

Project Title:

2023 Montana Statewide Spring Canola Variety Trial

Objective:

To test yield and quality of spring canola lines.

Personnel:

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Summary:

Twenty-four spring canola cultivars were tested in this statewide trial. See Table 1 for detailed management practices.

DL225373LL had the lowest yield at 1,209 lbs/A and InVigor L345PC had the highest yield at 2,520 lbs/A. Plant height ranged from 44 in. (NCC101S) to 56 in. (InVigor LR354PC). The BY 6217TF cultivar had the highest oil content at 53% and NCC101S had the lowest at 48.2%. Test weight ranged from 49.5 lb/bu (NC527CR TF) to 51.3 lb/Bu (NCC1825/8-S). Shattering and Lodging scores were minimal (Table 2).

Table 1. Management Information

Seeding date:	4/28/2023 (118 Julian)	Field Location:	Y4
Seeding rate:	Standard	Harvest date:	8/24/2023 (236 Julian)
Previous crop:	Barley	Soil type:	Creston silt loam
Herbicide:	N/A	Tillage:	Conventional
Insecticide:	N/A	Soil residual nutrient (NO₃⁻, P, K lb/A):	88-26-232 (Fall, 2022)
Fungicide:	N/A	Nutrient fertilizer applied (N, P₂O₅, K₂O lb/A):	60-35-35 (Spring, 2023)

Table 2. Agronomic Performance

Cultivar	YLD¹, lbs/A	Stand ft²	FLWR Julian	HT, in	% SHTTR	% LOD	% Oil	TWT¹, lb/bu
InVigor L345PC	2520	10.5	165	53	1.5	1.5	51.3	50.6
InVigor L350PC	2319	11.3	170	55	1.3	1.0	51.6	50.4
InVigor L343PC	2317	9.5	164	52	2.0	1.8	51.2	50.6
InVigor LR354PC	2169	11.0	169	56	0.5	1.3	52.2	50.7
CP9978TF	2162	12.8	163	49	0.3	1.8	51.3	50.8
BY 5125CL	2153	12.0	164	52	1.5	1.8	51.5	50.6
NCC101S	2123	11.0	162	44	2.5	1.3	48.2	50.9
CP7130LL	2116	11.0	164	52	1.8	1.8	51.1	49.9
NC155 TF	2093	10.8	162	49	0.5	1.0	50.4	50.7
CP9221TF	2086	13.0	162	47	1.0	2.3	50.7	50.6
InVigor L340PC	2076	11.8	164	51	1.3	1.3	50.1	50.5
CP7250LL	2047	11.5	165	50	0.8	1.3	50.8	50.6
NC527CR TF	1988	11.8	163	47	0.0	1.3	51.4	49.5
InVigor L233P	1982	9.3	164	52	1.5	1.5	51.7	50.4
BY 6211TF	1962	10.3	163	52	1.0	1.8	50.5	51.0
StarFlex	1948	14.0	163	49	0.8	1.0	51.3	50.7
NCC1825/8-S	1909	10.3	162	45	2.5	1.0	50.0	51.3
DL225389LL	1780	13.3	164	50	1.3	1.0	51.3	50.4
BY 6217TF	1761	10.8	166	55	1.3	1.0	53.0	50.3
NC471 TF	1710	11.8	163	49	2.3	1.0	52.0	50.9
DL225372LL	1567	10.8	168	50	0.8	1.3	50.9	50.2
DL225595TF	1428	10.8	170	51	0.3	1.0	51.8	50.0
DL225634TF	1341	10.0	168	55	0.8	1.0	49.8	51.3
DL225373LL	1209	11.0	176	50	0.8	0.8	48.9	49.7
Mean	1948	11.2	165	51	1.2	1.3	50.9	50.5
CV	13.0	23.9	0.4	5.4	90	37	2.0	0.5
LSD	357.8	ns	1.0	3.8	1.5	0.7	1.4	0.4
PR > F	0.001	0.789	0.001	0.001	0.045	0.003	0.001	0.001

YLD: yield, Stand: plant stand, FLWR: flower, HT: plant height, SHTTR: shatter score, LOD: lodging score, TWT: test weight

¹ adjusted to 8.5% moisture

ns: not significant