

# North Dakota Canola Variety Trial Results for 2013 and Selection Guide

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## Introduction

Canola is a major oil crop in the northern Great Plains, particularly in North Dakota. In 2013, North Dakota accounted for approximately 67 percent of the canola acreage planted in the U.S. This publication summarizes canola variety performance at the various North Dakota State University Research Extension Centers. The relative performance of the varieties and hybrids is presented in table form. Give special attention to yield results of those trials nearest to your production area when evaluating varieties or hybrids in these trials. Also, attempt to view yield averages of several years rather than using only one year's data as a determining factor. In addition, consider other agronomic characteristics, such as maturity, lodging score and oil percentages, if available. Research specialists and technicians helped with the field work and data compilation. The assistance given by many secretaries in typing respective portions of the document is very much appreciated. A special thank you goes to Lisa Johnson, Extension Plant Sciences secretary, for assisting in the compilation of this publication.

## 2013 Growing Season Update

Canola fieldwork began by the end of April. Planting was later than normal, and by May 6, only 1 percent of the acres had been planted, compared with the average (2008-2012) of 19 percent on the same date. On May 6, early in the growing season, only 3 percent of North Dakota acres were reported to have an inadequate top soil moisture supply. Early canola stands varied across the region, depending on soil moisture availability and rainfall after planting. Many acres intended for canola production did not get seeded due to excess soil moisture. By July 8, 39 percent of the canola crop was flowering, which compared with the 2008-2012 average of 56 percent. By the third week in July, the North Dakota Agricultural Statistics Service reported the canola crop condition as 63 percent "good" and 13 percent "excellent." Hot growing conditions during and after flowering, with reduced available soil moisture for crop growth, moved the crop toward maturity. Only 13 percent of the canola acres were harvested on Aug. 26, and 55 percent of the crop was harvested by Sept. 9. By Sept. 30, 85 percent of the canola was harvested. In general the 2013 season started late and ended late.

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**Table 1. Canola Production, North Dakota 2008-2013.**

Year	Acres Planted	Acres Harvested	Yield Per Acre	Production
	------(1,000 Acres)-----		(lb)	(1,000 lb)
2008	910	895	1,460	1,306,700
2009	730	725	1,840	1,334,000
2010	1,280	1,270	1,720	2,184,400
2011	890	850	1,500	1,275,000
2012	1,460	1,455	1,400	2,037,000
2013	920	910	--	--
Average	1,032	1,018	1,584	1,627,420

Source: North Dakota Agricultural Statistics Service – USDA.

**Table 2. April-September 2013 Average Temperature and Precipitation Rankings for Select North Dakota Locations.**

City	Temperature Ranking	Precipitation Ranking
Bowman	49th Warmest	The Wettest
Bismarck	67th Coolest	8th Wettest
Cavalier	21st Warmest	38th Wettest
Fargo	37th Warmest	4th Wettest
Minot Exp. Station	23rd Warmest	The Wettest
Williston Exp. Station	37th Coolest	3rd Wettest
North Dakota Average	<b>45th Coolest (119 years)</b>	<b>8th Wettest (119 years)</b>

Source: Adnan Akyüz, NDSU, North Dakota state climatologist.

### About This Publication

Variety trial data from all NDSU Research Extension Centers for all crops can be found at [www.ag.ndsu.edu/varietytrials](http://www.ag.ndsu.edu/varietytrials). The agronomic data presented in this publication are from replicated research plots using experimental designs that enable the use of statistical analysis. The LSD (least significant difference) numbers beneath the columns in tables are derived from the statistical analyses and only apply to the numbers in the column in which they appear. If the difference between two varieties exceeds the LSD value, it means that with 90 percent probability (0.10 level), the higher-yielding variety has a significant yield advantage. If the difference between two varieties is less than the LSD value, then the variety yields are considered similar. The abbreviation NS is used to indicate “no significant difference” for that trait among any of the varieties. The CV is a measure of variability in the trial. The CV stands for coefficient of variation and is expressed as a percentage. Large CVs mean a large amount of variation that could not be attributed to differences in the varieties. In the tables, the mean indicates the average of the observations in the column. Only compare values within the table and look for trends for the desired trait among different experimental sites and years. Oil and harvest yield were adjusted to 8.5 percent moisture. Tables 4 and 5 are summary tables, with yields expressed as a percentage of the trial mean of the various trials reported in subsequent tables.

