

2018 Canola Field Crop Trials Results



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

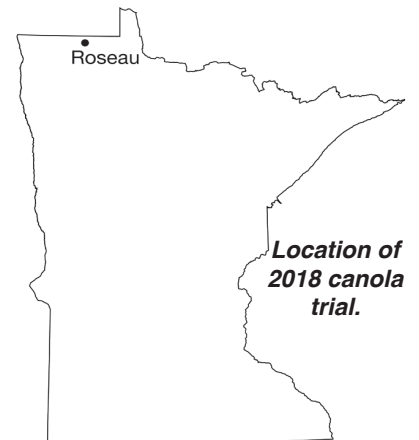
The 2018 Canola Production Center (CPC) was located northwest of Roseau Minnesota on Rice Farms, just north of the U of M Magnusson Research Farm. Primary soil tillage was also provided by Rice Farms. Previous crop was spring wheat. A spring fertilizer rate of 140-50-50-20s was applied and incorporated prior to final seedbed preparation. Soil moisture conditions at planting were favorable and emergence was generally uniform and vigorous. Weather conditions during the season were generally drier and hotter than optimal, especially during the pollination time frame. Mean yields on this variety trial were slightly above average at 2468#/acre.

The canola variety trial was seeded on May 23 with a Hege small plot seeder and double disk openers. Seeding rate was 12PLS/ft.² or 5# per acre if pure live seed (PLS) of a variety was not available. 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 an applications of either Roundup PowerMax @ 16oz. to RR varieties, Draft @ .3oz. to SU 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 7/9 mainly for sclerotinia control. Plots were segregated by company listed maturity for management purposes with the early and unknown maturity varieties swathed on August 15 and medium and late entries swathed on August 18. All plots were combined on September 5.

Project Leaders and Plot Managers

Dave Grafstrom, Donn Vellekson and Nancy Ehlke.



Submitting companies and contact information.

Contact	Phone	Email
Jordan Varberg	(701) 740-3324	jordan.varberg@bayer.com
Codee Lee	(701) 626-1386	clee@cibus.com
Courtney Meduna	(701) 339-0238	courtney.a.meduna@monsanto.com
Rene Mabon	(204) 261-7932	rene.mabon@brettyoung.ca
Paul Gregor	(218) 686-4122	psgregor@landolakes.com
Keith Peltier	(701) 324-4177	proseed@gondtc.com
Alan Scott	(507) 317-1046	alan.scott@pioneer.com
Dave Gregerson	(701) 741-2915	dgregers@wilburellis.com
Jim Johnson	(701) 361-8958	jimj_star@hotmail.com

2018 Spring Canola Variety Trial

Location: Rice Farms — NW of Roseau, MN

University of Minnesota

Company	Herbicide Tolerance*	Variety	Seeding** Rate (#/Acre)	Yield ¹			% Protein ²	Test			% Ground Cover ⁵	Harvest Height (Inches)	Flowering		
				#/Acre	% of Mean	% Oil ²		Weight (#/Bu.)	Lodging ³	ESV ⁴			Begin Day	End Day	# of Days
Cibus	SU	C5507	4.4	2013	82	46.1	19.9	50.2	7.0	7.0	71	45	7/5	7/23	18
Cibus	SU	exp201803	4.7	1986	80	49.6	17.7	50.0	1.5	6.0	65	48	7/3	7/19	16
Cibus	SU	exp201801	3.9	2580	105	48.7	18.1	51.6	2.5	5.0	48	52	7/5	7/25	21
Dekalb-Monsanto	RR	DKL70-10	7.3	2348	95	50.2	16.2	50.9	4.0	8.5	88	45	6/30	7/15	15
Dekalb-Monsanto	RR	DKL 75-42CR	4.4	2475	100	50.0	16.0	50.4	2.0	7.5	79	48	7/2	7/20	18
Dekalb-Monsanto	RR	DKL35-23	5.8	2315	94	51.1	16.3	51.0	3.5	8.0	85	47	6/29	7/15	16
Dekalb-Monsanto	RR	DKL71-14BL	6.5	2714	110	51.0	15.8	51.2	1.5	8.0	84	46	6/30	7/19	19
DuPont Pioneer	RR	45M35	5.0	2669	108	52.5	14.0	50.8	1.5	7.5	84	50	7/1	7/18	16
DuPont Pioneer	RR	45H33	5.0	2514	102	50.4	15.6	49.4	1.0	7.5	76	51	7/1	7/20	19
BrettYoung	RR	6074 RR	5.2	2708	110	49.6	14.5	51.2	1.0	8.0	85	47	6/30	7/22	22
BrettYoung	RR	6090 RR	5.6	2512	102	49.9	15.4	50.7	1.0	7.5	80	61	7/4	7/25	21
BrettYoung	RR	4187 RR	5.6	2665	108	50.1	15.4	51.1	1.0	7.5	80	53	7/4	7/23	19
Integra Seed/Wilbur Ellis	RR	7257R	4.4	2278	92	50.6	16.3	51.6	4.0	7.5	78	45	6/30	7/15	15
Star Specialty Seed	RR	Star 402	4.6	2562	104	53.0	14.1	50.6	2.0	7.0	75	48	7/2	7/17	15
Proseed	RR	300 Magnum	5.6	2455	99	51.8	15.1	51.0	5.0	7.5	76	45	6/30	7/18	18
Proseed	RR	PS 5000	5.3	2426	98	49.3	15.7	50.7	1.5	8.5	89	53	7/3	7/23	20
Winfield United	RR	HyClass 955	4.7	2289	93	51.4	15.5	51.1	6.5	8.5	86	45	6/30	7/16	16
Winfield United	RR	HyClass 730	4.9	2280	92	52.1	15.2	51.0	5.0	8.5	83	43	6/30	7/15	16
Winfield United	RR	HyClass 930	4.9	2546	103	52.1	14.9	50.9	2.0	7.5	76	46	6/30	7/15	16
Bayer CropScience	LL	InVigor L140P	5.4	2442	99	48.0	16.4	50.2	1.5	9.0	81	52	7/1	7/16	15
Bayer CropScience	LL	InVigor L233P	5.7	2675	108	48.4	16.0	50.8	1.5	9.0	91	47	7/1	7/15	15
Bayer CropScience	LL	InVigor L255P	6.0	2563	104	51.0	13.7	51.2	1.0	9.0	91	48	7/2	7/19	17
Bayer CropScience	LL	InVigor L252	5.4	2742	111	51.5	14.2	51.3	1.0	7.0	81	51	7/3	7/21	18
LSD @ 5% Level				222	9	0.9	0.9	0.2	1.7	1.1	9.6	4.0	1.5	1.3	1.9
CV(%)				6	6	1	4	0.3	47	10	8	6	3	5	7

Experimental Design: RCB w/4reps.

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

**Seeding Rate = 12PLS/Ft² (using company provided PLS/#).¹Clean Seed Yields corrected to 8.5% moisture.

Trial Mean Yield = 2468#/Acre.

²Oil and Protein dry matter basis.³Lodging at harvest — 1 = Upright; 9 = Flat.⁴ESV(early season vigor) — June 13 — 9 = Best; 1 = Least.⁵% Ground Cover — June 14.

Herbicide Treatments:	Where applied	Date of Application
Draft — .3oz. + .5% NIS	SU lines	6/12
Liberty — 22oz. + 2.5% AMS	LL lines	6/13
Roundup PowerMax — 16oz. + 2.5% AMS	RR lines	6/13
Section 2 — 5oz. + 1% COC + 1.5oz. Warrior	All plots	6/7