> <td>100</td> <td></td> <td></td> <td>44</td> <td>107</td> <td>9.1</td> <td>49.8</td> <td>39.9</td>	Dynastie	5240	2908	4074	124	100			44	107	9.1	49.8	39.9	
NPZ 0903 4835 114 100 43 104 7.9 49.4 39.7 NPZ 1005 4808 114 100 45 106 8.8 51.2 40.7 Rumba 4039 95 100 45 106 8.8 51.2 40.7 Safran 5026 3437 4232 119 100 42 108 9.6 51.1 38.9 Sitro 4725 3107 3916 112 100 43 107 11.0 49.2 39.6 Ulura 3488 82 100 42 106 8.7 49.8 39.9 Visby 4750 283 3794 112 100 44 107 9.7 50.8 38.9 DuPont Pioneer 101 100 <td>Flash</td> <td>4332</td> <td>3382</td> <td>3857</td> <td>102</td> <td>100</td> <td></td> <td></td> <td>45</td> <td>107</td> <td>9.2</td> <td>49.4</td> <td>39.2</td>	Flash	4332	3382	3857	102	100			45	107	9.2	49.4	39.2	
NPZ 1005 4808 114 100 45 106 8.8 51.2 40.7 Rumba 4039 95 100 45 105 9.5 50.0 36.9 Safran 5026 3437 4232 119 100 42 108 9.6 51.1 38.9 Sitro 4752 3107 3916 112 100 4 43 107 11.0 49.2 39.6 Ulura 3488 82 100 4 49 106 8.7 49.8 39.9 Visby 4750 2839 3794 112 100 44 107 8.6 50.7 38.9 DuPont Proneer 107 100 44 106 8.6 49.9 38.0 46W94 4547 101 100	Hornet	4533	3047	3790	107	100			46	108	9.2	50.3	39.4	
Rumba 4039 95 100 45 105 9.5 50.0 36.9 Safran 5026 3437 4232 119 100 42 108 9.6 51.1 38.9 Sitro 4725 3107 3916 112 100 43 107 11.0 49.2 39.9 Visby 4750 2839 3794 112 100 42 106 8.7 49.8 39.9 Visby 4750 2839 3794 112 100 42 106 8.6 50.1 38.5 WRH 350 4768 107 100 44 107 8.6 50.7 38.9 DuPont Pioneer 101 100 44 107 9.7 50.8 38.9 High Plains Crop Develorment 101 100 </td <td>NPZ 0903</td> <td>4835</td> <td></td> <td></td> <td>114</td> <td>100</td> <td></td> <td></td> <td>43</td> <td>104</td> <td>7.9</td> <td>49.4</td> <td>39.7</td>	NPZ 0903	4835			114	100			43	104	7.9	49.4	39.7	
Safran 5026 3437 4232 119 100 42 108 9.6 51.1 38.9 Sitro 4725 3107 3916 112 100 43 107 11.0 49.2 39.6 Ulura 3488 82 100 42 106 8.7 49.8 39.9 Visby 4760 2839 3794 112 100 42 106 8.7 49.8 39.9 DuPont Pioneer 113 100 44 107 8.6 50.7 38.9 DuPont Pioneer 107 100 44 106 8.6 49.9 38.0 46W94 4547 101 100 44 107 9.6 37.9 High Plains Crop Develor 101 100 41 114 <td>NPZ 1005</td> <td>4808</td> <td></td> <td></td> <td>114</td> <td>100</td> <td></td> <td></td> <td>45</td> <td>106</td> <td>8.8</td> <td>51.2</td> <td>40.7</td>	NPZ 1005	4808			114	100			45	106	8.8	51.2	40.7	
Sitro 4725 3107 3916 112 100 43 107 11.0 49.2 39.6 Ulura 3488 82 100 49 106 8.7 49.8 39.9 Visby 4750 2839 3794 112 100 42 106 7.8 50.1 38.5 WRH 350 4768 113 100 44 107 8.6 50.7 38.9 DuPont Pioneer 107 100 44 106 8.6 49.9 38.0 46W94 4547 101 100 44 106 8.6 49.9 38.0 46W99 4256 101 100 41 114 10.1 50.6 37.4 HPX-7228 3412 2650 3031 81 100	Rumba	4039			95	100			45	105	9.5	50.0	36.9	
Ulura 3488 82 100 49 106 8.7 49.8 39.9 Visby 4750 2839 3794 112 100 42 106 7.8 50.1 38.5 WRH 350 4768 113 100 42 106 7.8 50.1 38.5 DuPont Pioneer 113 100 44 107 8.6 50.7 38.9 Homestone 4547 101 100 44 106 8.6 49.9 38.0 46W94 4556 101 100 44 106 8.6 49.9 38.0 High Plains Crop Develorment 41 114 10.1 50.6 37.9 HPX-7328 3412 2650 3031 81 100 42 106 8.1 </td <td>Safran</td> <td>5026</td> <td>3437</td> <td>4232</td> <td>119</td> <td>100</td> <td></td> <td></td> <td>42</td> <td>108</td> <td>9.6</td> <td>51.1</td> <td>38.9</td>	Safran	5026	3437	4232	119	100			42	108	9.6	51.1	38.9	
Visby 4750 2839 3794 112 100 42 106 7.8 50.1 38.5 WRH 350 4768 113 100 44 107 8.6 50.1 38.9 DuPont Pioneer 46W94 4547 107 100 44 106 8.6 49.9 38.0 46W94 4547 101 100 44 106 8.6 49.9 38.0 d6W99 4256 101 100 44 107 9.7 50.8 38.9 High Plains Crop Development 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7341 4205 2846 3526 93 100	Sitro	4725	3107	3916	112	100			43	107	11.0	49.2	39.6	
WRH 350 4768 113 100 44 107 8.6 50.7 38.9 DuPont Pioneer 46W94 4547 107 100 44 106 8.6 49.9 38.0 46W99 4256 101 100 44 106 8.6 49.9 38.0 High Plains Crop Development Claremore 3576 2566 3031 85 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 44 109 8.2 50.9 37.6 Kansas State University K K 4205 2846 3526 93 100 47 108 9.9 50.6 37.4	Ulura	3488			82	100			49	106	8.7	49.8	39.9	
DuPont Pioneer 46W94 4547 107 100 44 106 8.6 49.9 38.0 46W99 4256 101 100 44 107 9.7 50.8 38.9 High Plains Crop Development 44 107 9.7 50.8 38.9 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7228 3412 2650 3031 81 100 44 109 8.2 50.9 37.6 Kansas State University Kiowa 3947 2763 3355 93 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 48 109 8.0 50.4	Visby	4750	2839	3794	112	100			42	106	7.8	50.1	38.5	
46W94 4547 107 100 44 106 8.6 49.9 38.0 46W99 4256 101 100 44 107 9.7 50.8 38.9 High Plains Crop Development Claremore 3576 2566 3071 85 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7241 4205 2846 3526 99 100 44 109 8.2 50.9 37.4 Kansas State University Kiowa 3947 2763 3355 93 100 48 109 8.4 50.9 37.4 KS4083 4161 <th< td=""><td></td><td>4768</td><td></td><td></td><td></td><td>100</td><td></td><td></td><td>44</td><td>107</td><td></td><td>50.7</td><td>38.9</td></th<>		4768				100			44	107		50.7	38.9	
46W99 4256 101 100 44 107 9.7 50.8 38.9 High Plains Crop Develorment Claremore 3576 2566 3071 85 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7341 4205 2846 3526 99 100 44 109 8.2 50.9 37.6 Kansas State University Kiowa 3947 2763 3355 93 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 48 109 8.0 50.4 39.2 KS4564 <td< td=""><td>DuPont Pioneer</td><td>,</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	DuPont Pioneer	,												
