

A-1124 (Revised)

STATE LIBRARY
STATE DEPOSITORY
DOCUMENT

NORTH DAKOTA STATE UNIVERSITY



3 0109 01435 8488

2006

Canola Variety Trials

Compiled by

Duane R. Berglund
Extension Agronomist and Professor
Department of Plant Sciences



S
544.3
N9
A8
no. 1124
2006

NDSU

N.D. Agricultural Experiment Station
NDSU Extension Service

North Dakota State University, Fargo, North Dakota 58105

DECEMBER 2006

Introduction

Canola is an expanding crop in the northern Great Plains and in North Dakota. In 2006, North Dakota accounted for approximately 91 percent of the canola acreage planted in the United States. This trial summary is a report of variety performance at the various North Dakota State University Research Extension Centers in North Dakota. 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, also review other agronomic characteristics such as maturity, lodging score and oil percentages if available.

We wish to thank the following NDSU Research Extension Center agronomists for their time, labor and efforts in providing the data from the 2006 canola trials.

Bryan Hanson	Langdon Research Extension Center, North Dakota State University, Langdon, ND 58249
Blaine Schatz and Steve Zwinger	Carrington Research Extension Center, North Dakota State University, Carrington, ND 58421
Mark Halvorson	North Central Research Extension Center, North Dakota State University, Minot, ND 58701
Neil Riveland	Williston Research Extension Center, North Dakota State University, Williston, ND 58801
Eric Eriksmoen	Hettinger Research Extension Center North Dakota State University, Hettinger, ND 58639

Canola Production, North Dakota 1995-2006

Year	Acres Planted	Acres Harvested	Yield Per Acre	Production
		(000 Acres)	(lbs)	(000 lbs.)
1995	215	211	1,220	257,420
1996	220	217	1,380	299,460
1997	460	430	1,180	507,400
1998	800	780	1,490	1,162,200
1999	855	820	1,300	1,085,500
2000	1,270	1,250	1,320	1,650,000
2001	1,300	1,285	1,400	1,799,000
2002	1,300	1,160	1,230	1,426,800
2003	970	960	1,400	1,358,000
2004	780	750	1,530	1,222,500
2005	1,040	1,015	1,440	1,461,600
2006	950	930	1,200	1,116,000

Source: North Dakota Agricultural Statistics Service – USDA

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, if appropriate footnotes are given, and if the order of the data is not rearranged and NDSU is credited for the data.

2006 Growing Season

Fieldwork began in early April, but was slowed by wet soils in many areas. Badly needed April rain fell across the dry southern areas of the state, but in the west and southwest, rainfall was more like a deluge with 2 to 5 inches. Except for scattered thunderstorms, May, June and July were exceptionally dry. Water deficits increased throughout the summer. Conditions worsened until mid-August, when most of the state was classified in severe drought and the south-central and southwestern border regions were in extreme drought. However, by mid-August, substantial rains, especially heavy throughout the dry south-central and southwestern regions, caused conditions to improve in much of the state. Rains continued into September and by October, only the western and south-central regions were in severe drought.

April temperatures reached the 70s everywhere and low 80s in the northwestern and south-central areas in early April because of the dry conditions. This dry, warm weather allowed a lot of canola to be planted earlier than normal. May was dry throughout most of the state, but especially so in portions of the north-central and south-central regions. Total rainfall ranged from only 0.25 inch to about 2 inches throughout most of the state. These amounts represent less than 100 percent of normal. Relatively dry weather persisted throughout June except for a few widely scattered thunderstorms. Total June rainfall ranged from about 0.50 inch in several locations to more than 3 inches in Divide, Stutsman, Foster, Wells and McLean counties, where thunderstorms moved through the area. June rainfall was below normal nearly everywhere in the state except for those scattered locations mentioned above. However, outside of the southwestern and south-central regions, stored soil water continued to carry the crops better than expected. Average temperatures were normal to slightly above normal.

July rainfall totaled less than 1.50 inches, or less than 60 percent of normal, nearly everywhere in the state. Portions of the northwest and numerous scattered locations throughout the state received less than 0.25 inch of rain, which is only 3 percent to 20 percent of normal. As the soil in the southwestern and south-central regions dried out, air temperatures increased as would be expected, reaching the low 100s at several locations. Some record high temperatures were reported in late July. Average July air temperatures throughout the southwestern and south-central regions of the state ranged from 5 to 7 degrees Fahrenheit above normal, but in the wetter northern regions, temperatures were only 2 to 3 F above normal.

August continued mostly dry until midmonth, when numerous showers and thunderstorms began providing much needed rain across most of the state, including the parched south-central and southwestern regions. Rains continued into early September throughout the northeast and along the southern border. Rain continued sporadically throughout the rest of the month with mostly light showers and a few widespread lighter rains. The northwestern and north-central regions had frost on Sept. 27, which was more widespread on the 28th, with temperatures reaching the mid- 20s at several locations. Harvest of canola began in mid-August. By Sept. 10th more than 96 percent of the canola acreage had been harvested, compared with the five-year average of 72 percent harvested.

Canola - Roundup Ready Cultivars

Carrington (Page 1 of 2)