Presentation of data for the varieties tested does not imply approval or endorsement by the authors or agencies conducting the tests. NDSU approves the reproduction of any table in this publication only if no portion is deleted, appropriate footnotes are given, the order of the data is not rearranged and NDSU is credited for the data.

**Table 3. Company Name, Short Name Used in the Tables and URL With Company Information.**

Company/Brand	Short	URL
Bayer CropScience	Bayer	<a href="http://www.bayercropscience.us/products/seeds/invigor-canola/">www.bayercropscience.us/products/seeds/invigor-canola/</a>
Brett Young	Brett Young	<a href="http://www.brettyoung.ca/index.cfm">www.brettyoung.ca/index.cfm</a>
Cargill	Cargill	<a href="http://www.victorycanola.com/">www.victorycanola.com/</a>
Dekalb	Dekalb	<a href="http://www.asgrowanddekalb.com/products/Pages/default.aspx">www.asgrowanddekalb.com/products/Pages/default.aspx</a>
DuPont Pioneer	Pioneer	<a href="http://www.pioneer.com/home/site/about/products/crops/canola">www.pioneer.com/home/site/about/products/crops/canola</a>
Integra Fortified Seed	Integra	<a href="http://www.integraseed.com/products/canola.aspx">www.integraseed.com/products/canola.aspx</a>
Mycogen Seeds	Mycogen	<a href="http://www.mycogen.com/Canola/SitePages/Variety%20List.aspx">www.mycogen.com/Canola/SitePages/Variety%20List.aspx</a>
Proseed Inc.	Proseed	<a href="http://www.proseed.net/canola.php">www.proseed.net/canola.php</a>
Star Specialty	Star	<a href="http://www.northstaragri.com/ag-center/agronomy">www.northstaragri.com/ag-center/agronomy</a>
WinField Croplan	Croplan	<a href="http://www.winfield.com/Farmer/Croplan/FindSeed/Canola/default.aspx">www.winfield.com/Farmer/Croplan/FindSeed/Canola/default.aspx</a>

**Table 4. 2013 Summary of Roundup Ready Canola Varieties in North Dakota.**

Company/ Brand	Variety	Type <sup>1</sup>	Blackleg Rating <sup>2</sup>	REC Carrington	REC Hettinger	REC Langdon	REC Minot	REC Williston	Main Station <sup>3</sup>
---(Yields Expressed as a Percentage of the Trial Mean)---									
BrettYoung	6044 RR	H,TR	R	--	105	102	109	98	--
BrettYoung	6070 RR	H,TR	R	--	95	103	110	96	--
Cargill	V12-1	H,HO	R	105	106	116	119	--	--
Cargill	V12-2	H,HO	R	101	95	93	103	--	--
Cargill	v2045	H,HO	R	99	87	94	101	--	--
Cargill	v2170	H,HO	R	84	97	90	97	--	--
Croplan	HyCLASS 930	H,TR	R	89	102	112	99	91	--
Croplan	HyCLASS 955 <sup>4</sup>	H,TR	R	129	127	103	94	102	--
Croplan	HyCLASS 969	H,TR	R	91	124	101	102	99	--
Dekalb	DKL30-42	H,TR	R	104	88	98	83	106	91
Dekalb	DKL38-48	H,TR	R	96	107	97	112	96	--
Dekalb	DKL52-41	H,TR	R	--	--	--	--	--	107
Dekalb	DKL55-55	H,TR	R	104	85	96	81	103	99
Dekalb	DKL70-07	H,TR	R	120	109	101	100	111	121
Dekalb	DKL72-40	H,TR	R	81	101	94	85	117	87
Dekalb	DKL72-55	H,TR	R	--	--	--	--	--	NA
Integra	7150R	H,TR	R	73	--	98	90	95	--
Integra	7152R	H,TR	R	75	--	103	98	99	--
Mycogen	Nexera 1012 RR	H,HO	R	108	98	104	97	--	--
Mycogen	Nexera 1016 RR	H,HO	R	98	80	100	100	--	--
Pioneer	45H26	H,TR	NA	--	--	--	--	--	95
Pioneer	45S51	H,TR	NA	--	--	--	--	--	100
Proseed	CD 2	H,TR	R	122	97	103	120	--	--
Proseed	CS 1	H,TR	R	113	102	97	104	--	--
Star	Star 402	H,TR	R	107	105	105	103	94	--
Star	Star 514	H,TR	R	104	90	91	92	93	--
Trial mean in lb/a				1,242	1,619	3,391	2,486	1,811	1,864

<sup>1</sup>H = Hybrid, TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>Blackleg: R = Resistant, NA = Not Available. Blackleg rating provided by company.

