

# 2022

## Montana Statewide Spring Canola Variety Trial



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## **Montana Statewide Spring Canola Variety Trial 2022**

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## **Introduction**

Canola is quickly becoming an essential crop for the state of Montana. We have consistently been among the top three growers of canola in the United States in recent years, producing almost 32 million dollars of production value in 2021. However, canola is a sensitive crop, so selecting varieties that are adapted to local growing conditions will help increase producers yields. This trial evaluated 29 canola hybrids at five research centers throughout the state (Kalispell, Havre, Conrad, Sidney, and Corvallis) under dryland and irrigated conditions.

## **Objective**

The objective of the 2022 Montana Statewide Spring Canola Variety Trial is to evaluate the agronomic performance of currently available or soon to be released varieties and breeding lines of canola in the many diverse climates of Montana. This trial provides growers with information regarding which canola varieties will be best suited for their specific production environment.

## **Methods**

In spring 2022, twenty-nine canola varieties with seven herbicide resistance traits were submitted by eight sponsors ([Table 1](#)). Five research centers across Montana participated in the trial ([Figure 1](#)). These included: Northwestern Ag near

Kalispell (NWARC), Western Ag near Corvallis (WARC), Western Triangle Ag near Conrad (WTARC), Northern Ag near Havre (NARC), and Eastern Ag near Sidney (EARC). While five of the varieties were tested at all of the locations, a different combination of the varieties were tested at each location. Each site was arranged as a randomized complete block design (RCBD) with four replications. Plot size and crop management methods varied depending upon standard procedures at each location and can be seen in [Table 2](#). Plots were seeded at 14 plts/ft<sup>2</sup> with the goal of 10 to 12 established plants/ft<sup>2</sup>. Varieties were compared for plant density, canopy height, flowering date, lodging, shattering, grain yield, test weight, and oil content. Lodging and shatter were evaluated on a scale of 0 to 100%. Plant density was determined by counting seedlings within a known area. Canola yield was adjusted to 8% moisture. Planting and harvest dates, fertilizer and pesticide applications, row spacing, tillage systems, and field site crop history were recorded for each location ([Table 2](#)). Trial site meteorological and soil data are presented in [Table 3](#).

## **Interpreting Results**

Canola performance data are presented by location in [Tables 4-10](#). Least Significant Difference (LSD) values were

not presented due to missing data at several locations, preventing the use of standard analytical procedures (one-way analysis of variance) and reliable LSD calculations. Rather, an analytical approach deemed more appropriate for unbalanced datasets (linear mixed modelling with Tukey pairwise comparisons) was employed, where a probability value (p-value) exceeding 0.05 indicates statistical equivalence.

The variety or varieties with the highest plant density, canopy height, yield, test weight, oil content; and the lowest Julian flowering date, lodging, and shatter scores are considered top performers. The value of the top-performer within a given column is bolded and underlined. If the difference between the value of the top-performer(s) and that of a given variety within the same column is not significant by Tukey pairwise comparisons ( $p > 0.05$ ), then the latter is bolded, indicating no real difference between this variety and the top performer.

### **Results & Discussion**

The following results are for informational purposes only. The presentation of data for the varieties evaluated does not imply approval or endorsement by Montana State University.

Of the five participating research centers, three sites were able to collect yield and quality data for the entries. WARC experienced a large amount of bird predation which caused an inaccurate representation of yields, and due to environmental conditions the WTARC trial was terminated.

The highest yielding varieties from each location were InVigor L345PC at NWARC, DG760TM at NARC, and NCC1825/8-S at EARC. Of the locations that collected plant density data, there was no significant differences detected. The average flowering date (julian) ranged from 168 at NARC to 178 at NWARC. CP930RR had the highest oil content at each recorded location ranging from 44.6% at NARC to 50.4% at NWARC.