46W99 4256 101 100 44 107 9.7 50.8 38.9 High Plains Crop Development Claremore 3576 2566 3071 85 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7341 4205 2846 3526 99 100 44 109 8.2 50.9 37.6 Kansas State University Kiowa 3947 2763 3355 93 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 48 109 8.0 50.4 39.2 KS4084 <th< td=""><td>46W94</td><td>4547</td><td></td><td></td><td>107</td><td>100</td><td></td><td></td><td>44</td><td>106</td><td>8.6</td><td>49.9</td><td>38.0</td></th<>	46W94	4547			107	100			44	106	8.6	49.9	38.0	
Claremore 3576 2566 3071 85 100 41 114 10.1 50.6 37.9 HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7341 4205 2846 3526 99 100 44 109 8.2 50.9 37.6 Kansas State University Kiowa 3947 2763 3355 93 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 48 109 8.4 50.9 37.4 KS4083 4161 2733 3447 98 100 48 109 8.0 50.4 39.2 KS4564 4092	46W99	4256			101	100			44	107	9.7	50.8	38.9	
HPX-7228 3412 2650 3031 81 100 42 106 9.1 48.0 38.7 HPX-7341 4205 2846 3526 99 100 44 109 8.2 50.9 37.6 Kansas State University V V V V V V V V V Kiowa 3947 2763 3355 93 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 48 109 8.0 50.4 39.2 KS4428 4311 2612 3462 102 100 43 106 8.4 51.1 38.9 Riley 4429 2281 3355 105 100 43	High Plains Cro	p Develo	opment											
HPX-734142052846352699100441098.250.937.6Kansas State UniversityKiowa39472763335593100471089.950.637.4KS408341612733344798100481098.450.937.4KS4428431126123462102100481098.050.439.2KS4564409297100431068.451.138.9Riley442922813355105100431078.549.638.5Sumner34332131278281100441098.050.937.7MOMONTChrome413526693402981004310810.950.140.0Hybrirock514922283688122100451078.350.837.8MH06E10435727443551103100461098.450.838.9	Claremore	3576	2566	3071	85	100			41	114	10.1	50.6	37.9	
Kansas State University Kiowa 3947 2763 3355 93 100 47 108 9.9 50.6 37.4 KS4083 4161 2733 3447 98 100 48 109 8.4 50.9 37.4 KS4083 4161 2733 3447 98 100 48 109 8.4 50.9 37.4 KS4428 4311 2612 3462 102 100 48 109 8.0 50.4 39.2 KS4564 4092 97 100 43 106 8.4 51.1 38.9 Riley 4429 2281 3355 105 100 43 106 8.4 51.1 38.9 Sumner 3433 2131 2782 81 100 41 106 8.8 50.6 37.8 Wichita 4156	HPX-7228	3412	2650	3031	81	100			42	106	9.1	48.0	38.7	
Kiowa39472763335593100471089.950.637.4KS408341612733344798100481098.450.937.4KS4428431126123462102100481098.050.439.2KS4564409297100431068.451.138.9Riley442922813355105100431078.549.638.5Sumner34332131278281100411068.850.637.8Wichita41562431329398100441098.050.937.7MOMONTChrome413526693402981004310810.950.140.0Hybrirock514922283688122100451078.350.837.8MH06E10435727443551103100461078.851.037.4MH07J145324126100461098.450.838.9	HPX-7341	4205	2846	3526	99	100			44	109	8.2	50.9	37.6	
KS40834161 2733 344798100481098.450.937.4KS4428431126123462102100481098.050.439.2KS4564409297100431068.451.138.9Riley 4429 22813355105100431078.549.638.5Sumner34332131278281100411068.850.637.8Wichita41562431329398100441098.050.937.7MOMONTChrome413526693402981004310810.950.140.0Hybrirock514922283688122100451078.350.837.8MH06E10435727443551103100461078.851.037.4MH07J145324126100461098.450.838.9	Kansas State U	niversity	1											
KS4428 4311 2612 3462 102 100 48 109 8.0 50.4 39.2 KS4564 4092 97 100 43 106 8.4 51.1 38.9 Riley 4429 2281 3355 105 100 43 106 8.4 51.1 38.9 Sumner 3433 2131 2782 81 100 41 106 8.8 50.6 37.8 Wichita 4156 2431 3293 98 100 44 109 8.0 50.9 37.7 MOMONT Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 1	Kiowa	3947	2763	3355	93	100			47	108	9.9	50.6	37.4	
KS4564 4092 97 100 43 106 8.4 51.1 38.9 Riley 4429 2281 3355 105 100 43 107 8.5 49.6 38.5 Sumner 3433 2131 2782 81 100 41 106 8.8 50.6 37.8 Wichita 4156 2431 3293 98 100 44 109 8.0 50.9 37.7 MOMONT Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 103 100 46 107 8.8 51.0 37.4 MH07J14 5324 12	KS4083	4161	2733	3447	98	100			48	109	8.4	50.9	37.4	
Riley 4429 2281 3355 105 100 43 107 8.5 49.6 38.5 Sumner 3433 2131 2782 81 100 41 106 8.8 50.6 37.8 Wichita 4156 2431 3293 98 100 44 109 8.0 50.9 37.7 MOMONT Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 103 100 46 107 8.8 51.0 37.4 MH07J14 5324 126 100 46 109 8.4 50.8 38.9	KS4428	4311	2612	3462	102	100			48	109	8.0	50.4	39.2	
Summer 3433 2131 2782 81 100 41 106 8.8 50.6 37.8 Wichita 4156 2431 3293 98 100 44 109 8.0 50.9 37.7 MOMONT Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 103 100 46 107 8.8 51.0 37.4 MH07J14 5324 126 100 46 109 8.4 50.8 38.9	KS4564	4092			97	100			43	106	8.4	51.1	38.9	
Summer 3433 2131 2782 81 100 41 106 8.8 50.6 37.8 Wichita 4156 2431 3293 98 100 44 109 8.0 50.9 37.7 MOMONT Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 103 100 46 107 8.8 51.0 37.4 MH07J14 5324 126 100 46 109 8.4 50.8 38.9	Riley	4429	2281	3355	105	100			43	107	8.5	49.6	38.5	
Wichita 4156 2431 3293 98 100 44 109 8.0 50.9 37.7 MOMONT 44 109 8.0 50.9 37.7 Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 103 100 46 107 8.8 51.0 37.4 MH07J14 5324 126 100 46 109 8.4 50.8 38.9		3433	2131		81	100			41		8.8	50.6	37.8	
MOMONT Chrome 4135 2669 3402 98 100 43 108 10.9 50.1 40.0 Hybrirock 5149 2228 3688 122 100 45 107 8.3 50.8 37.8 MH06E10 4357 2744 3551 103 100 46 107 8.8 51.0 37.4 MH07J14 5324 126 100 46 109 8.4 50.8 38.9	Wichita		2431		98	100			44	109		50.9		
Hybrirock514922283688122100451078.350.837.8MH06E10435727443551103100461078.851.037.4MH07J145324126100461098.450.838.9	MOMONT													
MH06E10435727443551103100461078.851.037.4MH07J145324126100461098.450.838.9	Chrome	4135	2669	3402	98	100			43	108	10.9	50.1	40.0	
MH06E10435727443551103100461078.851.037.4MH07J145324126100461098.450.838.9	Hybrirock	5149	2228	3688	122	100			45	107	8.3	50.8	37.8	
MH07J14 5324 126 100 46 109 8.4 50.8 38.9			2744			100								
	MH07J14	5324				100				109		50.8	38.9	
					117									