<sup>3</sup>NA = Not Available.

<sup>4</sup>Hybrid has Clubroot resistance. Rating provided by company.

**Table 5. 2013 Summary of Liberty Link and Clearfield Canola Varieties in North Dakota.**

Company/ Brand	Variety	Type <sup>1</sup>	Blackleg Rating <sup>2</sup>	REC Minot	REC Langdon	REC Hettinger
(Yields Expressed as a Percentage of the Trial Mean)						
Bayer	InVigor 5440	H,LL,TR	R	104	119	--
Bayer	InVigor L120	H,LL,TR	R	101	109	--
Bayer	InVigor L130	H,LL,TR	R	95	108	--
Bayer	InVigor L156H	H,LL,HO	R	--	108	--
Bayer	InVigor L252	H,LL,TR	R	--	115	--
Croplan	VT X 121 CL	H,CL,TR	R	--	59	85
Croplan <sup>3</sup>	HyCLASS 955	H,RR,TR	R	--	103	--
Dekalb <sup>3</sup>	DKL30-42	H,RR,TR	R	--	99	--
Mycogen	CL2537357H	H,CL	NA	--	98	127
Mycogen	CL268726H	H,CL	NA	--	83	119
Mycogen	Nexera 2012 CL	H,CL,HO	MR	--	100	70
Trial mean in lb/a				2,097	3,451	890

<sup>1</sup>H = Hybrid, LL = Liberty Link, CL = Clearfield System, RR = Roundup Ready.

TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>Blackleg: R = Resistant, MR = Moderately Resistant, NA = Not Available. Blackleg rating provided by company.

<sup>3</sup>Roundup Ready checks in the trial.

**Table 6. 2013 Canola - Roundup Ready - Carrington - Authors, B. Schatz, M. Ostlie and K. Bjerke.**

Company/		Type <sup>1</sup>	First	Flower	1000 Seed		Test	Oil	Seed Yield	
Brand	Variety		Flower	Duration	Maturity	Weight	Weight	Content	2013	3-yr. Avg.
			(DAP) <sup>2</sup>	(days)	(DAP) <sup>2</sup>	(gram)	(lb/bu)	(%)	-----lb/a-----	
Cargill	V12-1	HO	43	18	81	2.79	50.9	42.3	1,307	1,622
Cargill	V12-2	HO	44	17	81	2.78	50.9	41.7	1,249	--
Cargill	v2045	HO	41	19	80	3.52	51.2	41.9	1,232	--
Cargill	v2170	HO	44	18	81	2.98	51.8	41.2	1,044	--
Croplan	HyCLASS 930	TR	42	19	78	2.76	51.2	45.6	1,101	1,711
Croplan	HyCLASS 955	TR	42	19	79	2.89	51.5	44.3	1,596	1,831
Croplan	HyCLASS 969	TR	42	20	78	2.75	51.5	43.4	1,124	--
Dekalb	DKL30-42	TR	41	20	76	3.10	52.0	42.1	1,292	1,683
Dekalb	DKL38-48	TR	42	20	78	2.75	51.9	42.4	1,187	--
Dekalb	DKL55-55	TR	42	19	79	2.78	51.2	43.7	1,286	1,753
Dekalb	DKL70-07	TR	42	20	80	2.89	51.8	42.5	1,496	1,793
Dekalb	DKL72-40	TR	43	19	80	2.76	51.5	43.5	1,006	--
Integra	7150R	TR	41	20	77	2.93	51.2	44.0	904	1,446
Integra	7152R	TR	42	19	77	3.15	51.6	42.4	933	1,385
Mycogen	Nexera 1012 RR	HO	45	19	83	2.44	52.0	39.7	1,337	1,581
Mycogen	Nexera 1016 RR	HO	44	18	80	2.66	52.4	40.9	1,217	--
Proseed	CD 2	TR	42	20	81	2.70	51.8	42.4	1,513	--
Proseed	CS 1	TR	41	20	78	3.09	51.5	42.8	1,399	--
Star	Star 402	TR	42	19	79	2.95	51.2	44.7	1,326	--
Star	Star 514	TR	42	19	78	2.80	51.0	44.9	1,290	--
Mean			42	19	79	2.87	51.5	42.8	1,242	1,645
CV %			1.4	4.8	1.6	6.4	0.5	1.5	19.8	--
LSD 0.10			0.7	1.1	1.5	0.21	0.3	0.8	297	--

Trial was planted on May 17 and harvested on Aug. 16. Previous crop was spring wheat.