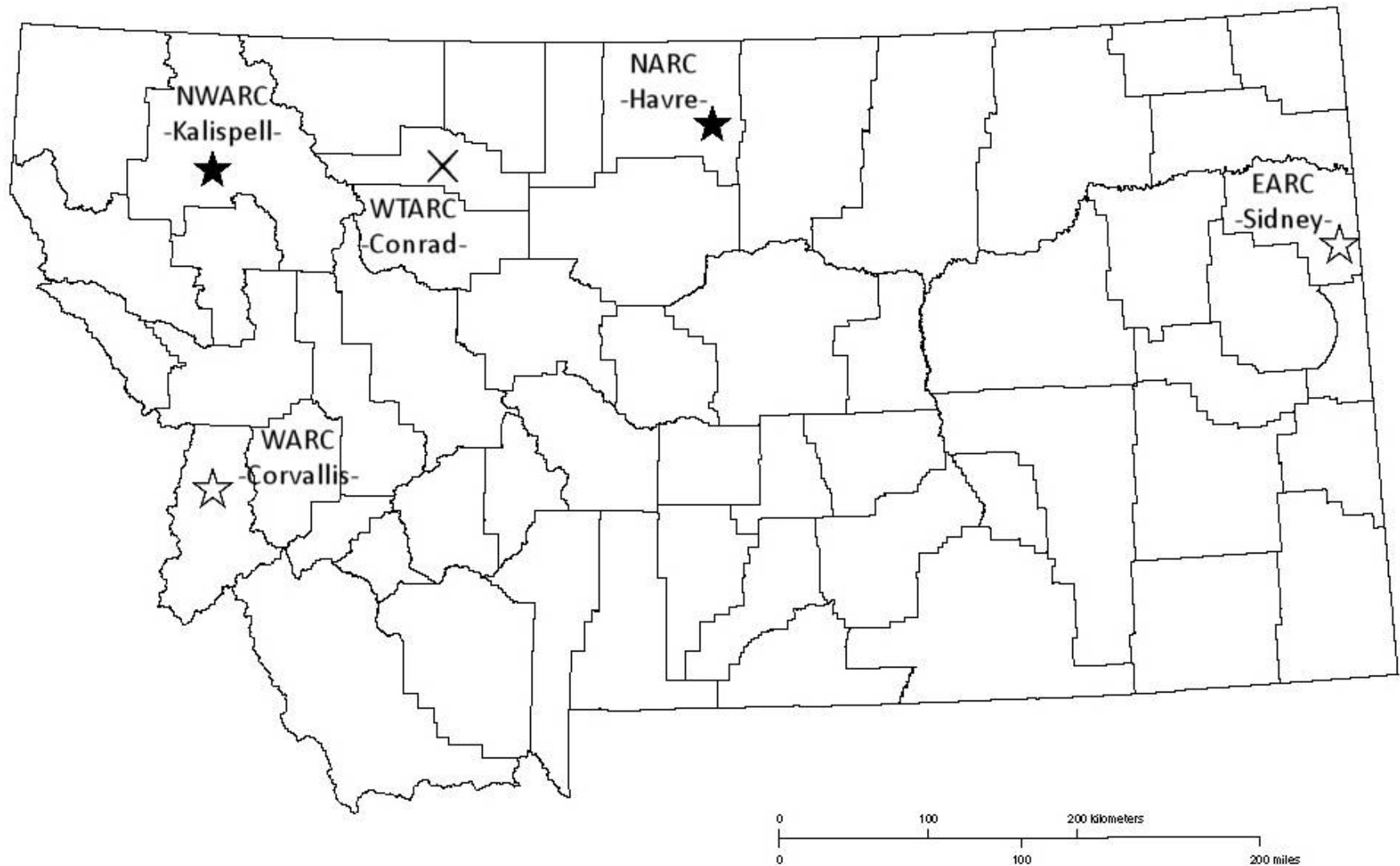
Yield data is summarized for all locations in Table 4. Variety performance at each location is summarized in [Tables 5-8](#).