Table 22. Results for the 2012 National Winter Canola Variety Trial at Fai
--

				Yield (% of				Plant	50%		Test	
Name		Yield (lb	/a)	test avg.)	Win	ter survi	val (%)	height	bloom	Moisture	weight	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(DOY)	(%)	(lb/bu)	(%)
Monsanto / DE	KALB											
DKW41-10	3196	1796	2496	76	100			36	104	10.8	50.1	36.7
DKW44-10	3915	2265	3090	93	100			39	108	8.2	50.4	36.4
DKW46-15	3548	2140	2844	84	100			40	110	8.4	49.4	40.3
DKW47-15	3839	2418	3129	91	100			44	108	8.9	49.2	37.3
Technology Cr	ops Inter	national										
Rossini	4025	2742	3383	95	100			43	103	9.2	48.7	38.7
TCI805	4273			101	100			47	109	8.9	50.2	36.7
TCI806	4441			105	100			45	106	8.2	50.7	37.1
University of lo	daho											
05.UI.5.6.33	3836			91	100			44	109	9.3	49.6	38.3
06.UIWC.1	4432			105	100			42	107	8.5	51.2	36.9
Amanda	4210	2304	3257	100	100			46	109	8.6	51.1	38.5
Durola	3798	2573	3186	90	100			44	109	9.1	50.2	40.8
Virginia State	University	1										
Virginia	3910	2685	3298	92	100			42	107	8.6	49.8	38.0
VSX-3	4002	2974	3488	95	100			37	107	9.2	49.0	37.0
Mean	4231	2517			100			44	107	8.9	50.2	38.4
CV	14	19			0			4		11.6	2.0	3.4
LSD (0.05)	977	770			NS			3		1.6	1.6	NS

Goodwell, Oklahoma

Rick Kochenower Oklahoma State University

Planted:	9/20/2011 at 6 lb/a in 7.5-in. rows
Swathed:	5/23/2012
Harvested:	5/30/2012
Herbicides:	None
Insecticides:	None
Irrigation:	11 in.
Previous Crop:	Fallow
Soil Test:	NA
Fertilizer:	200-30-0 lb N-P-K fertilizer in fall
Soil Type:	Richfield clay loam
Elevation:	3239 ft Latitude: 36° 36'N
Comments:	Excellent winter canola yields.