<sup>1</sup>TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>DAP = Days after planting.

**Table 7. 2013 Canola - Roundup Ready - Carrington, Williston, Langdon and Prosper - Author, M. Rahman.**

Company/		Type <sup>1</sup>	2013 Seed Yield				Seed Yield		
Brand	Hybrid		Carrington	Williston	Langdon	Prosper	2011	2012	2013 <sup>1</sup>
			-----lb/a-----				-----lb/a-----		
Dekalb	DKL30-42	H, TR	1,291	1,702	2,659	1,123	2,753	2,163	1,691
Dekalb	DKL52-41	H, TR	1,927	1,223	2,675	1,369	2,478	2,012	1,990
Dekalb	DKL55-55	H, TR	1,867	--	2,560	1,099	--	2,180	1,842
Dekalb	DKL70-07	H, TR	1,529	--	3,213	2,048	--	2,347	2,263
Dekalb	DKL72-40	H, TR	1,247	--	2,502	1,139	--	2,237	1,629
Dekalb	DKL72-55	H, TR	--	1,461	3,205	988	2,400	2,133	--
Pioneer	45H26	H, TR	1,380	1,396	2,672	1,252	2,637	2,039	1,768
Pioneer	45S51	H, TR	1,241	--	2,798	1,547	2,976	2,367	1,862
Mean			1,497	1,446	2,786	1,321	2,649	2,185	1,864
CV %			--	--	--	--	--	11.4	15.5
LSD 0.10			--	--	--	--	--	211	NS

<sup>1</sup>Averaged across Carrington, Langdon and Prosper.

**Table 8. 2013 Canola - Roundup Ready - Hettinger - Authors, J. Rickertsen and R. Olson.**

Company/ Brand	Variety	Type <sup>1</sup>	Days to	Flower	Days to	Plant	Lodging <sup>2</sup>	Test	Oil	Seed Yield	
			Flower (DAP) <sup>3</sup>	Duration (days)	Mature (DAP)	Height (inch)		Weight (lb/bu)	Content (%)	2013	2-Yr. Avg.
BrettYoung	6044 RR	H,TR	48	23	92	41	0	53.0	42.5	1,696	--
BrettYoung	6070 RR	H,TR	48	23	93	40	0	52.0	43.2	1,539	1,325
Cargill	V12-1	H,HO	50	22	91	39	1	50.8	43.9	1,718	1,419
Cargill	V12-2	H,HO	50	22	92	38	0	50.6	44.0	1,533	--
Cargill	v2045	H,HO	48	22	91	37	0	50.9	44.2	1,411	1,238
Cargill	v2170	H,TR	50	23	92	36	0	50.8	44.2	1,566	1,246
Croplan	HyCLASS 930	H,TR	47	23	90	41	0	52.9	45.3	1,647	--
Croplan	HyCLASS 955	H,TR	48	22	89	41	1	52.4	45.3	2,054	1,536
Croplan	HyCLASS 969	H,TR	47	22	89	40	1	52.6	44.8	2,008	--
Dekalb	DKL30-42	H,TR	47	24	93	36	2	52.2	42.7	1,422	--
Dekalb	DKL38-48	H,TR	47	23	91	36	1	52.9	43.9	1,727	--
Dekalb	DKL55-55	H,TR	47	24	92	34	2	52.5	45.5	1,370	--
Dekalb	DKL70-07	H,TR	48	25	95	35	1	51.8	44.5	1,770	--
Dekalb	DKL72-40	H,TR	48	23	92	36	0	52.0	46.3	1,639	--
Mycogen	Nexera 1012 RR	H,HO	50	26	98	42	0	51.0	44.0	1,593	1,204
Mycogen	Nexera 1016 RR	H,HO	48	23	92	40	1	52.0	42.2	1,301	1,068
Proseed	CD 2	H,TR	47	22	89	37	1	52.7	45.0	1,570	--
Proseed	CS 1	H,TR	47	23	90	38	2	52.9	44.7	1,650	--
Star	Star 402	H,TR	48	22	90	38	0	52.6	46.8	1,700	1,293
Star	Star 514	H,TR	46	23	90	37	3	53.1	44.5	1,460	--
Mean			48	23	92	38	1	52.1	44.4	1,619	1,291
CV %			1.2	3.3	3.3	7.3	142	1.3	1.8	12.6	--
LSD 0.10			0.7	0.9	0.9	3.2	1.1	0.8	1.0	240	--

Trial was planted on May 7 and harvested on Aug. 17. Previous crop was no-till green fallow spring wheat.