### **Future Plans**

With continued support from the canola industry and research center personnel, multi-location canola evaluations will continue in 2023.

## Trial Locations

Figure 1. Statewide spring canola variety testing locations in 2022. Trials were established in irrigated (open symbols) and dryland (closed symbols) systems. Testing at WTARC was discontinued (×) in 2022.



## Variety List

Table 1. 2022 variety list grouped by herbicide resistance

Company	Variety	<sup>1</sup> Herbicide Trait(s)	<sup>2</sup> Resistance		
			BL	CR	S
BrettYoung	<sup>3</sup> BY 5125CL	CL	<sup>4</sup> R	R	<sup>4</sup> N
Nutrien	DG280CLC		R	R	N
WinField - CROPLAN	CP7130LL	LL	R	R	Y
WinField - CROPLAN	CP7144LL		R	R	Y
Meridian Seeds	CS4000 LL		R	R	Y
Nutrien	DG660LCM		R	R	Y
BASF	InVigor L233P		R	-	Y
BASF	InVigor L340PC		R	R	Y
BASF	InVigor L343PC		R	R	Y
BASF	InVigor L345PC		R	R	Y
BASF	InVigor L356PC		R	R	Y
Photosyntech	<sup>3</sup> NCC101S	None	MR	R	N
Photosyntech	<sup>3</sup> NCC1825/8-S		R	-	N
WinField - CROPLAN	CP930RR	RR	R	-	Y
WinField - CROPLAN	CP9919RR		R	-	Y
Bayer - Dekalb	DKTF91SC	RR/TF	R	-	Y
Bayer - Dekalb	DKTF99SC		R	-	Y
Bayer - Dekalb	DKTFLL21SC	RR/TF/LL	R	-	Y
BASF	InVigor LR344PC		R	R	Y
BrettYoung	<sup>3</sup> BY 6211TF	TF	R	-	Y
BrettYoung	<sup>3</sup> BY 6217TF		R	-	Y
WinField - CROPLAN	CP9978TF		R	-	Y
Meridian Seeds	CS2600 CR-T		R	R	Y
Meridian Seeds	CS3000 TF		R	R	Y
Nutrien	DG760TM		R	-	Y
Nutrien	DG781TCM		R	R	Y
Nuseed	NC155 TF		MR	-	N
Nuseed	NC471 TF		R	-	N
Nuseed	NC527CR TF		MR	R	N

<sup>1</sup>CL = Clearfield, LL = Liberty Link, RR = Roundup Ready, TF = TruFlex; <sup>2</sup>S = Shatter, BL = Blackleg, CR =Clubroot;

<sup>3</sup>Variety tested at all six locations

<sup>4</sup>Shatter/disease ratings provided by seed suppliers: Y = Yes, N = No, R = Resistant, MR = Moderately Resistant



## Multi-Location Summaries

### Management Information

Table 2. 2022 spring canola variety trial management information by location

Management	NWARC (Ka)	NARC (Ha)	EARC (Si)	WARC (Cv)
Irrigation (inches)	None	None	1.14	4.2
Tillage	Conventional	No-till	Conventional	Conventional
Row Spacing (inches)	6	12	9	6.5
Plot Size (ft <sup>2</sup> )	63	110	100	82
Seeding Date	4/29/2022	4/22/2022	5/3/2022	4/20/2022
Harvest Date	9/8/2022	8/4/2022	8/1/2022	9/1/2022
Harvest Type	Direct Cut	Direct Cut	Direct Cut	Direct Cut
Previous Crop	Spring Wheat	Spring Wheat	Cereal Grain	Lentils
Fertilizer (NPK)	50-25-40 @ 210 lb/A	50-15-0-20s @ 173 lb/A	80-30-0 @ 136 lb/A	50 lb/A N
Pesticide	Lambda-CY @ 3.84 oz/A on 6/2/22 & 6/28/22	RT3 @ 28 oz/A on 4/8/22, Mustang Maxx @ 4 oz/A on 6/11/22, Baythroid @ 2.4 oz/A on 6/27/22	Mustang Maxx @ 4 oz/A on 6/10/22	Stinger 0.33 pt/A
Pests	Flea beetle and seedpod weevil	Weeds, flea beetle, and grasshoppers	Flea beetle	Weeds