Company/Brand	Cultivar	Days to Bloom	Bloom Duration	Days to PM	Plant Lodge	Plant Height	1,000 KWT	Test Weight	Oil Content	Seed Yield	
										% @ 8.5%M	2006 3-yr. Avg.
			days		0-9	inch	gram	lb/bu		--- lb/ac ---	
CSCO (Cargill)	V1030	48.0	20.0	84.0	0.0	33.1	2.4	52.1	40.8	1337	--
CSCO (Cargill)	V1031	50.0	19.5	88.0	1.0	38.2	2.6	52.4	41.3	1267	--
CSCO (Cargill)	03H252	48.3	19.8	84.8	0.0	30.7	2.9	52.0	41.0	1309	--
CSCO (Cargill)	03H580	49.8	18.8	88.0	0.0	34.3	2.7	51.2	41.9	1345	--
CSCO (Cargill)	03H631	49.5	18.3	86.5	0.0	34.4	2.6	51.7	43.1	1662	--
Proseed	RR 2066	50.0	19.0	86.0	0.0	36.0	2.8	51.0	41.8	1424	--
Proseed	RR E30518	49.3	20.3	86.5	0.0	35.2	2.4	51.9	41.4	1051	--
Farm Pure Seeds	Reaper	51.0	19.3	88.0	0.0	35.8	2.5	52.0	42.2	1088	--
Meridian	1818	49.5	19.3	88.0	0.0	27.4	2.5	51.8	41.2	1081	--
Meridian	SW H5272	49.3	20.3	83.3	0.5	34.8	2.8	52.5	39.8	1077	--
Meridian	SW H5278	46.8	20.3	84.5	0.0	28.3	2.9	51.5	41.7	1042	--
Croplan Genetics	HyClass 431	49.5	20.5	87.8	0.0	33.7	2.7	50.9	41.8	1232	--
Croplan Genetics	HyClass 905	52.3	18.0	88.3	0.0	40.7	2.5	51.5	41.9	1052	1923
Croplan Genetics	HyClass 910	51.0	18.5	87.5	0.0	38.2	2.6	52.2	40.7	1268	1891
Croplan Genetics	HyClass 924	46.0	21.5	84.5	0.5	30.5	2.7	51.1	40.6	1321	--
Croplan Genetics	HyClass 712	51.0	19.0	87.5	0.0	40.0	2.5	51.4	41.9	1477	--
Croplan Genetics	HyClass 767	49.3	21.0	87.8	0.0	37.6	2.7	52.5	40.4	1352	1901
SW Seed Ltd	SW-PI 02-1212	47.3	21.5	85.3	0.0	33.9	2.8	52.7	40.6	1533	--
Pioneer	45H21	48.5	19.8	85.3	0.0	34.1	2.5	51.8	41.2	1447	2172
Pioneer	45H26	48.5	19.0	86.3	0.0	35.4	2.4	52.3	39.7	1622	--
Interstate	Hyola 357 Magnum	45.3	21.3	85.3	0.0	27.8	2.7	51.5	38.9	1547	2127
Interstate	Hyola 514 RR	50.5	18.8	85.3	0.0	40.0	2.2	52.0	40.7	1647	--
Interstate	SW Patriot RR	46.5	22.5	86.0	0.0	37.6	2.4	51.0	41.4	1520	1915
Interstate	SW Marksman RR	46.8	21.8	85.8	0.0	37.4	2.7	50.8	40.8	1260	1981
Interstate	SW Titan RR	46.5	21.0	84.5	0.0	35.2	2.6	51.6	40.0	1503	--
Interstate	IS7145 RR	52.5	17.3	88.3	0.0	37.2	2.3	52.4	42.7	1732	--
Interstate	IS 3465 RR	46.8	21.5	88.0	0.0	32.1	2.5	50.7	39.9	1452	--
Dekalb	DKL 52-10	46.8	21.5	87.8	0.5	31.3	2.6	52.7	39.2	1538	--
Dekalb	DKL 38-25	48.5	19.5	85.8	0.0	34.8	2.8	50.8	42.0	1398	--
Dekalb	KDL 34-55	48.5	20.0	85.8	0.5	31.3	2.5	51.6	43.0	1430	--
Monsanto	MB52141	48.8	18.8	86.0	0.0	34.4	2.7	51.9	41.9	1640	--
Monsanto	MB52143	49.3	20.0	87.8	0.0	31.1	2.7	51.6	42.4	1466	--
Monsanto	Z5052	46.3	21.3	84.5	0.0	27.8	2.8	50.1	41.2	1376	--
Monsanto	SW-PF-02-3902	50.0	19.8	86.8	0.0	34.1	2.5	52.7	40.8	1304	--
Monsanto	SW-PF-02-3910	49.0	22.5	86.5	0.0	36.4	2.5	52.4	39.9	1500	--
MEAN		49.0	20.0	86.4	0.1	34.5	2.58	51.6	41.1	1376	--
C.V. %		2.2	6.0	1.7	251	9.1	4.7	0.8	2.9	13.1	--
LSD .05		1.5	1.7	2.0	NS	4.3	0.20	0.6	1.6	250	--

Planting Date = April 27; Harvest Date = Aug 1; Previous Crop = Direct seeded into undisturbed oat forage residue.

Canola - Roundup Ready Cultivars
Carrington (Page

Company/Brand	Cultivar	Days to Bloom	Bloom Duration	Days to PM	Plant Lodge	Plant Height	1,000 KWT	Test Weight	Oil Content	- Seed
										% @ 8.5M ----- lb/
Monsanto	SWG 5246	49.8	19.5	87.3	0.0	34.3	2.9	51.6	41.1	1292
Monsanto	SW H5263RR	52.3	19.0	87.0	0.0	34.1	2.7	51.0	44.3	1047
IntegraSeed	RangeRR	48.0	20.3	85.3	0.5	34.3	2.4	50.4	41.2	1210
IntegraSeed	3789RR	46.8	21.0	84.8	0.0	30.7	2.6	50.4	38.9	1367
Agriprogress/Lembke	AP30111-A5	48.3	19.5	87.0	0.5	33.7	2.3	51.3	42.4	1479
Agriprogress/Lembke	AP 30213-A5	50.3	19.8	87.3	0.5	33.9	2.7	52.2	40.7	1466
Agriprogress/Lembke	AP 30306-A5	48.3	21.3	85.5	0.5	35.6	2.6	52.0	40.0	1406
Agriprogress/Lembke	AP 30310-A5	50.8	21.0	88.0	0.0	39.8	2.5	51.7	40.9	1478
Agriprogress/Lembke	AP 30326-A5	49.5	20.3	87.0	0.0	35.0	2.6	51.8	41.5	1542
Agriprogress/Lembke	AP 30516-A5	48.0	21.0	85.8	0.0	36.4	2.5	51.7	40.2	1398
Agriprogress/Lembke	AP 30608-A5	49.3	19.3	85.3	0.5	33.1	2.4	51.7	41.5	1455
Agriprogress/Lembke	AP 30623-A5	54.8	18.5	89.0	0.0	38.6	2.4	51.4	41.0	1186
MEAN		49.0	20.0	86.4	0.1	34.5	2.58	51.6	41.1	1376
C.V. %		2.2	6.0	1.7	251	9.1	4.7	0.8	2.9	13.1
LSD .05		1.5	1.7	2.0	NS	4.3	0.20	0.6	1.6	250

Planting Date = April 27; Harvest Date = Aug. 1; Previous Crop = Direct seeded into undisturbed oat forage residue.