<sup>1</sup>H = Hybrid, TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>Lodging: 0 = none, 9 = lying flat on the ground.

<sup>3</sup>DAP = Days after planting.

**Table 9. 2013 Canola - Clearfield - Hettinger - Authors, J. Rickertsen and R. Olson.**

Brand	Variety	Type	Days to	Flower	Days to	Plant	Lodging <sup>2</sup>	Test	Oil	Seed Yield	
			Flower (DAP) <sup>3</sup>	Duration (days)	Mature (DAP)	Height (inch)		Weight (lbs/bu)	Content (%)	2013	2-Yr. Avg.
Croplan	VT X 121 CL	H,TR	43	25	90	33	3	51.8	42.1	757	--
Mycogen	CL2537357H	H,HO	49	22	92	36	0	50.8	45.3	1,126	--
Mycogen	CL268726H	H,HO	49	22	91	34	0	51.1	45.9	1,056	--
Mycogen	Nexera 2012 CL	H,HO	47	23	92	32	1	50.5	44.4	621	672
Mean			47	23	91	34	1	51.0	44.4	890	--
CV %			0.6	2.3	0.8	2.3	51.0	1.7	1.9	14.5	--
LSD 0.10			0.4	0.7	1.0	3.2	0.6	1.1	1.1	167	--

Trial was planted on May 7 and harvested on Aug. 17. Previous crop was no-till green fallow spring wheat.

<sup>1</sup>H = Hybrid, TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>Lodging: 0 = none, 9 = lying flat on the ground.

<sup>3</sup>DAP = Days after planting.

**Table 10. 2013 Canola - Roundup Ready - Langdon - Authors, B. Hanson and T. Hakanson.**

Company/ Brand	Variety	Type <sup>1</sup>	First Flower (DAP) <sup>3</sup>	Flower Duration (days)	Plant Maturity (DAP) <sup>3</sup>	Plant Height (inch)	Oil Cover <sup>2</sup> (%)	Oil Content (%)	Seed Yield -----lb/a----- 2013 3-yr. Avg.	
Brett Young	6044 RR	H,TR	41	22	91	43	73	46.3	3,464	--
Brett Young	6070 RR	H,TR	40	20	90	43	84	45.9	3,504	2,816
Cargill	V12-1	H,HO	42	19	91	44	87	45.3	3,938	--
Cargill	V12-2	H,HO	45	19	94	42	75	43.6	3,168	--
Cargill	v2045	H,HO	40	19	88	44	85	45.8	3,176	--
Cargill	v2170	H,HO	43	21	92	43	82	45.3	3,040	--
Croplan	HyClass 930	H,TR	39	19	89	39	78	49.5	3,781	--
Croplan	HyClass 955	H,TR	41	19	89	41	78	49.0	3,481	2,818
Croplan	HyClass 969	H,TR	40	20	90	42	78	48.3	3,426	--
Dekalb	DKL30-42	H,TR	38	19	88	38	81	48.7	3,336	2,655
Dekalb	DKL38-48	H,TR	41	20	89	41	73	47.4	3,280	--
Dekalb	DKL55-55	H,TR	39	18	89	40	75	49.1	3,248	2,447
Dekalb	DKL70-07	H,TR	41	20	90	41	73	47.9	3,433	2,731
Dekalb	DKL72-40	H,TR	41	18	90	41	74	48.1	3,180	--
Integra	7150 R	H,TR	39	18	91	41	80	47.9	3,310	2,515
Integra	7152 R	H,TR	39	18	90	38	86	47.3	3,498	2,594
Mycogen	Nexera 1012 RR	H,HO	43	24	93	47	81	44.3	3,514	2,707
Mycogen	Nexera 1016 RR	H,HO	42	19	91	43	79	45.9	3,407	--
Proseed	CD 2	H,TR	42	19	91	43	80	47.0	3,485	--
Proseed	CS 1	H,TR	40	20	89	38	79	48.2	3,305	--
Star	Star 402	H,TR	41	19	92	41	78	50.4	3,545	--
Star	Star 514	H,TR	41	18	89	41	69	50.6	3,077	--
Mean			41	19	90	42	79	47.4	3,391	2,660
CV %			2.0	5.4	1.3	6.6	7.4	2.0	9.9	--
LSD 0.10			1.0	1.2	1.4	3.3	6.8	1.1	390	--

Trial was planted on May 24 and harvested on Sept. 4.