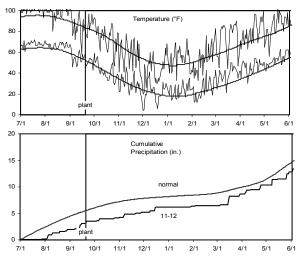
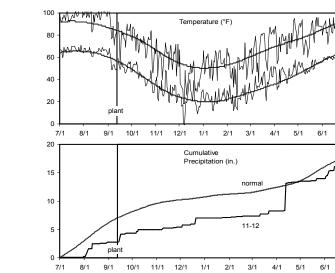


Table 23. Results for the 2012 National Winter Canola Variety Trial at Goodwell, OK

				Yield (% of	í		·	Plant		Test		
Name		Yield (lb	o/a)	test avg.)	Win	ter surv	ival (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Croplan by WinF	ield								<u>x</u>	· · · ·		`
HyClass 115W	2088	1482	1785	99				39	5.3	47.8	21.9	39.8
HyClass 125W	2066	1726	1896	98				37	5.6	46.8	20.7	39.9
HyClass 154W	1760	1388	1574	83				37	6.1	46.7	22.8	39.0
DL Seeds Inc. / F	Rubisco	Seeds L	LC									
Baldur	2310	1676	1993	109				36	5.6	48.8	21.8	38.6
Dynastie	1805	1905	1855	85				39	5.4	46.7	20.5	41.2
Flash	1474	1561	1517	70				42	5.7	44.9	20.3	40.0
Hornet	1843	1802	1822	87				45	5.7	47.8	20.2	41.9
NPZ 0903	2223			105				35	5.4	48.5	20.6	39.9
NPZ 1005	2123			100				38	5.3	48.6	20.8	40.0
Rumba	2328			110				38	5.7	49.4	20.7	40.8
Safran	2394	2084	2239	113				39	5.2	47.2	21.6	39.8
Sitro	2072	1734	1903	98				38	5.7	47.7	21.3	39.4
Ulura	2101			99				41	6.0	48.4	20.6	41.4
Visby	1800	2018	1909	85				39	6.2	49.1	19.6	41.4
WRH 350	2139			101				41	5.2	47.7	20.4	39.6
DuPont Pioneer												
46W94	2656			126				37	5.4	48.6	21.3	39.1
46W99	1985			94				37	6.3	49.2	22.4	39.0
High Plains Crop	Develo	opment										
Claremore	1995	1516	1756	94				40	6.1	48.9	20.0	41.0
HPX-7228	2223	1864	2044	105				38	5.6	49.7	21.8	37.7
HPX-7341	2055	1760	1907	97				38	5.7	49.3	19.8	40.6
Kansas State Un	iversity											
Kiowa	2293	1764	2028	109				43	5.7	47.3	19.9	40.0
KS4083	2156	1548	1852	102				45	6.0	47.9	21.0	40.5
KS4428	2223	1667	1945	105				41	5.6	48.4	19.8	41.1
KS4564	2081			98				36	5.8	49.3	22.2	39.4
Riley	2224	1979	2102	105				36	5.8	48.4	20.6	41.1
Sumner	2219	1735	1977	105				33	5.8	48.5	21.5	37.6
Wichita	2255	1798	2026	107				39	5.9	48.9	21.4	39.6
MOMONT												
Chrome	2474	1944	2209	117				37	5.5	49.3	19.7	41.0
Hybrirock	2349	1510	1930	111				36	5.7	48.3	20.1	42.0
MH06E10	2328	1397	1862	110				39	5.7	48.1	19.5	41.3
MH07J14	1825			86				39	5.6	46.8	20.0	39.9
MH09H19	2294			109				36	5.7	47.5	21.2	38.2

				Yield (% of				Plant		Test		
Name		Yield (lb	/a)	test avg.)	Win	ter survi	val (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	2197	1207	1702	104				32	5.5	50.4	21.0	40.8
DKW44-10	2451	2222	2336	116				38	5.4	48.6	19.8	40.3
DKW46-15	1985	1793	1889	94				36	6.3	49.0	21.1	40.3
DKW47-15	1886	1247	1567	89				39	5.5	47.8	21.0	41.0
Technology Cr	ops Inter	national										
Rossini	1600	1482	1541	76				35	5.8	46.5	20.4	39.9
TCI805	1863			88				39	5.4	47.9	20.8	39.5
TCI806	1856			88				37	5.2	47.4	20.7	40.2
University of lo	daho											
05.UI.5.6.33	1941			92				38	5.6	48.4	19.5	40.6
06.UIWC.1	2146			102				33	5.7	49.1	21.4	39.0
Amanda	2014	2091	2052	95				38	5.9	49.0	21.4	40.7
Durola	2197	2052	2124	104				38	6.1	47.4	22.5	38.9
Virginia State I	University	,										
Virginia	2274	2030	2152	108				35	5.3	48.4	22.3	39.3
VSX-3	2470	2033	2251	117				37	5.9	47.8	21.3	39.5
Mean	2113	1690						38	5.7	48.2	20.9	40.0
CV	11	21						5	6.9	1.7	6.1	3.0
LSD (0.05)	364	579						3	0.6	1.4	NS	NS

Etter, Texas



. 7/1

7/1

Table 24. Results for the 2012 National Winter Canola Variety Trial at Etter, TX

85-0-0-14 lb N-P-K-S fertilizer in spring

Above-normal tempertures and below-

Latitude: 35° 59'N

Calvin Trostle

Planted:

Harvested:

Herbicides:

Insecticides:

Previous Crop:

Irrigation:

Soil Test:

Fertilizer:

Soil Type:

Elevation:

Comments:

Texas A&M University

9/12/2011

6/13/2012

None Warrior T

20 in.

Fallow

3450 ft

Sherm clay loam

normal precipitation.