## Meteorological and Soils Information

Table 3. 2022 soil and meteorological data by location

<b>Meteorological &amp; Soils</b>	<b>NWARC (Kalispell)</b>	<b>NARC (Havre)</b>	<b>EARC (Sidney)</b>	<b>WARC (Corvallis)</b>
2022 15th Apr through 15th Sep Precip. (inches)	8.1	5.2	11.5	3.9
Long-Term Average Precip. & Period of Record (inches)	9.61 (1989-2022)	7.95 (1916- 2021)	9.53 (1949 - 2020)	5.55 (1987 - 2021)
Last Killing Frost in Spring (< 32°F)	5/22/2022	5/21/2022	5/2/2022	5/11/2022
First Killing Frost in Fall (< 32°F)	9/10/2022	10/7/2022	10/6/2022	10/14/2022
Frost-free Period (days)	110	139	156	155
2-wk Avg. Air Temp Beginning at First Flowering (°F)	62.3	63.27	65.4	62.8
Max Summer Temperature (°F)	96.9	100.0	99.9	98.9
Date of Max Summer Temperature	7/31/2022	7/17/2022	8/4/2022	7/31/2022
Soil Type	Creston Silt Loam	Telstad-Joplin loams	Savage silty clay loam	Burnt Fork loam
Elevation (ft)	2956	2668	1931	3597

## Yield Summary

Table 4. 2022 yield summary by location

<b>Statewide Yield Summary (bu/A)</b>				
<sup>1</sup> Herb Traits	Variety	NWARC (KalisPELL)	NARC (Havre)	<sup>2</sup> EARC (Sidney)
CL	BY 5125CL	<b>70.0</b>	<b>31.2</b>	<b>40.0</b>
	DG280CLC	<b>64.7</b>	<b>28.8</b>	-
LL	CP7130LL	<b>64.4</b>	<b>29.5</b>	<b>36.5</b>
	CP7144LL	<b>65.2</b>	<b>28.9</b>	<b>36.8</b>
	CS4000 LL	<b>60.7</b>	<b>29.8</b>	-
	DG660LCM	<b>59.8</b>	23.5	-
	InVigor L233P	<b>72.6</b>	<b>28.2</b>	<b>35.6</b>
	InVigor L340PC	<b>72.7</b>	<b>31.7</b>	<b>40.9</b>
	InVigor L343PC	<b>73.5</b>	<b>31.7</b>	-
	InVigor L345PC	<b>74.2</b>	<b>30.2</b>	-
None	InVigor L356PC	<b>67.9</b>	-	-
	NCC101S	<b>64.3</b>	<b>30.7</b>	<b>34.7</b>
	NCC1825/8-S	<b>68.5</b>	<b>29.9</b>	<b>48.1</b>
	RR	CP930RR	58.8	26.9
RR	CP9919RR	53.6	24.7	29.7
	RR/TF	DKTF91SC	-	-
RR/TF/LL	DKTF99SC	-	-	<b>46.6</b>
	DKTFLL21SC	-	-	<b>38.5</b>
	InVigor LR344PC	<b>67.6</b>	<b>31.7</b>	<b>35.0</b>
TF	BY 6211TF	<b>68.0</b>	<b>28.4</b>	<b>34.2</b>
	BY 6217TF	<b>66.3</b>	20.7	25.7
	CP9978TF	<b>64.6</b>	<b>28.2</b>	<b>36.8</b>
	CS2600 CR-T	<b>62.9</b>	<b>32.1</b>	-
	CS3000 TF	<b>62.2</b>	<b>28.9</b>	-
	DG760TM	<b>62.4</b>	<b>34.3</b>	-
	DG781TCM	<b>63.1</b>	<b>32.5</b>	-
	NC155 TF	<b>60.9</b>	<b>31.2</b>	-
	NC471 TF	<b>66.2</b>	<b>27.7</b>	-
	NC527CR TF	<b>68.6</b>	<b>31.9</b>	-
Mean		65.5	29.3	37.7
CV		7.7	7.5	15.1
Pr>F		<.001	<.001	<0.001