Canola - Conventional, Liberty Link and Clearfield Cultivars
Carrington

Company/Brand	Cultivar	Type	Weed Control Trait	Days to Bloom	Bloom Duration	Days to PM	Plant Lodge	Plant Height	1,000 KWT	Test Weight	Oil Content	Seed
												%@ 8.5M ---lb/a
Farm Pure Seeds	Manor	OP	CL	49.3	20.8	89.0	1.8	40.2	2.4	50.4	42.7	1686
Dow Agro Sciences	Nexera 828CL	OP	CL	54.5	21.5	92.0	0.0	51.8	2.5	53.2	42.1	1270
Dow Agro Sciences	CNX03	OP	CL	50.3	20.0	88.3	0.0	40.9	2.7	52.2	42.4	1911
Dow Agro Sciences	CNX06	OP	CL	50.5	18.5	86.8	0.8	39.2	2.8	53.1	43.4	2054
Dow Agro Sciences	CNX19	OP	CL	53.3	21.0	92.3	0.3	44.0	2.7	52.8	43.2	1560
Proseed	Manor	OP	CL	49.8	21.0	89.5	1.0	42.7	2.3	50.3	41.7	1600
Proseed	WinSpr	OP		62.0	18.5	.	0.0	53.7	2.2	51.2	40.1	684
Bayer Crop Science	InVigor 5550	Hyb	LL	48.0	20.5	87.0	0.8	47.2	2.5	53.3	43.0	2101
Bayer Crop Science	InVigor 5630	Hyb	LL	48.8	20.5	87.8	0.3	42.9	2.4	53.0	42.5	2124
Pioneer	45H73	Hyb	CL	48.3	20.5	87.8	2.8	43.7	2.3	52.3	42.5	2361
Interstate	HyLite 618 CL	Hyb	CL	48.5	20.8	85.5	3.3	37.4	2.5	53.1	40.6	1476
Agriprogress/Lembke	AP 30316-A5	Hyb	CL	52.0	19.8	90.5	0.5	44.7	2.5	52.1	42.5	2106
Agriprogress/Lembke	AP 30321-A5	Hyb	CL	51.5	20.0	90.0	0.3	45.3	2.6	52.1	42.6	2112
Agriprogress/Lembke	AP 30812-A5	Hyb	CL	51.0	20.5	90.5	0.3	48.4	2.5	52.4	43.1	2156
Cibus Genetics	Roper			50.0	19.0	89.0	1.0	47.8	2.8	53.3	42.6	2054
MEAN				51.2	20.2	89.0	0.9	44.7	2.5	52.3	42.3	1817
C.V.%				1.6	4.8	1.4	81.7	6.1	4.0	0.5	2.4	10.4
LSD.05				1.2	1.4	1.8	1.0	3.9	0.1	0.3	1.4	271

 Planting Date = April 26; Harvest Date = Aug. 3 ; Previous Crop = Durum
 CL – Clearfield, LL – Liberty Link

Canola - Roundup Ready - 2006- Table 1

Langdon

Company/Brand	Cultivar	Type	Blackleg Rating†	Days to 1st Flower	Days to End Flower	Flower Duration	Days to Mature
Agriprogress/Lembke	AP 30111-A5	H	R	45	66	20	88
Agriprogress/Lembke	AP 30213-A5	H	R	47	67	20	89
Agriprogress/Lembke	AP 30306-A5	H	R	43	67	24	87
Agriprogress/Lembke	AP 30310-A5	H	R	48	70	23	92
Agriprogress/Lembke	AP 30326-A5	Syn	R	46	67	21	88
Agriprogress/Lembke	AP 30516-A5	Syn	R	46	66	20	87
Agriprogress/Lembke	AP 30608-A5	OP	R	47	67	20	88
Agriprogress/Lembke	AP 30623-A5	OP	R	49	70	21	91
Croplan Genetics	HyClass 431	Syn	MR	46	69	23	91
Croplan Genetics	HyClass 905	H	R	49	69	21	91
Croplan Genetics	HyClass 910	H	R	48	68	19	90
Croplan Genetics	HyClass 924	H	R	41	65	24	86
Croplan Genetics	HyClass 712	Syn	R	48	69	21	90
Croplan Genetics	HyClass 767	Syn	MR	45	68	23	88
Croplan Genetics	Crosby	OP	R	47	69	21	90
Croplan Genetics	HyClass 906	H	R	48	68	21	90
CSCO	V1030	H	MR	47	66	19	88
CSCO	V1031	H	MR	46	65	20	89
CSCO	03H252	H	MR	44	63	19	85
CSCO	03H580	H	R	47	67	20	89
CSCO	03H631	H	R	46	64	18	87
Dekalb	DKL 52-10	H	R	44	66	23	88
Dekalb	DKL 38-25	H	MR	44	66	22	86
Dekalb	DKL 34-55	OP	MR	46	67	21	87
Dekalb	DKL 35-85	OP	R	48	68	21	90
FarmPure Seeds Inc.	Reaper	OP	MR	47	67	21	89
Integra Seed	Range RR	Syn	MR-R	43	65	22	86
Integra Seed	INT 3789 RR	H	R	42	66	24	86
Interstate Seed	Hyola 357 Mag.	H	MR	41	61	20	86
Interstate Seed	Hyola 514 RR	H	R	47	67	20	87
Interstate Seed	SW Patriot RR	Syn	MR	42	66	24	86
Interstate Seed	SW Marksman RR	H	MR	44	68	24	89
Interstate Seed	SW Titan RR	H	R	42	65	23	87
Interstate Seed	IS 7145RR	H	R	45	63	18	86
Interstate Seed	IS 3465RR	OP	R	44	67	23	87
Meridian Seeds	1818	OP	R	46	65	19	88
Meridian Seeds	1852 H	H	R	43	64	21	84
Meridian Seeds	1759 S	Syn	R	42	63	22	85
Monsanto	MB52141	H	R	43	62	19	86
Monsanto	MB52143	H	R	44	63	19	86
Monsanto	Z5052	H	R	41	63	22	85
Monsanto	SW-PF-02-3902	H	R	45	68	23	88
Monsanto	SW-PF-02-3910	H	R	44	67	23	86
Monsanto	MB51105	OP	R	46	68	22	89
Monsanto	SW H5263RR	OP	R	49	70	21	90
Pioneer	45H26	H	R	44	63	19	84
Pioneer	45H21	H	R	45	63	19	86
Proseed	RR 2066	H	MR	49	70	21	90
Proseed	RR E 30518	H	R	44	65	21	86
SW Seed Ltd.	SW-PI-02-1212	H	R	43	65	22	86
Trial Mean				45.1	66.1	21.0	87.6
C.V. %				1.7	1.6	4.9	1.7
LSD .05				1.1	1.5	1.4	2.1