<sup>1</sup>H = Hybrid, TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>Cover - visual rating of percent area of plot covered by plant growth. This is a measure of stand and vigor. Plants were at 5- to 6-leaf stage.

<sup>3</sup>DAP = Days after planting.



**Table 11. 2013 Canola - Liberty Link and Clearfield - Langdon - Authors, B. Hanson and T. Hakanson.**

Company/ Brand	Variety	Type <sup>1</sup>	First	Flower	Plant	Cover <sup>2</sup>	Oil Content	Seed Yield		
			Flower (DAP) <sup>3</sup>	Duration (days)	Maturity (DAP) <sup>3</sup>			Height (inch)	2013	3-yr. Avg.
Bayer	InVigor 5440	H,LL,TR	41	19	92	48	85	44.0	4,094	--
Bayer	InVigor L120	H,LL,TR	40	18	91	44	91	43.8	3,758	2,604
Bayer	InVigor L130	H,LL,TR	41	19	90	48	83	44.4	3,714	2,560
Bayer	InVigor L156 H	H,LL,TR	41	20	93	45	86	44.1	3,739	--
Bayer	InVigor L252	H,LL,TR	42	19	93	47	85	46.5	3,968	--
Croplan	VT X 121 CL	H, CL, TR	39	18	90	44	53	41.4	2,019	--
Mycogen	CL25637357H	H,CL,TR	42	20	92	47	78	46.6	3,388	--
Mycogen	CL268726H	H,CL,HO	44	21	93	47	59	45.0	2,872	--
Mycogen	Nexera 2012 CL	H,CL,HO	40	18	91	42	80	45.9	3,435	2,583
Dekalb <sup>4</sup>	DKL30-42	H,RR,TR	40	19	89	39	86	46.3	3,430	--
Croplan <sup>4</sup>	HyCLASS 955	H,RR,TR	41	19	92	43	83	46.6	3,551	--
Mean			41	19	91	45	79	45.0	3,451	2,582
CV %			1.9	3.8	1.6	5.7	7.6	1.9	9.9	--
LSD 0.10			0.9	0.9	1.8	3.1	7.2	1.0	408	--

Trial was planted on May 24 and harvested on Sept. 4.

<sup>1</sup>H = Hybrid, LL = Liberty Link, CL = Clearfield System, RR = Roundup Ready.

TR = Traditional Oil Type, HO = High Oleic Oil Type.

<sup>2</sup>Cover - visual rating of percent area of plot covered by plant growth. This is a measure of stand and vigor. Plants were at 5- to 6-leaf stage.

<sup>3</sup>DAP = Days after planting.

<sup>4</sup>RR = Roundup Ready check in the trial.

**Table 12. 2013 Canola - Roundup Ready - Williston - Authors, J. Bergman, D. Amiot and C. Penuel.**

Company/ Brand	Variety	Type <sup>1</sup>	First	Flower	Plant	Test	Oil Content	Seed Yield	
			Flower (DAP) <sup>2</sup>	Duration (days)	Height (inch)	Weight (lb/bu)		2013	3-yr. Avg.
BrettYoung	6044 RR	H,TR	53	23	34.0	50.5	44.3	1,769	--
BrettYoung	6070 RR	H,TR	48	31	37.3	48.9	44.3	1,745	1,098
Croplan	HyClass 930	H,TR	45	24	34.8	49.7	47.7	1,656	--
Croplan	HyClass 955	H,TR	47	25	35.8	49.9	46.4	1,841	1,319
Croplan	HyClass 969	H,TR	48	25	34.5	50.2	46.2	1,787	--
Dekalb	DKL30-42	H,TR	49	26	31.3	50.0	45.3	1,922	1,255
Dekalb	DKL38-48	H,TR	52	26	33.8	50.5	44.5	1,738	--
Dekalb	DKL55-55	H,TR	45	27	34.0	50.2	46.3	1,859	1,266
Dekalb	DKL70-07	H,TR	48	29	35.8	49.9	45.1	2,004	1,237
Dekalb	DKL72-40	H,TR	49	23	36.0	50.6	44.9	2,124	--
Integra	7150R	H,TR	44	27	34.0	50.4	45.8	1,721	1,166
Integra	7152R	H,TR	48	27	33.5	50.8	45.6	1,799	1,081
Star	Star 402	H,TR	47	26	37.3	49.3	48.3	1,703	--
Star	Star 514	H,TR	49	28	32.0	49.3	46.3	1,680	--
Mean			48	26	34.6	50.0	45.8	1,811	1,203
CV %			7.1	16.9	8.6	1.2	2.5	14.2	--
LSD 0.10			4.1	5.4	3.6	0.7	1.4	308	--