NA

				Yield (% of				Plant		Test		
Name		Yield (lb	/a) ¹	test avg.)	Wir	nter survi	val (%)	height	Bloom ²	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Croplan by WinFi	ield											
HyClass 115W	1545	840	1192	77				30	27	48.9		
HyClass 125W	1624	980	1302	81				32	30	51.0		
HyClass 154W	1968	1310	1639	98				37	10	52.4		
DL Seeds Inc. / R	ubisco S	Seeds LL	C									
Baldur	2133	1454	1793	106				36	30	52.9		
Dynastie	2952			147				34	27	50.9		
Flash	1897			95				36	25	52.5		
Hornet	2338			117				38	22	51.4		
Rumba	1970			98				32	70	52.0		
Safran	2519	1552	2036	126				35	18	51.8		
Sitro	2393	1225	1809	119				36	60	52.4		
Ulura	1620			81				36	50	51.2		
Visby	2674			134				37	52	52.0		
WRH 350	2317			116				34	33	51.6		
DuPont Pioneer												
46W94	2045			102				36	32	52.2		
46W99	1903			95				32	47	50.9		
High Plains Crop	Develop	ment										
Claremore	1935			97				36	2	52.4		
Kansas State Uni	versity											
Riley	1908	1352	1630	95				31	27	50.7		
Sumner	1905	1366	1636	95				34	28	52.0		
Wichita	1884	924	1404	94				32	22	45.5		
MOMONT												
Chrome	2781			139				39	28	52.2		

Table 24. Results for the 2012 National Winter Canola Variety Trial at Etter, TX

				Yield (% of				Plant		Test		
Name		Yield (lb	/a) ¹	test avg.)	Wir	nter survi	val (%)	height	Bloom ²	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DE	KALB											
DKW41-10	1198	1141	1170	60				27	58	50.6		
DKW44-10	1206	1063	1134	60				31	18	51.2		
DKW46-15	1431	1228	1330	71				27	18	44.5		
DKW47-15	1418	996	1207	71				34	17	51.8		
Technology Cr	ops Interna	ational										
Rossini	2507	1425	1966	125				34	68	47.3		
Mean	2003	1232						34	33	50.9		
CV	30	24								7.5		
LSD (0.05)	669	317								NS		

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

²Percentage of current flowers on plant that appear to be be flowering on 3/30/2012.

Lubbock, Texas

Texas A&M L	Iniversity	100
		80
Planted:	9/12/2011	60
Harvested:	6/13/2012	
Herbicides:	None	40
Insecticides:	Warrior T	20
Irrigation:	18 in.	
Previous Crop	p: Fallow	0
Soil Test:	NA	20
Fertilizer:	85-0-0-14 lb N-P-K-S fertilizer in spring	
Soil Type:	Amarillo fine sandy loam	15
Elevation:	3240 ft Latitude: 33° 41'N	
	Above-normal temperatures and well below-normal precipitation.	10

Calvin Trostle

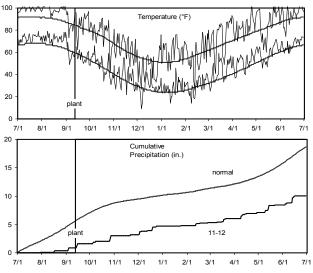


Table 25. Results for the 2012 National Winter Canola Variety Trial at Lubbock, TX

				Yield (% of				Plant		Test		
Name		Yield (lb/	'a) ¹	test avg.)	Wir	nter survi	val (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Croplan by WinFig	eld											
HyClass 115W	1943	1254	1599	82				41		50.6		
HyClass 125W	1906	1369	1638	81				35		48.5		
HyClass 154W	2374	1348	1861	100				41		51.5		
DL Seeds Inc. / Ru	ubisco S	eeds LLC	2									
Baldur	2235	1733	1984	94				39		52.4		
Dynastie	3072			130				41		51.8		
Flash	2696			114				45		51.5		
Hornet	1872			79				43		52.2		
NPZ 0903	2912			123				41		53.2		
NPZ 1005	2649			112				45		52.7		
Rumba	2764			117				41		52.6		
Safran	2910	1966	2438	123				41		51.6		
Sitro	2660	1709	2185	112				41		51.4		
Ulura	2579			109				45		52.0		
Visby	3266			138				43		52.2		
WRH 350	2797			118				43		50.5		
DuPont Pioneer												
46W94	2800			118				47		51.8		
46W99	2726			115				39		51.6		
High Plains Crop	Develop	ment										
Claremore	1809			76				41		49.8		
HPX-7228	2763			117				37		52.0		
HPX-7341	1995			84				35		51.2		
Kansas State Univ	versity											
Kiowa	2073			88				37		50.9		
KS4083	1462			62				43		50.4		
KS4428	2831			120				43		52.1		
KS4564	2099			89				35		50.8		
Riley	2380	1578	1979	101				37		50.7		
Sumner	2531	1416	1973	107				39		51.9		
Wichita	2638	1525	2081	111				41		51.3		
MOMONT												
Chrome	2764			117				43		51.8		
Hybrirock	2857			121				41		52.2		
MH06E10	3123			132				47		52.5		
MH07J14	2160			91				39		50.1		
MH09H19	2700			114				41		51.9		

Table 25. Results for the 2012 National Winter C	Canola Variet	/ Trial at Lubbock TX
Table 25. Results for the 2012 National Willer C	Sanola vallety	

				Yield (% of	-			Plant		Test		
Name		Yield (lb	/a) ¹	test avg.)	Win	ter survi	val (%)	height	Moisture	weight	Protein	Oil
	2012	2011	2-yr.	2012	2012	2011	2-yr.	(in.)	(%)	(lb/bu)	(%)	(%)
Monsanto / DEP	(ALB											
DKW41-10	1292	1115	1203	55				33		49.3		
DKW44-10	1413	1277	1345	60				35		50.2		
DKW46-15	1852	1354	1603	78				33		49.5		
DKW47-15	1949	1258	1603	82				37		50.2		
Technology Cro	ops Interna	ational										
Rossini	3346	1807	2577	141				43		52.6		
TCI805	2174			92				47		51.5		
TCI806	2584			109				47		51.4		
University of Ida	aho											
05.UI.5.6.33	1896			80				41		49.3		
06.UIWC.1	2361			100				39		51.0		
Amanda	1972			83				39		52.0		
Durola	2426			102				41		50.3		
Virginia State U	niversity											
Virginia	1475			62				31		49.3		
VSX-3	1460			62				37		49.2		
Mean	2368	1512						40		51.2		
CV	22	20								2.9		
LSD (0.05)	495	239								1.7		

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

¹Use yield data with caution. A CV above 20 indicates higher experimental error. Make variety selection decisions based on more than one year's data.