Planting Date: May 10, 2006

Harvest Date: Aug. 21, 2006

All varieties are Argentine (*B.napus*). OP-Open Pollinated, H-Hybrid, SYN-Synthetic.

†Blackleg Rating: S=Susceptible, MS=Moderately Susceptible, MR=Moderately Resistant,

R=Resistant, Ratings are provided by the companies.

Canola - Roundup Ready - 2006 - Table 2

Langdon

Company/Brand	Cultivar	Plant Ht	LGD	Cover†	Oil ¹	Yield			Ave. Yield	
						2004	2005	2006‡	2 year	3 year
Agriprogress/Le	AP 30111-A5	47	0.3	51	50.1	--	--	1845	--	--
Agriprogress/Le	AP 30213-A5	46	0.0	61	48.5	--	--	2198	--	--
Agriprogress/Le	AP 30306-A5	50	0.5	69	46.4	--	--	1791	--	--
Agriprogress/Le	AP 30310-A5	54	0.3	68	48.3	--	--	2188	--	--
Agriprogress/Le	AP 30326-A5	52	0.8	60	47.1	--	--	2015	--	--
Agriprogress/Le	AP 30516-A5	50	1.0	59	47.0	--	--	2135	--	--
Agriprogress/Le	AP 30608-A5	49	0.3	43	48.3	--	--	1925	--	--
Agriprogress/Le	AP 30623-A5	53	0.0	58	49.0	--	--	1769	--	--
Croplan	HyClass 431	50	1.0	55	47.5	--	2132	2078	2105	--
Croplan	HyClass 905	55	0.0	50	50.2	2991	2222	2065	2144	2426
Croplan	HyClass 910	57	0.0	74	48.1	3133	2321	2135	2228	2530
Croplan	HyClass 924	48	1.3	81	47.0	--	--	2331	--	--
Croplan	HyClass 712	53	0.0	73	50.3	2895	2213	1969	2091	2359
Croplan	HyClass 767	50	0.8	69	47.1	2928	2151	1942	2046	2340
Croplan	Crosby	50	0.5	45	47.7	2655	1934	1713	1823	2101
Croplan	HyClass 906	52	0.0	78	50.2	--	--	2274	--	--
CSCO	V1030	49	1.3	75	46.4	--	2105	2125	2115	--
CSCO	V1031	49	3.0	85	46.7	--	2193	2198	2196	--
CSCO	03H252	46	1.0	89	47.1	--	2326	2158	2242	--
CSCO	03H580	47	0.3	60	50.3	--	--	1560	--	--
CSCO	03H631	46	1.0	71	50.4	--	--	2394	--	--
Dekalb	DKL 52-10	49	0.3	85	46.9	--	--	2298	--	--
Dekalb	DKL 38-25	47	0.0	65	49.7	3026	2326	2015	2171	2456
Dekalb	DKL 34-55	45	0.0	60	49.9	2933	2087	1782	1935	2267
Dekalb	DKL 35-85	50	0.0	50	47.9	2888	1914	1739	1827	2180
FarmPure	Reaper	45	0.5	51	49.8	--	--	1752	--	--
Integra Seed	Range RR	47	1.3	80	48.3	--	1850	1962	1906	--
Integra Seed	INT 3789 RR	47	2.5	79	45.9	--	--	2025	--	--
Interstate Seed	Hyola 357 Mag.	40	0.5	75	45.0	2676	2243	2005	2124	2308
Interstate Seed	Hyola 514 RR	50	2.0	69	48.4	--	2270	2088	2179	--
Interstate Seed	SW Patriot RR	48	2.3	79	46.5	2628	1858	2161	2010	2216
Interstate Seed	SW Marksman RR	48	0.3	71	48.4	2750	2336	1842	2089	2309
Interstate Seed	SW Titan RR	51	1.5	85	45.7	2636	1999	2122	2060	2252
Interstate Seed	IS 7145RR	47	2.8	79	49.1	--	--	2168	--	--
Interstate Seed	IS 3465RR	49	1.3	66	45.8	--	--	1729	--	--
Meridian Seeds	1818	43	0.0	53	47.9	--	2179	1693	1936	--
Meridian Seeds	1852 H	48	0.5	83	45.3	--	2314	2152	2233	--
Meridian Seeds	1759 S	44	1.3	80	48.7	--	--	2048	--	--
Monsanto	MB52141	45	0.8	76	48.8	--	--	1829	--	--
Monsanto	MB52143	48	3.5	84	48.6	--	--	2341	--	--
Monsanto	Z5052	46	1.3	88	49.2	--	--	1992	--	--
Monsanto	SW-PF-02-3902	50	0.5	79	48.3	--	--	2068	--	--
Monsanto	SW-PF-02-3910	46	0.5	84	45.4	--	--	1885	--	--
Monsanto	MB51105	51	1.3	84	45.0	--	--	2035	--	--
Monsanto	SW H5263RR	50	0.0	69	50.7	--	2217	1845	2031	--
Pioneer	45H26	47	1.5	85	46.4	--	--	2577	--	--
Pioneer	45H21	47	1.5	83	47.7	2958	2329	2188	2259	2492
Proseed	RR 2066	55	0.0	39	47.7	2770	1983	1826	1904	2193
Proseed	RR E 30518	48	0.8	73	47.5	--	--	2128	--	--
SW Seed Ltd.	SW-PI-02-1212	49	1.0	90	46.0	--	--	1919	--	--