Trial was planted on May 9 and harvested on Aug. 26.

<sup>1</sup>H = Hybrid, TR = Traditional Oil Type.

<sup>2</sup>DAP = Days after planting.

**Table 13. 2013 Canola - Roundup Ready - Minot - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz.**

Company/ Brand	Variety	Days to Flower (DAP) <sup>1</sup>	Flower Duration (days)	Days to Maturity (DAP) <sup>1</sup>	Plant Height (inch)	Lodging (0-9) <sup>2</sup>	Oil Content (%)	Seed Yield (lb/a)
Brett Young	6044 RR	45	27	106	40	2	45.0	2,698
Brett Young	6070 RR	45	28	108	43	2	42.2	2,746
Cargill	V12-1	46	29	107	42	3	43.6	2,965
Cargill	V12-2	46	23	105	44	3	43.9	2,557
Cargill	v2045	45	24	107	42	3	42.1	2,499
Cargill	v2170	49	23	106	43	2	44.1	2,416
Croplan	HyCLASS 930	44	27	106	42	3	46.0	2,453
Croplan	HyCLASS 955	46	25	106	38	4	45.2	2,338
Croplan	HyCLASS 969	44	27	107	38	3	44.8	2,533
Dekalb	DKL30-42	43	27	105	36	5	45.4	2,070
Dekalb	DKL38-48	45	25	106	36	3	43.2	2,782
Dekalb	DKL55-55	44	28	106	35	3	45.6	2,022
Dekalb	DKL70-07	45	26	106	40	3	45.0	2,488
Dekalb	DKL72-40	45	26	107	45	3	44.9	2,110
Integra	7150R	43	28	106	39	3	44.4	2,245
Integra	7152R	44	28	106	37	4	44.4	2,427
Mycogen	Nexera 1012 RR	50	26	109	47	2	42.2	2,419
Mycogen	Nexera 1016 RR	47	24	107	41	2	42.3	2,487
Proseed	CD2	45	31	107	41	3	43.5	2,988
Proseed	CS1	44	29	107	44	3	43.0	2,589
Star	Star 402	46	29	107	40	3	46.6	2,570
Star	Star 514	44	27	106	41	5	45.4	2,286
Mean		45	27	106	41	3	44.2	2,486
CV %		1.9	5.7	1.1	8.9	41	1.2	10.8
LSD 0.10		1	2	1	4	1	0.6	318

Trial was planted on May 13 with a seeding rate of 685,000 PLS/A and harvested on Sept. 6.

<sup>1</sup>DAP = Days after planting.

<sup>2</sup>Lodging: 0 = none, 9 = lying flat on the ground.

Previous crop was durum.

**Table 14. 2013 Canola - Liberty Link - Minot - Authors, E. Eriksmoen, J. Tarasenko and J. Effertz.**

Company/ Brand	Variety	Days to Flower (DAP) <sup>1</sup>	Flower Duration (days)	Days to Maturity (DAP) <sup>1</sup>	Plant Height (inch)	Oil Content (%)	Seed Yield (lb/a)
Bayer	InVigor L130	46	23	99	37	41.7	2,002
Bayer	InVigor L120	46	23	101	38	39.7	2,109
Bayer	InVigor 5440	48	22	100	38	41.2	2,179
Mean		46	23	100	37	40.8	2,097
CV %		3.1	7.1	1.0	11	2.6	9.2
LSD 0.10		NS	NS	1	NS	1.4	NS

Trial was planted on May 13 with a seeding rate of 685,000 PLS/A and harvested on Sept. 13.

<sup>1</sup>DAP = Days after planting.



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