Table 26. Great Plains Region Summary Table

		Number of		Number of			Number of		Number of
Name	Yield	observations	Oil	observations	Name	Yield	observations	Oil	observations
	(lb/a)		(%)			(lb/a)		(%)	
Croplan by Win	Field				MOMONT				
HyClass 115W	1822	52	38.9	52	Chrome	2535	30	40.4	28
HyClass 125W	1933	20	38.9	18	Hybrirock	2475	27	40.1	26
JyClass 154W	1864	71	37.8	70	MH06E10	2378	27	39.5	26
DL Seeds Inc. /	Rubisco	Seeds LLC			MH07J14	2903	11	40.1	10
Baldur	1980	69	38.6	68	MH09H19	2973	11	39.3	10
Dynastie	2527	29	40.5	27	Monsanto / DE	KALB			
Flash	2060	71	39.0	70	DKW41-10	1580	55	37.7	54
Hornet	2433	19	39.1	17	DKW44-10	2029	20	37.3	18
NPZ 0903	2919	9	41.1	8	DKW46-15	1819	55	39.8	54
NPZ 1005	2869	9	41.2	8	DKW47-15	1813	55	38.7	54
Rumba	2605	12	39.3	10	Technology Cr	ops Intern	ational		
Safran	2379	58	39.3	57	Rossini	2400	19	39.6	17
Sitro	2246	72	39.0	71	TCI805	2335	12	39.1	11
Ulura	2365	12	41.1	9	TCI806	2595	12	38.1	11
Visby	2272	51	39.3	49	University of Id	laho			
WRH 350	2767	12	39.3	10	05.UI.5.6.33	2319	11	38.5	10
DuPont Pioneer					06.UIWC.1	2385	11	37.7	10
46W94	2578	12	40.2	10	Amanda	2257	17	38.5	16
46W99	2323	12	39.8	9	Durola	2203	17	41.2	16
High Plains Cro	p Develo	oment			Virginia State L	Iniversity			
Claremore	1912	52	38.6	49	Virginia	1849	65	38.0	64
HPX-7228	2402	28	39.3	27	VSX-3	2384	15	37.9	14
HPX-7341	2278	28	39.6	27	Mean	1899	74	38.7	73
Kansas State U	niversity								
Kiowa	1905	67	38.0	68	Data averaged of	over a 6 ye	ar period from 20	07 - 20	12.
KS4083	2331	16	38.3	15	-				
<s4428< td=""><td>2495</td><td>15</td><td>38.8</td><td>14</td><td>¹Number of mea</td><td>in observat</td><td>ions, not average</td><td>value o</td><td>of observations</td></s4428<>	2495	15	38.8	14	¹ Number of mea	in observat	ions, not average	value o	of observations
KS4564	2350	9	40.2	8	per entry.		, .		
Riley	2167	56	39.9	54					
Sumner	1765	71	38.6	71					
Wichita	1911	74	38.4	73					

Table 27. Field Ratings for Resistance to Blackleg (Leptosphaeria maculans) National Winter Canola Variety Trial, Lake Carl Blackwell, OK