†Cover % - Visual rating of percent area of plot covered by plant growth. This is a measure of stand and vigor.
 Plants were at 5-6 leaf stage.
 ‡Some hail damage occurred on Aug. 19 just prior to harvest. Damage in the swaths appeared uniform between varieties and no damage ratings were taken. No adjustments to yield were made. 1 - 8.5% Moisture

Canola - Conventional, Liberty Link, Clearfield Varieties - Table 1 - 2006
Langdon

Company/Brand	Cultivar	Type	Blackleg Rating†	Days	Days	Flower Duration	Days to Maturity
				to 1st Flower	to End Flower		
Agriprogress/Lembke	AP 30316-A5	H-CL	MR	48	72	24	90
Agriprogress/Lembke	AP 30321-A5	H-CL	MR	47	70	23	90
Agriprogress/Lembke	AP 30812-A5	H-CL	R	47	71	24	91
Bayer Crop Science	InVigor 5550	H-LL	R	43	66	23	85
Bayer Crop Science	InVigor 5630	H-LL	R	44	67	23	87
Bonis & Co. Ltd	BC74P00 LL	OP-LL	MR	44	68	24	89
Bonis & Co. Ltd	BC84S00 LL	Syn-LL	MR	45	71	25	88
Bonis & Co. Ltd	BCS309L	Syn-LL	MR	46	71	25	90
Bonis & Co. Ltd	BCS314L	Syn-LL	MR	46	69	23	88
Cibus LLC	Roper	OP	R	47	71	25	90
Dow AgroSciences	Nexera 828CL	OP-CL	R	51	72	22	91
Dow AgroSciences	CNX03	OP-CL	R	47	71	24	91
Dow AgroSciences	CNX06	OP-CL	R	46	69	22	89
Dow AgroSciences	CNX19	OP-CL	R	49	71	22	92
Interstate Seed	HyLite 618 CL	H-CL	R	46	69	23	87
Pioneer	45H73	H-CL	R	43	64	21	87
Proseed	Manor	OP-CL	MR	46	69	23	90
Proseed	WinSpr	OP	R	55	81	26	100
Check‡	Hyola 357 Mag.	H	MR	41	64	23	88
<hr/>				<hr/>			
Trial Mean				46.8	70.4	23.6	90.4
C.V. %				2.5	1.6	5.5	1.7
LSD .05				1.6	1.6	1.8	2.2

Planting Date: May 12, 2006

Harvest Date: Aug. 23, 2006, Winspr harvested Aug. 29.

All varieties are Argentine (B.napus), OP-Open Pollinated, H-Hybrid, SYN-Synthetic, LL-Liberty Link, CL-Clearfield System, CTO-Character Trait Oil

†Blackleg Rating: S=Susceptible, MS=Moderately Susceptible, MR=Moderately Resistant, R=Resistant, Ratings provided by the company.

‡Roundup ready check variety.

Canola - Conventional, Liberty Link, Clearfield Varieties - Table 2- 2006
Langdon

Company/Brand	Cultivar	Plant						Yield			Average		
		Height inch	LDG 0-9	Cover† %	Oil ¹ %	Hail ² 0-9	2004	2005	2006	year	year	2	3
												lb/ac	lb/ac
Agriprogress/Lembke	AP 30316-A5	56	0.7	51	44.7	5.4	--	--	1731	--	--	--	--
Agriprogress/Lembke	AP 30321-A5	56	0.9	47	45.4	5.1	--	--	1831	--	--	--	--
Agriprogress/Lembke	AP 30812-A5	55	1.2	48	46.1	5.2	--	--	1919	--	--	--	--
Bayer Crop Science	InVigor 5550	51	1.3	68	44.0	5.5	--	2945	2202	2573	--	--	--
Bayer Crop Science	InVigor 5630	51	1.1	58	46.4	5.2	3192	2988	2061	2525	2747	--	--
Bonis & Co. Ltd	BC74P00 LL	46	2.6	43	45.4	5.0	--	--	1498	--	--	--	--
Bonis & Co. Ltd	BC84S00 LL	51	2.8	40	42.7	5.7	--	--	1359	--	--	--	--
Bonis & Co. Ltd	BCS309L	53	2.1	41	44.0	5.0	--	--	1573	--	--	--	--
Bonis & Co. Ltd	BCS314L	52	2.7	36	44.6	5.5	--	--	1473	--	--	--	--
Cibus LLC	Roper	51	2.5	43	44.5	3.5	--	--	1702	--	--	--	--
Dow AgroSciences	Nexera 828CL	54	0.7	36	43.0	6.2	--	2485	1301	1893	--	--	--
Dow AgroSciences	CNX03	49	0.5	27	45.4	5.5	--	--	1507	--	--	--	--
Dow AgroSciences	CNX06	45	2.5	31	43.6	5.7	--	--	1303	--	--	--	--
Dow AgroSciences	CNX19	45	1.8	27	45.3	5.5	--	--	1137	--	--	--	--
Interstate Seed	HyLite 618 CL	50	2.7	31	43.0	5.8	2850	2372	1473	1922	2232	--	--
Pioneer	45H73	50	2.1	59	46.0	4.5	--	--	2094	--	--	--	--
Proseed	Manor	51	3.6	45	44.1	3.5	--	--	1309	--	--	--	--
Proseed	WinSpr	67	0.1	51	43.4	0.2	--	--	1695	--	--	--	--
Check‡	Hyola 357 Mag.	43	2.2	38	43.0	5.6	--	--	1674	--	--	--	--
Trial Mean		51.7	2.0	38.8	42.9	4.5	2983	2510	1566	--	--	--	--
C.V. %		3.7	64.4	19.0	4.2	19.1	10.0	9.7	17.1	--	--	--	--
LSD .05		2.7	1.8	10.4	2.6	1.2	422	343	377	--	--	--	--

† Cover % - Visual rating of percent area of plot covered by plant growth. This is a measure of stand and vigor.

Plants were at 6-7 leaf stage.

‡ Roundup ready check cultivar.