**Bold** = top-performer within a column; **Bold** = statistically equivalent to top-performer by Tukey pairwise comparisons ( $p > 0.05$ )

<sup>1</sup>CL = Clearfield; LL = Liberty Link; RR = Roundup Ready; TF = TruFlex; <sup>2</sup>Irrigated

## Individual Location Summaries

Northwestern Ag Research Center, Kalispell, MT

Table 5. 2022 Spring canola variety trial, NWARC, Kalispell, MT

<sup>1</sup> Herb Traits	Variety	Flowering Date (julian)	Plant Height (in)	Plant Density (#/ft <sup>2</sup> )	Lodging (%)	Shatter (%)	<sup>3</sup> TWT (lb/bu)	Oil Content (%)	Yield (bu/A)
CL	BY 5125CL	<b>179</b>	<b>48.8</b>	-	<b>22.5</b>	-	<b>50.5</b>	<b>48.8</b>	<b>70.0</b>
	DG280CLC	179	<b>54.2</b>	-	<u>10.0</u>	-	<b>50.0</b>	47.9	<b>64.7</b>
LL	CP7130LL	<b>179</b>	44.8	-	<b>15.0</b>	-	<b>50.0</b>	47.3	<b>64.4</b>
	CP7144LL	180	<b>49.2</b>	-	<b>17.5</b>	-	<b>50.0</b>	48.0	<b>65.2</b>
	CS4000 LL	<b>177</b>	40.1	-	<b>37.5</b>	-	<b>50.5</b>	<b>48.9</b>	<b>60.7</b>
	DG660LCM	179	47.8	-	<b>22.5</b>	-	<b>49.8</b>	48.4	<b>59.8</b>
	InVigor L233P	180	<b>49.5</b>	-	<b>22.5</b>	-	49.8	48.0	<b>72.6</b>
	InVigor L340PC	<b>178</b>	<b>51.0</b>	-	<b>17.5</b>	-	<b>50.0</b>	46.4	<b>72.7</b>
	InVigor L343PC	<b>179</b>	43.0	-	<b>25.0</b>	-	49.1	47.1	<b>73.5</b>
	InVigor L345PC	179	44.0	-	<b>20.0</b>	-	<b>50.2</b>	48.2	<u>74.2</u>
	InVigor L356PC	<b>179</b>	46.6	-	<b>17.5</b>	-	<b>50.0</b>	48.2	<b>67.9</b>
None	NCC101S	<u>175</u>	45.5	-	<b>22.5</b>	-	<b>49.9</b>	44.4	<b>64.3</b>
	NCC1825/8-S	<b>176</b>	44.5	-	<b>27.5</b>	-	<b>50.4</b>	48.1	<b>68.5</b>
RR	CP930RR	<b>176</b>	41.5	-	60.0	-	49.8	<u>50.4</u>	58.8
	CP9919RR	<b>175</b>	31.7	-	85.0	-	49.4	47.2	53.6
RR/TF/LL	InVigor LR344PC	180	46.1	-	<b>27.5</b>	-	49.8	47.6	<b>67.6</b>
TF	BY 6211TF	<b>179</b>	42.3	-	<b>30.0</b>	-	<u>51.0</u>	48.2	<b>68.0</b>
	BY 6217TF	181	<u>58.7</u>	-	<u>10.0</u>	-	<b>50.2</b>	<b>49.0</b>	<b>66.3</b>
	CP9978TF	<b>178</b>	42.5	-	57.5	-	49.8	48.4	<b>64.6</b>
	CS2600 CR-T	<b>178</b>	41.1	-	<b>22.5</b>	-	<b>50.4</b>	<b>49.4</b>	<b>62.9</b>
	CS3000 TF	<b>178</b>	45.3	-	<b>25.0</b>	-	<b>50.3</b>	<b>49.0</b>	<b>62.2</b>
	DG760TM	<b>178</b>	<b>51.0</b>	-	<u>10.0</u>	-	<b>50.4</b>	48.2	<b>62.4</b>
	DG781TCM	<b>178</b>	<b>51.6</b>	-	<b>15.0</b>	-	49.6	<b>48.5</b>	<b>63.1</b>
	NC155 TF	<b>177</b>	<b>50.8</b>	-	<u>10.0</u>	-	<b>50.6</b>	48.1	<b>60.9</b>
	NC471 TF	<b>177</b>	<b>56.4</b>	-	<b>12.5</b>	-	<b>50.6</b>	48.1	<b>66.2</b>
	NC527CR TF	<b>178</b>	<b>54.4</b>	-	<b>15.0</b>	-	49.7	<b>49.4</b>	<b>68.6</b>
Mean		178.1	47.0	-	25.3	-	50.1	48.1	65.5
CV		0.8	8.0	-	44.4	-	0.9	1.5	7.7
Pr>F		<.001	<.001	-	<.001	-	<.001	<.001	<.001

