

2017 Canola Field Crop Trials Results



Minnesota Agricultural Experiment Station and the College of Food, Agricultural and Natural Resource Sciences

The 2017 Canola Production Center (CPC) was located on the western edge of Roseau Minnesota on land owned by Northern Resources Cooperative north of the West plant facility. Tillage was provided by Tony Brateng and Magnusson Farms. Previous crop was spring wheat. A spring fertilizer rate of 150-40-40-20s was applied and incorporated prior to final seedbed preparation. Weather conditions during the growing season were generally favorable for canola production. Moisture conditions at planting were favorable and emergence was generally uniform and vigorous. Conditions midseason were wet but long periods of standing water and soil saturation were avoided. Mean yields on the variety trials were well above average at over 3000#/acre.

The canola variety trial was seeded on May 20 with a Hege cone seeder with double disk openers. Seeding rate was 12PLS/ft. 2 or 5#/per acre if pure live seed (PLS) of a variety was unknown. Individual plots were seeded on 6 ft. x 27 ft. centers. Experimental design was four replications in a randomized

complete block design. All plots were sprayed with Section 2 @ 5oz./acre on 6/7 for grass weed control. General weed control was done with applications of either Roundup PowerMax @ 16oz. to RR varieties, Draft @ .3oz. to SU varieties, Beyond @ 4oz. to CL varieties or Liberty @ 22oz. to LL varieties. Application of these herbicides was 6/12-6/15 at late vegetative stage prior to stem elongation. Labeled adjuvants were combined with all of the herbicides. Proline @ 5.7oz./acre was applied on 7/6 for sclerotinia control. Plots were segregated by company listed maturity for management purposes with the early and unknown maturity varieties swathed on August 16 and medium and late entries swathed on August 18. SU canola varieties were swathed on August 26. Harvest dates were August 30 and September 1 for the early and late varieties, respectively. SU varieties were combined on September 6.

Project Leaders and Plot Managers

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Submitting companies and contact information.

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2017 Spring Canola Variety Trial

Location — Northern Resources Cooperative — West Plant, Roseau, MN.

University of Minnesota

Company	Herbicide* Tolerance	Variety	Seeding ¹ Rate (#/Acre)	Yield ²		%		Ground Cover ⁴ (%)	Test Wt. ESV ⁵ (#/Bu.)	Height (Inches)	Flowering			
				#/ Acre	% of Mean	Protein ³	Oil ³				Begin Day	End Day	# of Days	
BrettYoung	CL	5545 CL	6.0	3951	126	18.9	45.0	89	8.5	51.8	54	7/4	7/22	19
Mycogen	CL	Nexera 2022CL	6.7	3226	103	20.1	46.1	80	7.3	51.8	43	7/5	7/22	17
Cibus	SU	C5507	4.2	2518	80	20.4	44.4	78	7.8	50.8	41	7/7	8/2	26
Cibus	SU	C5522	4.6	2564	82	20.1	44.2	80	7.8	51.0	43	7/8	8/2	26
Cibus	SU	C5513	3.5	2500	80	20.8	44.1	65	6.5	52.4	44	7/9	8/3	26
Bayer CropScience	LL	InVigor L233P	5.3	3220	103	18.0	45.5	85	8.3	51.7	51	7/3	7/17	14
Bayer CropScience	LL	InVigor L140P	5.2	3164	101	17.1	45.8	83	8	50.8	50	7/4	7/19	16
Bayer CropScience	LL	InVigor L252	5.6	3261	104	16.3	48.4	83	7.8	51.5	51	7/5	7/21	16
Bayer CropScience	LL	InVigor L230	5.5	3391	108	16.8	47.7	85	8.3	51.7	49	7/2	7/17	15
CROPLAN	RR	HyClass 930	5.5	3077	98	16.0	48.3	73	7.3	51.3	39	7/1	7/17	15
CROPLAN	RR	HyClass 955	5.3	3369	107	17.0	47.0	85	7.8	51.6	41	7/1	7/17	16
CROPLAN	RR	HyClass 970	6.0	3595	115	17.5	47.5	78	7.8	51.9	47	7/3	7/20	17
Proseed	RR	300 Magnum	5.0	3362	107	17.9	47.0	63	6.5	51.8	49	7/4	7/22	18
Proseed	RR	PS 5000	5.0	3298	105	16.3	47.6	73	7.3	51.5	47	7/4	7/21	18
Dekalb-Monsanto	RR	DKL70-10	6.3	3343	107	17.6	47.2	86	8.3	51.5	46	7/3	7/20	17
Dekalb-Monsanto	RR	G15P9374	5.0	3261	104	17.8	47.3	88	7.5	51.9	42	7/5	7/22	17
Dekalb-Monsanto	RR	DKL35-23	6.4	3464	110	19.0	46.9	83	7.8	52.1	46	7/2	7/17	16
Dekalb-Monsanto	RR	DKL71-14BL	5.5	3341	106	17.4	47.4	80	7.5	51.9	44	7/2	7/20	18
DuPont Pioneer	RR	45CS40	5.0	3623	115	18.2	47.2	80	8	51.4	55	7/5	7/21	16
DuPont Pioneer	RR	45M35	5.0	3453	110	16.4	47.8	78	7.8	52.0	48	7/3	7/21	17
Integra Seed/Wilbur Ellis	RR	7257	4.7	3232	103	17.7	47.0	73	7	52.0	43	7/3	7/20	17
BrettYoung	RR	6074 RR	5.2	3628	116	16.5	47.0	83	8.3	52.1	48	7/4	7/23	19
		Shatter check	5.0	3499	112	17.5	47.2	83	8.3	51.7	52	7/5	7/22	17
LSD @ 5% Level				318	10	1.2	1.1	10	0.9	0.4	3.9	1.2	1.2	1.2
CV(%)				6.8	7	5	2	9	8	16	6	22	4	5

Experimental Design: RCB w/4reps

*Herbicide Tolerance — LL = Liberty Link, CL = Clearfield, RR = Roundup Ready and SU = Sulfonated Urea.

¹Seeding rate = 12PLS/ft².²Yields corrected to 8.5% moisture.

Mean trial yield = 3139#/acre.

³All quality on dry matter basis.⁴% ground cover June 14.⁵ESV (early season vigor) — June 13 — 9 = best; 1 = least.

Herbicide Treatments	Herbicide Tolerance	Date of Application
Draft — .3oz. + .5% NIS	SU	6/15
Beyond — 4oz. + .25% NIS + 2.5% AMS	CL	6/15
Liberty — 22oz. + 2.5% AMS	LL	6/12
Roundup PowerMax — 16oz. + .25% AMS	RR	6/12
Section 2 — 5oz. + 1% COC	All Plots	6/7