1 - 8.5% moisture

2 - Some hail damage occurred on Aug. 19. Some of the later maturing varieties were cut later and may have not received as much hail damage. 0=no damage, 9=most damage. Based on shelled pods on top of swath. The rating is a relative rating between varieties and not an estimate of yield. No adjustments to yield have been made.

Canola Variety Trial—Roundup Ready 2006

North Central Research Extension Center—Minot

Company/Brand	Cultivar	Type	Black Leg	Days	Days	Seed						
				to 10% Flower	to 90% Flower	Mature	Plant Height	Seed Weight g/1000	Test Weight lb/bu	Yield 2006	2 Year	3 Year
Agriprogress Inc.	AP 30111-A5	H	R	DAP	DAP	DAP	in	3.6	49.8	2776	--	--
Agriprogress Inc.	AP 30213-A5	H	R	48.8	60.5	88.3	39.5	3.6	48.6	2418	--	--
Agriprogress Inc.	AP 30306-A5	H	R	45.0	61.8	89.0	39.7	3.8	50.4	2495	--	--
Agriprogress Inc.	AP 30310-A5	H	R	48.8	61.5	90.5	42.1	3.7	49.2	2429	--	--
Agriprogress Inc.	AP 30326-A5	Syn	R	47.5	61.3	88.0	40.4	3.6	49.9	2863	--	--
Agriprogress Inc.	AP 30516-A5	Syn	R	45.8	60.3	86.0	40.4	3.4	50.7	2247	--	--
Agriprogress Inc.	AP 30608-A5	OP	R	47.8	61.3	88.3	39.9	3.2	50.4	2765	--	--
Agriprogress Inc.	AP 30623-A5	OP	R	50.0	65.0	89.3	40.0	3.4	49.1	2264	--	--
Cargill	O3H252	H	MR	45.3	59.3	86.8	40.1	3.7	49.4	2332	2466	--
Cargill	O3H580	H	R	48.5	60.8	90.3	40.3	3.8	46.5	2397	--	--
Cargill	O3H631	H	R	47.3	59.5	87.0	40.2	3.5	49.6	3193	--	--
Cargill	V1030	H	MR	48.3	61.0	88.8	42.3	3.9	48.9	2843	2803	--
Cargill	V1031	H	MR	47.0	60.8	89.0	41.8	3.6	48.5	2412	2461	--
Croplan	Crosby	OP	R	48.3	62.0	90.8	38.2	4.0	48.8	2319	2126	2076
Croplan	HyClass 431	Syn	MR	46.8	62.0	89.5	41.1	3.8	49.1	2690	2486	--
Croplan	HyClass 712	Syn	MR	48.8	61.5	89.0	41.2	3.5	49.3	2701	2603	2438
Croplan	HyClass 767	Syn	MR	47.3	60.8	87.8	39.6	3.9	50.0	2731	2585	2329
Croplan	HyClass 905	H	R	49.5	65.0	89.8	43.3	3.6	48.8	2632	2546	2231
Croplan	HyClass 906	H	R	49.5	65.0	89.3	40.7	3.7	48.9	2033	--	--
Croplan	Minot	OP	MR	47.8	62.0	89.3	38.5	3.6	49.2	2122	2396	2288
Croplan	HyClass 910	H	R	49.5	60.8	89.3	43.8	4.0	48.1	2919	2857	2617
Croplan	HyClass 924	H	R	44.3	60.5	87.5	42.9	3.4	50.1	2761	--	--
IntegraSeed Ltd.	INT 3789RR	H	R	43.0	59.5	88.0	37.9	3.9	48.7	2782	--	--
IntegraSeed Ltd.	RangeRR	Syn	MR	44.0	59.3	87.8	39.2	3.8	48.8	2257	2347	--
Interstate Seed	Hyola 357 Magnum	H	MR	41.5	57.8	86.3	33.3	4.0	48.5	2409	2747	2498
Interstate Seed	Hyola 514 RR	H	R	47.5	61.5	89.5	44.1	3.6	50.0	2913	2800	--
Interstate Seed	IS 3465RR	OP	R	48.3	60.5	88.0	41.8	3.5	48.4	2823	--	--
Interstate Seed	IS 7145RR	H	R	46.8	60.8	87.5	41.4	3.6	50.6	3245	--	--
Interstate Seed	SW Marksman RR	H	MR	47.5	61.5	89.0	40.6	3.7	48.7	2846	2777	2436
Interstate Seed	SW Patriot RR	S	MR	44.8	59.5	87.3	40.2	3.6	49.0	2624	2430	2299
Interstate Seed	SW Titan RR	H	R	45.0	59.8	88.8	41.9	3.8	49.6	3026	2818	--
Meridian Seeds	1818	OP	R	47.5	61.5	89.3	33.2	3.1	49.1	1849	2340	--
Meridian Seeds	1852H	H	R	47.8	61.3	88.3	38.2	3.7	51.0	1992	--	--
Meridian Seeds	1759S	S	R	47.3	60.8	88.8	38.6	3.8	50.5	1829	--	--
Monsanto-Dekalb	DKL 34-55	OP	MR	46.8	60.3	88.8	38.4	3.7	49.4	2741	2450	2240
Monsanto-Dekalb	DKL 35-85	O	R	47.8	60.8	88.3	40.7	3.5	49.5	2459	--	--
Monsanto-Dekalb	DKL 38-25	H	MR	46.5	61.5	89.5	42.8	3.4	49.4	2673	2593	--
Monsanto-Dekalb	DKL 52-10	H	R	46.8	60.5	88.8	44.1	3.5	51.0	2799	2630	--
Monsanto	MB52141	H	R	46.8	60.3	87.5	42.4	3.6	50.0	3446	--	--
Monsanto	MB52143	H	R	46.0	60.5	88.3	42.8	3.6	48.8	3033	--	--
Monsanto	SW H5263RR	OP	R	48.3	69.0	90.0	40.4	3.4	49.8	2332	2313	--
Monsanto	SWG5246	OP	R	47.0	61.3	88.0	43.8	3.4	50.4	2326	--	--
Monsanto	SW-PF-02-3902	H	R	47.0	61.5	89.0	40.4	3.6	50.6	2497	--	--
Monsanto	SW-PF-02-3910	H	R	46.0	61.0	88.5	41.7	3.4	50.6	3054	2690	--
Monsanto	Z5052	H	R	42.8	58.8	85.5	37.1	4.1	48.4	2594	--	--
Proseed, Inc	Proseed E30518RR	H	R	47.3	61.5	88.5	34.7	3.2	49.2	1883	--	--
Proseed, Inc	Proseed RR 2066	H	R	48.3	61.3	89.0	43.1	3.5	48.2	2643	2471	2381
SW Seed Ltd.	SW-PI 02-1212	H	R	45.0	61.0	89.8	42.0	3.8	50.6	2744	--	--
Pioneer Hi-Bred	45H21	H	R	46.0	60.0	87.8	42.1	3.5	49.2	2634	2419	--
Pioneer Hi-Bred	45H24	H	R	46.5	61.0	89.3	45.8	3.4	48.3	3206	3013	--
Pioneer Hi-Bred	45H26	H	R	46.3	59.5	87.8	41.0	3.3	50.0	3183	--	--