**Bold** = top-performer within a column; **Bold** = statistically equivalent to top-performer by Tukey pairwise comparisons (p > 0.05)

<sup>1</sup>CL = Clearfield; LL = Liberty Link; RR = Roundup Ready; TF = TruFlex; <sup>3</sup>Test Weight

Table 6. 2022 Spring canola variety trial, NARC, Havre, MT

<sup>1</sup> Herb Traits	Variety	Flowering Date (julian)	Plant Height (in)	Plant Density (#/ft <sup>2</sup> )	Lodging (%)	Shatter (%)	<sup>3</sup> TWT (lb/bu)	Oil Content (%)	Yield (bu/A)
CL	BY 5125CL	168	35.4	4.7	0	0	52.7	<b>41.9</b>	<b>31.2</b>
	DG280CLC	169	<b>39.2</b>	5.2	0	0	52.9	39.7	<b>28.8</b>
LL	CP7130LL	168	<b>38.5</b>	4.5	0	0	<b>53.3</b>	38.7	<b>29.5</b>
	CP7144LL	168	36.9	5.7	0	0	52.9	39.7	<b>28.9</b>
	CS4000 LL	168	<b>38.4</b>	4.9	0	0	<b>53.3</b>	<b>41.1</b>	<b>29.8</b>
	DG660LCM	169	37.2	4.2	0	0	52.5	<b>40.4</b>	23.5
	InVigor L233P	169	<b>37.7</b>	5.2	0	0	52.5	<b>41.1</b>	<b>28.2</b>
	InVigor L340PC	168	<b>39.9</b>	6.6	0	0	<b>53.6</b>	38.5	<b>31.7</b>
	InVigor L343PC	168	<b>37.5</b>	5.3	0	0	<b>53.1</b>	<b>41.4</b>	<b>31.7</b>
InVigor L345PC	168	<b>38.7</b>	6.9	0	0	<b>53.3</b>	<b>40.8</b>	<b>30.2</b>	
None	NCC101S	<b>166</b>	34.8	5.5	0	0	<b>53.0</b>	37.3	<b>30.7</b>
	NCC1825/8-S	<b>166</b>	32.1	4.8	0	0	<b>54.3</b>	37.3	<b>29.9</b>
RR	CP930RR	<b>166</b>	34.6	4.6	0	0	51.1	<b>44.6</b>	26.9
	CP9919RR	<b>167</b>	32.0	4.3	0	0	52.0	<b>41.0</b>	24.7
RR/TF/LL	InVigor LR344PC	168	<b>38.1</b>	5.3	0	0	52.6	<b>40.8</b>	<b>31.7</b>
TF	BY 6211TF	168	<b>37.9</b>	6.4	0	0	<b>53.2</b>	38.7	<b>28.4</b>
	BY 6217TF	169	<b>41.8</b>	5.6	0	0	51.9	<b>41.8</b>	20.7
	CP9978TF	<b>167</b>	33.7	5.1	0	0	52.4	<b>40.6</b>	<b>28.2</b>
	CS2600 CR-T	<b>167</b>	36.9	5.4	0	0	<b>53.1</b>	<b>41.4</b>	<b>32.1</b>
	CS3000 TF	<b>167</b>	32.9	3.7	0	0	52.5	<b>40.6</b>	<b>28.9</b>
	DG760TM	168	36.0	5.0	0	0	52.3	<b>40.5</b>	<b>34.3</b>
	DG781TCM	<b>167</b>	35.3	4.8	0	0	52.1	<b>42.9</b>	<b>32.5</b>
	NC155 TF	<b>167</b>	36.5	5.8	0	0	<b>54.2</b>	36.2	<b>31.2</b>