Name	Incide			erity ²	Name		lence		erity
	2012	2011	2012	2011		2012	2011	2012	2011
Croplan by WinFiel	d				DuPont Pioneer				
HyCLASS 115W	82	59	1.9	1.6	46W94	88		2.3	
HyCLASS 125W	65	82	1.5	2.5	46W99	66		1.7	
HyCLASS 125W	69	80	1.5	2.5	400099	00		1.7	
11y0LA33 134W	03	00	1.2	2.0	Technology Crops	Internations			
DL Seeds Inc. / Rub	nisco Soods				Rossini	62	76	0.4	2.3
Baldur	51 51	73	0.9	1.9	TCI805	80	97	1.8	3.5
Dynastie	61	75	1.2	2.1	TCI806	77	90	1.9	2.9
Flash	64	83	1.2	2.6	101000		50	1.5	2.5
Hornet	77	94	1.5	3.0	Virginia State Univ	orsity			
NPZ 0903	49		1.0		Virginia	40	90	0.7	2.9
NPZ 1005	43 52		1.2		VIIgilila VSX-3	35	30 77	1.3	2.5
Rumba	68		1.6		V0X-0	55		1.5	2.5
Safran	49	73	1.3	2.1	University of Idaho	`			
Sitro	43 64	88	1.1	2.9	05.UI.5.33.6	, 72		1.2	
Ulura	23		0.4	2.5	06.UIWC.1	72		1.6	
Visby	23 66	85	0.4 1.6	2.1	Amanda	44	85	0.9	2.7
WRH 350	48		1.0	2 .1	Durola	70	75	2.0	2.7
WRIT 550	40		1.0		Duiola	70	75	2.0	2.5
High Plains Crop D	evelopment				CV	23	17	33	26.3
Claremore	53	81	0.8	2.3	LSD (0.05)	23	23	0.7	1.0
HPX-7228	42	98	0.7	3.1					
HPX-7341	66	64	1.3	1.8					
HPX-7341	66	64	1.3	1.8	¹ Percentage of plar	its with blackl	eg.		
HPX-7341 Kansas State Unive		64	1.3	1.8			•		
		64 78	1.3 1.2	1.8 2.3	¹ Percentage of plar ² Internal stem deca		•	on a scale	from 0 t
Kansas State Unive	ersity					ay from blackl	eg rated o		
Kansas State Unive KS4083	ersity 67	78	1.2	2.3	² Internal stem deca	ay from blackl ase, 1 = 25%	eg rated of the ste	em with de	cay, 2 =
Kansas State Unive KS4083 KS4428	67 65	78 70	1.2 1.2	2.3 1.6	² Internal stem deca 5 where 0 = no dise	ay from blackl ase, 1 = 25% h decay, 3 =	eg rated of the ste 75% of the	em with de e stem wit	cay, 2 = h decay
Kansas State Unive KS4083 KS4428 KS4564	67 65 49	78 70 	1.2 1.2 0.9	2.3 1.6 	² Internal stem deca 5 where 0 = no dise 50% of the stem wit	ay from blackl ase, 1 = 25% h decay, 3 = m with decay	eg rated o of the ste 75% of the	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa	67 65 49 62	78 70 71	1.2 1.2 0.9 1.2	2.3 1.6 2.1	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley	67 65 49 62 65	78 70 71 78	1.2 1.2 0.9 1.2 1.0	2.3 1.6 2.1 2.0	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita	67 65 49 62 65 42	78 70 71 78 84	1.2 1.2 0.9 1.2 1.0 0.6	2.3 1.6 2.1 2.0 2.1	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT	ersity 67 65 49 62 65 42 72	78 70 71 78 84 80	1.2 1.2 0.9 1.2 1.0 0.6 1.4	2.3 1.6 2.1 2.0 2.1 2.8	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome	ersity 67 65 49 62 65 42 72 54	78 70 71 78 84 80 92	1.2 1.2 0.9 1.2 1.0 0.6 1.4	2.3 1.6 2.1 2.0 2.1 2.8	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock	ersity 67 65 49 62 65 42 72 54 57	78 70 71 78 84 80 92 92	1.2 1.2 0.9 1.2 1.0 0.6 1.4	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10	ersity 67 65 49 62 65 42 72 54 57 68	78 70 71 78 84 80 92 92 92 100	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.2 1.2	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the stem Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10 MH07J14	67 65 49 62 65 42 72 54 57 68 51	78 70 71 78 84 80 92 92 92 100 	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.0 1.2 0.8	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7 	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the ster Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10	ersity 67 65 49 62 65 42 72 54 57 68	78 70 71 78 84 80 92 92 92 100	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.2 1.2	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the ster Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10 MH07J14	ersity 67 65 49 62 65 42 72 54 57 68 51 53	78 70 71 78 84 80 92 92 92 100 	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.0 1.2 0.8	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7 	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the ster Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10 MH07J14 MH09H19	ersity 67 65 49 62 65 42 72 54 57 68 51 53	78 70 71 78 84 80 92 92 92 100 	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.0 1.2 0.8	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7 	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the ster Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10 MH07J14 MH09H19 Monsanto / DEKAL	ersity 67 65 49 62 65 42 72 54 57 68 51 53 8	78 70 71 78 84 80 92 92 100 	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.0 1.2 0.8 0.9	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7 	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the ster Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m
Kansas State Unive KS4083 KS4428 KS4564 Kiowa Riley Sumner Wichita MOMONT Chrome Hybrirock MH06E10 MH07J14 MH09H19 Monsanto / DEKALI DKW41-10	ersity 67 65 49 62 65 42 72 54 57 68 51 53 8 8 60	78 70 71 78 84 80 92 92 100 61	1.2 1.2 0.9 1.2 1.0 0.6 1.4 1.2 1.0 1.2 0.8 0.9	2.3 1.6 2.1 2.0 2.1 2.8 2.7 2.8 3.7 1.6	² Internal stem deca 5 where 0 = no dise 50% of the stem wit 4 = 100% of the ster Bradley and Chesro	ay from blackl ase, 1 = 25% h decay, 3 = m with decay wn [2005] Fu	eg rated o of the ste 75% of the , 5 = dead ngicide ar	em with de e stem wit l plant (fro	cay, 2 = h decay m

Bold: Superior LSD group. Unless two entries differ by more than the LSD, little confidence can be placed in one being superior to the other.

Blackleg was assessed on the stubble after harvest. Disease incidence and severity were assessed by uprooting plants and examining basal cross sections of 15 stems per plot on 16 May 2012.

Temperatures in 2011-2012 were below normal in the fall and above normal from January through harvest. Rainfall was below normal in the fall and above normal from February through April. Over the entire season, rainfall was 17% below normal. The dry conditions limited foliar blackleg development to a few areas. Leaf spots became widespread during the budding and flowering stages. Heavy grazing by deer may have reduced disease development. Stem cankers reached low levels of severity by harvest.

Table 28. Seed sources for entries in the 2011-2012 National Winter Canola Variety Trial