DAP=Days after planting

Blackleg rating provided by company

Canola Variety Trial—Conventional 2006

North Central Research Extension Center—Minot

Company/Brand	Cultivar	Type	Black Leg	Days to Flower		Days to 90% Flower		Plant Height	Seed Weight g/1000	Test Weight lb/bu	Seed		
				DAP	DAP	DAP	Mature				2006	2 Year	3 Year
Agriprogress Inc.	AP 30316-A5	H-CL	R	50	63	90	43	3.4	48.7	3369	--	--	
Agriprogress Inc.	AP 30321-A5	H-CL	R	49	62	90	43	3.8	48.9	3206	--	--	
Agriprogress Inc.	AP 30812-A5	H-CL	R	50	62	90	44	3.5	48.6	3116	--	--	
Bayer Crop Science	InVigor 5550	H-LL	R	47	60	87	43	3.4	50.9	3172	--	--	
Bayer Crop Science	InVigor 5630	H-LL	R	49	61	88	43	3.3	49.5	3577	2757	--	
Cibus	Roper	OP	R	48	61	90	42	3.4	50.4	3215	--	--	
Mycogen-Dow Agro	828CL	OP-CL	R	51	62	91	43	3.3	46.1	2457	--	--	
Mycogen-DA/Nexera	CNX03	OP-CL	R	49	60	89	40	3.5	49.4	2923	--	--	
Mycogen-DA/Nexera	CNX06	OP-CL	R	49	60	88	37	3.6	51.3	2908	--	--	
Mycogen-DA/Nexera	CNX19	OP-CL	R	51	62	90	37	3.5	50.1	2609	--	--	
Proseed, Inc	ProseedManor	OP-CL	R	48	62	90	40	3.6	48.3	3172	--	--	
Proseed, Inc	ProseedWinspr	OP	R	51	71	93	53	3.4	44.8	1285	--	--	
Interstate Seed	HyLite 618 CL	H-CL	R	48	61	86	42	3.3	50.0	2818	2263	2074	
RR Control	Hyola357Mag. †	H-RR	MR	42	58	89	34	3.5	48.0	3268	2754	2363	
RR Control	Hyclass906†	H-RR	R	51	67	90	40	3.6	47.6	2350	--	--	
RR Control	45H24†	H-RR	R	48	60	88	41	3.3	49.2	3283	--	--	
Mean	--	--	--	49	62	89	41	3.5	48.9	2920	--	--	
C.V.%	--	--	--	1.6	1.0	1.1	6.6	7.3	0.8	14.2	--	--	
LSD .05	--	--	--	1	1	1	4	NS	0.6	594	--	--	

Type: CL=Clearfield systems, H=hybrid, HEAR=high erucic acid rapeseed, LL=liberty link, OP=open pollinated, SPO=specialty oil, Blackleg: R=resistant, CR=canker resistant, MR=moderately resistant, S=susceptible, MS=moderately susceptible,

DAP=days after planting

Blackleg rating provided by company

†=Round Up Ready check cultivars

Hot conditions during flowering may have influenced some varieties more than others.

Roundup Ready Canola No-till Recrop - 2006

Williston Research/Extension Center

Company/Brand	Cultivar	Bloom Date		Plant Height	Stand %	Test Weight lb/bu	Seed Oil %	Grain Yield lb/ac			3 yr avg
		DAP	days					2004	2005	2006	
Croplan Gen.	Hyclass 431 RR	47	23	41	83	51.1	42.3	--	--	684	--
Croplan Gen.	Hyclass 712 RR	51	17	43	93	51.6	40.7	--	1199	734	--
Croplan Gen.	Hyclass 767 SW	47	20	35	98	53.1	39.9	1426	1033	707	1055
Croplan Gen.	Hyclass 910 RR	52	16	45	91	52.8	40.0	--	--	716	--
Croplan Gen.	Hyclass 924 RR	44	25	37	89	51.5	40.1	--	--	674	--
Croplan Gen.	Minot RR	48	23	36	76	52.5	41.2	1573	970	520	1021
DeKalb	DKL 52-10	46	22	41	88	52.8	39.0	--	1033	790	--
DeKalb	DKL 38-25	46	20	39	93	51.2	42.0	--	1257	769	--
DeKalb	DKL 34-55	46	21	39	90	52.7	41.5	1443	1058	650	1051
Interstate	Hyola 357 Magnum	43	23	29	90	53.0	39.6	1785	1333	936	1351
Interstate	Hyola 514 RR	50	18	40	97	52.4	41.5	--	1077	761	--
Interstate	SW Patriot RR	44	21	41	86	51.3	40.8	1670	1173	771	1205
Interstate	SW Marksman RR	47	22	38	94	51.3	41.4	1587	1196	701	1161
Interstate	SW Titan RR	44	22	40	94	52.0	39.3	--	1151	806	--
Interstate	IS 7145 RR	48	17	38	99	53.2	42.0	--	1465	913	--
Interstate	IS 3465 RR	45	23	39	91	50.7	40.1	--	1266	772	--
Meridian	SW 5272 RR	51	23	41	69	51.8	37.9	--	--	368	--
Meridian	SW H5278 RR	48	23	38	61	52.1	40.9	--	--	377	--
Meridian	Meridian 1818	52	19	33	66	54.0	39.8	--	--	277	--
Monsanto	MB52141	46	19	39	94	53.1	40.5	--	--	783	--
Monsanto	MB52143	47	19	37	97	52.7	42.9	--	--	853	--
Monsanto	Z5052	43	21	35	93	49.9	40.7	--	--	859	--
Monsanto	SW-PF-02-3902	47	21	39	97	53.2	39.8	--	--	664	--
Monsanto	SW-PF-02-3910	46	21	40	95	53.3	38.6	--	--	823	--
Monsanto	MB51105	47	22	38	91	51.6	39.7	--	--	501	--
Monsanto	SW H5263RR	52	20	39	94	51.0	43.2	--	--	592	--
SW Seed Ltd.	SW-PI 02-1212	45	22	40	91	53.4	40.4	--	--	749	--
Mean		47	21	38	89	52.2	40.6	1547	1081	692	--
CV %		1	6	7	9	0.6	1.1	8	15	12	--
LSD 0.05		1	2	4	12	0.6	0.9	168	231	113	--