NC471 TF	NC471 TF	168	<b>37.9</b>	6.0	0	0	52.5	<b>40.7</b>	<b>27.7</b>
	NC527CR TF	<b>167</b>	<b>37.6</b>	5.0	0	0	51.6	<b>42.4</b>	<b>31.9</b>
Mean		168	36.8	-	0	0	52.7	40.4	29.3
CV		0.4	4.5	-	-	-	0.8	3.6	7.5
Pr>F		<.001	<.001	0.25	-	-	<.001	<.001	<.001

**Bold** = top-performer within a column; **Bold** = statistically equivalent to top-performer by Tukey pairwise comparisons (p > 0.05)

<sup>1</sup>CL = Clearfield; LL = Liberty Link; RR = Roundup Ready; TF = TruFlex; <sup>3</sup>Test Weight

Table 7. 2022 Spring canola variety trial, <sup>2</sup>EARC, Sidney, MT

<sup>1</sup> Herb Traits	Variety	Flowering Date (julian)	Plant Height (in)	Plant Density (#/ft <sup>2</sup> )	Lodging (%)	Shatter (%)	<sup>3</sup> TWT (lb/bu)	Oil Content (%)	Yield (bu/A)
CL	BY 5125CL	173	<b>41.5</b>	-	-	-	<b>54.2</b>	<b>44.9</b>	<b>40</b>
LL	CP7130LL	173	<b>39.5</b>	-	-	-	<b>54</b>	43.6	<b>36.5</b>
	CP7144LL	173	<b>44.5</b>	-	-	-	50.6	44.4	<b>36.8</b>
	InVigor L233P	173	<b>39.1</b>	-	-	-	52.7	<b>45.9</b>	<b>35.6</b>
	InVigor L340PC	173	<b>38.2</b>	-	-	-	<b>53.4</b>	43.5	<b>40.9</b>
None	NCC101S	<b>172</b>	33.2	-	-	-	<b>54.7</b>	40.4	<b>34.7</b>
	NCC1825/8-S	<b>171</b>	<b>39.2</b>	-	-	-	<b>55.6</b>	42.3	<b>48.1</b>
RR	CP930RR	<b>171</b>	<b>39.7</b>	-	-	-	<b>53.5</b>	<b>47.5</b>	<b>41.9</b>
	CP9919RR	<b>171</b>	35.8	-	-	-	<b>53.5</b>	43.6	29.7
RR/TF	DKTF91SC	<b>172</b>	<b>36.6</b>	-	-	-	<b>53.6</b>	<b>45.9</b>	<b>39</b>
	DKTF99SC	173	<b>44.2</b>	-	-	-	<b>53.4</b>	44.6	<b>46.6</b>
RR/TF/LL	DKTFL21SC	<b>172</b>	<b>36</b>	-	-	-	<b>54.1</b>	<b>45.3</b>	<b>38.5</b>
	InVigor LR344PC	173	<b>39.3</b>	-	-	-	51.2	<b>47.5</b>	<b>35</b>
TF	BY 6211TF	173	<b>38.6</b>	-	-	-	<b>53.1</b>	<b>45.1</b>	<b>34.2</b>
	BY 6217TF	174	<b>43.6</b>	-	-	-	51.3	<b>45.7</b>	25.7
	CP9978TF	173	<b>40.3</b>	-	-	-	<b>53.5</b>	<b>44.8</b>	<b>36.8</b>
Mean		172	39.3	-	-	-	53.3	44.7	37.7
CV		0.3	8.4	-	-	-	1.9	2.5	15.1
Pr>F		<0.001	<0.001	-	-	-	<0.001	<0.001	<0.001