Developer /			Release		Developer /			Release	
Marketer	Type ¹	Trait ²	Date	Maturity ³	Marketer	Type ¹	Trait ²	Date	Maturity ³
Kansas State L	•		ing Progra	m	University of Id				
Michael J. Stam	m (mjstamm@	@ksu.edu)			Dr. Jack Brown (jbrown@เ	uidaho.edu)		
KS4083	OP			F	Amanda	OP			F
KS4428	OP			Μ	Durola	OP	HEAR		М
KS4564	OP			Μ	05.UI.5.6.33	OP			М
Kiowa	OP		2008	F	06.UIWC.1	OP			М
Riley	OP		2010	M					
Sumner	OP	SU	2003	E					
Wichita	OP		1999	M	Croplan by Win	Field			
					Mark Torno (Mto	rno@land	lolakes.com)		
DL Seeds Inc. ((Developer)				HyClass 115W	OP	RR/SURT	2008	Е
Kevin McCallum	n (kevin.mccal	lum@dlsee	ds.ca)		HyClass 125W	OP	RR/SURT	2010	М
Rubisco Seeds	LLC (Market	ter)			HyClass 154W	Hyb	RR	2008	F
Claire Caldbeck	(info@rubisc	oseeds.com	ı)						
Baldur	Hyb		2004	М	Monsanto / DEł	(ALB			
Dynastie	Hyb		2007	F	James Bosch (ja	mes.c.bo	sch@monsant	to.com)	
Flash	Hyb		2007	F					
Hornet	Hyb		2008	F	DKW41-10	OP	RR	2008	Е
NPZ 0903	Hyb			Μ	DKW44-10	OP	RR	2009	М
NPZ 1005	Hyb			Μ	DKW46-15	OP	RR/SURT	2008	М
Rumba	Hyb			Μ	DKW47-15	OP	RR/SURT	2008	F
Safran	Hyb		2008	М					
Sitro	Hyb		2007	E					

Virginia State University Agricultural Experiment Station Dr. Harbans Bhardwaj (hbhardwj@vsu.edu)

Virginia	OP	 2003	М
VSX-3	OP	 	М

Technology Crops International

Jeff Riddle (jriddle@techcrops.com)

Rossini	н	HEAR	2009	Е
TCI805	н	HEAR		E
TCI806	Н	HEAR		М

¹OP = open pollinated, Hyb = hybrid

²SU & SURT = sulfonylurea carryover tolerant; CL = Clearfield (imidazolinone resistant); IMI = imidazolinone carryover tolerant; RR = Roundup Ready

³E=Early; M=Medium; F=Full

⁴Durola has low glucosinolate meal (less than 30 µmol glucosinolates per gram of defatted meal).

⁵HEAR = High Erucic Acid Rapeseed. Contains greater than 2% erucic acid in the processed oil. Can be used only for industrial purposes. HEAR is not canola.

Baldur	Hyb		2004	М
Dynastie	Hyb		2007	F
Flash	Hyb		2007	F
Hornet	Hyb		2008	F
NPZ 0903	Hyb			Μ
NPZ 1005	Hyb			Μ
Rumba	Hyb			Μ
Safran	Hyb		2008	Μ
Sitro	Hyb		2007	E
Ulura	Hyb			Μ
Visby	Hyb		2008	E
WRH 350	Hyb	CL		М

High Plains Crop Development

Dr. Charlie Rife (charlie@highplainscd.com)

Claremore	OP	IMI	2011	F
HPX-7228	OP			М
HPX-7341	OP			М

MOMONT, France

Dr. Thierry Momont (tmomont@momont.com)

Chrome	Hyb	 2010	Μ	
Hybrirock	Hyb	 2011	Μ	
MH06E10	Hyb	 	Μ	
MH07J14	Hyb	 	Μ	
MH09H19	Hyb	 	М	

DuPont Pioneer

William McClure (william.mcclure@pioneer.com)

46W94	Hyb	RR	2011	М
46W99	Hyb	RR	2011	М

Senior Authors

Michael Stamm, Dept. of Agronomy, Kansas State University, Manhattan Scott Dooley, Dept. of Agronomy, Kansas State University, Manhattan

Other Contributors

Sangu Angadi, New Mexico State University, Clovis Rick Kochenower, Oklahoma State University, Goodwell Abdel Berrada, Colorado State University, Yellow Jacket Kevin Larson, Colorado State University, Walsh Harbans Bhardwaj, Virginia State University, Petersburg David Lee, Rutgers University, Woodstown, New Jersey Brooke Bohannon, Montana State University, Kalispell Edwin Lentz, The Ohio State University, Findlay Chuck Mansfield, Vincennes University, Vincennes Brian Caldbeck, Caldbeck Consulting, Philpot, Kentucky Ernst Cebert, Alabama A&M University, Normal Jerry Nachtman, University of Wyoming, Lingle Gary Cramer, Kansas State University, Wichita Peter Nelson, BioDimensions, Memphis, Tennessee John Damicone, Oklahoma State University, Stillwater Randall Nelson, Kansas State University, Belleville Heather Darby, University of Vermont, St. Albans Mick O'Neill and Curtis Owen, New Mexico State University, Farmington Jeffery Davidson, Colorado State University, Rocky Ford Calvin Pearson, Colorado State University, Fruita Don Day, John Gassett, Mitch Gilmer, and Gary Ware, University of Georgia, Griffin Steve Quiring, University of Minnesota, Lamberton Dennis Delaney, Auburn University, Auburn, Alabama Larry Reichenberger, Andale, Kansas Paul DeLaune, Texas AgriLife Research Service, Vernon Charlie Rife, High Plains Crop Development, Torrington, Wyoming Dean Elvin, Marquette, Kansas Michael Schmidt and Cathy Schmidt, Southern Illinois Robert Flynn, New Mexico State University, Artesia University, Carbondale Russell Freed, Michigan State University, East Lansing Robert Schrock, Kiowa, Kansas Chad Godsey, Godsey Precision Ag, Stillwater Wade Thomason, Virginia Tech University, Blacksburg Johnathon Holman, Kansas State University, Garden City Calvin Trostle, Texas AgriLife Extension Service, Lubbock Burton Johnson, North Dakota State University, Fargo Dennis West, University of Tennessee, Knoxville Jerry Johnson, Colorado State University, Ft. Collins William Wiebold and Howard Mason, University of Missouri, Bruce Kirksey, Agricenter International, Memphis, Tennessee Columbia

Copyright 2013 Kansas State University Agricultural Experiment Station and Cooperative Extension Service. These materials may be freely reproduced for educational purposes. All other rights reserved. In each case, give credit to the author(s), 2012 National Winter Canola Variety Trial, Kansas State University, April 2013. Contribution no. 13-188-S from the Kansas Agricultural Experiment Station.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available at: www.ksre.ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service