Planting Date: May 1 into standing durum stubble from 2005

Harvest Date: July 31

Croplan Gen. - Croplan Genetics; Interstate - Interstate Seeds;

Seed oil content reported at 8.5% moisture

Conventional Canola Variety - 2006

Williston Research Extension Center

Company/Brand	Cultivar	Grain Yield									
		Bloom Date	Bloom Duration	Plant Height	Stand	Test Weight	Seed Oil	2004	2005	2006	3 yr avg
Croplan Gen.	Minot RR	DAP 48	days 68	inch 32	% 78	lb/bu 52.6	% 43.6	--	--	720	--
Interstate	Hylite 618CL	47	66	29	95	52.8	41.0	1444	959	789	1064
Interstate	Hyola 401	44	65	27	94	53.6	41.2	--	--	1084	--
Interstate	Hyola 420	46	65	32	94	53.3	42.3	--	--	961	--
Interstate	Hyola 440	48	67	37	93	52.6	44.1	--	--	948	--
	Hyola 357										
Interstate	Magnum	44	65	29	86	53.1	41.2	--	--	1087	--
Interstate	Hyola 514 RR	49	68	35	98	52.4	43.1	--	--	1005	--
Interstate	SW Marksman RR	47	67	33	98	51.1	43.6	--	--	997	--
Mean		47	66	32	92	52.7	42.5	1429	753	949	--
CV %		1	1	7	9	0.5	0.8	8	23	8	--
LSD 0.05		1	1	3	12	0.6	0.8	156	262	112	--

Irrigated

Interstate	Hylite 618CL	45	NA	44	98	50.1	45.3	--	--	2243	--
------------	--------------	----	----	----	----	------	------	----	----	------	----

Planting Date: April 29 on fallow

Harvest Date: July 26

Croplan Gen. - Croplan Genetics; Interstate - Interstate Seeds;

Seed oil content reported at 8.5 percent moisture.

Irrigated Planting Date: May 10

Irrigated Harvest Date: Aug. 9

2006 Roundup Ready Canola Variety Trial
Hettinger

Company/Brand	Cultivar	Type†	Days to Bloom	Duration of Flowering	Days to Mature	Plant Height	Oil Content	Yield
				days		inch	%	lb/ac
Croplan Genetics	HyClass 712	S	55	16	85	40	36.6	389
	HyClass 910	H	54	16	84	36	36.0	464
	HyClass 767 SW	S	52	19	84	39	35.7	515
	HyClass 924	H	50	19	82	38	37.3	664
	HyClass 905	H	55	17	86	38	34.2	424
	HyClass 431	S	52	20	85	36	36.2	377
Dekalb	DKL 52-10	H	51	19	84	39	35.4	561
	DKL 38-25	H	52	17	84	39	38.9	692
	DKL 34-55	OP	52	19	84	37	39.5	470
Interstate Seed	Hyola 357 Mag	H	49	18	82	30	34.6	952
	Hyola 514RR	H	56	16	86	40	34.1	395
	SW Patriot RR	S	51	18	84	35	34.8	629
	SW Marksman RR	H	52	20	84	37	38.7	506
	SW Titan RR	H	50	19	84	35	34.8	516
	IS 7145RR	H	54	16	86	41	37.7	436
Monsanto	MB 52141	H	51	19	84	34	36.8	543
	MB 52143	H	52	20	84	41	39.6	519
	Z5052	H	49	19	82	32	36.4	657
	SW-PF-02-3902	H	53	20	85	37	34.7	486
	SW-PF-02-3910	H	53	19	84	38	34.4	461
	SWG 5246	OP	53	19	85	33	35.9	375
Proseed	SWH 5263RR	OP	54	19	86	37	36.8	350
	2066	H	54	18	84	39	37.7	532
	Exp30518	H	54	18	85	33	35.5	416
SW Seed	Manor ‡	OP	50	20	83	32	33.8	349
	SW-PI-02-1212	H	50	18	84	35	37.4	642
Trial Mean			52	18	84	37	36.3	512
C.V. %			1.4	4.9	0.9	6.4	2.8	12.6
LSD .05			1	1	1	3	1.4	91

† Type: H = Hybrid, S = Synthetic, OP = Open Pollinated

‡ Proseed Manor is a conventional (non-Roundup Ready) type.

Planting Date: April 23, 2006 Harvest Date: July 24, 2006

Note: Very low yields caused by severe heat and moisture stress.

Previous Crop: HRSW

For more information on this and other topics, see: www.ag.ndsu.edu

This publication may be copied for noncommercial, educational purposes in its entirety with no changes.

Requests to use any portion of the document (including text, graphics or photos) should be sent to permission@ndsuext.nodak.edu.

Include exactly what is requested for use and how it will be used.

County Commissions, North Dakota State University and U.S. Department of Agriculture cooperating. Duane Hauck, Director, Fargo, North Dakota. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. We offer our programs and facilities to all persons regardless of race, color, national origin, religion, gender, disability, age, veteran's status or sexual orientation, and are an equal opportunity institution. This publication will be made available in alternative formats for people with disabilities upon request, (701) 231-7881.

1.7M-12-06