**Bold** = top-performer within a column; **Bold** = statistically equivalent to top-performer by Tukey pairwise comparisons (p > 0.05)

<sup>1</sup>CL = Clearfield; LL = Liberty Link; RR = Roundup Ready; TF = TruFlex; <sup>2</sup>Irrigated site; <sup>3</sup>Test Weight

Table 8. 2022 Spring canola variety trial, <sup>2</sup>WARC, Corvallis, MT

<sup>1</sup> Herb Traits	Variety	Flowering Date (julian)	Plant Height (in)	Plant Density (#/ft <sup>2</sup> )	Lodging (%)	Shatter (%)	<sup>3</sup> TWT (lb/bu)	Oil Content (%)	Yield (bu/A)
CL	BY 5125CL	<b>176</b>	<b>33.2</b>	15.1	-	<b>45.0</b>	-	-	-
	DG280CLC	174	<b>32.7</b>	15.6	-	<b>45.0</b>	-	-	-
LL	DG660LCM	175	<b>31.2</b>	15.8	-	<b>42.5</b>	-	-	-
None	NCC101S	173	<b>28.9</b>	15.1	-	<b>35.0</b>	-	-	-
	NCC1825/8-S	172	<b>29.2</b>	14.1	-	<b>33.8</b>	-	-	-
TF	BY 6211TF	<b>176</b>	<b>33.0</b>	18.4	-	<b>33.8</b>	-	-	-
	BY 6217TF	<b>176</b>	<b>31.5</b>	15.6	-	<b>31.3</b>	-	-	-
	DG760TM	<b>176</b>	27.6	14.1	-	<b>45.0</b>	-	-	-
	DG781TCM	<b>176</b>	<b>28.9</b>	13.8	-	<b>40.0</b>	-	-	-
	NC155 TF	<b>176</b>	<b>28.2</b>	15.8	-	65.0	-	-	-
	NC471 TF	<b>176</b>	<b>29.9</b>	16.9	-	<b>57.5</b>	-	-	-
	NC527CR TF	174	<b>31.2</b>	16.8	-	<b>50.0</b>	-	-	-
Mean		-	30.5	15.6	-	43.6	-	-	-
CV		-	7.3	16.8	-	29.2	-	-	-
Pr>F		<0.001	0.007	0.4461	-	0.0188	-	-	-

**Bold** = top-performer within a column; **Bold** = statistically equivalent to top-performer by Tukey pairwise comparisons (p > 0.05)

<sup>1</sup>CL = Clearfield; LL = Liberty Link; TF = TruFlex; <sup>2</sup>Irrigated site; <sup>3</sup>Test Weight