

Statewide Spring Canola Variety Trials 2019

Results of the 2019 Statewide spring canola trials for the state of Montana can be found in the following tables. Further information on these studies can be found by contacting the superintendent or cooperating scientist of the Research Center where each trial was conducted.

Index

Table	Description
1	NWARC spring canola results, Kalispell, MT
2	NARC spring canola results, Havre, MT
3	CARC spring canola results, Moccasin, MT
4	EARC spring canola results, Sidney, MT
5	WARC spring canola results, Corvallis, MT

Table 1. MSU spring canola variety trial (dryland), Northwestern Agricultural Research Center, Kalispell, MT, 2019.

CULTIVAR	SOURCE	HERB RES	COUNT (sqft)	FLWR DATE (julian)	CNPY HT (in)	LDGE (1-9)	SHTTR (1-9)	YIELD (lb/ac)	TEST WT (lb/bu)	OIL (%)
5545CL	Brett Young	CL	13.5	177	53.8	1	2	1914	49.7	48.1
16MH6001	Cargill Inc	CL	14	177	47.2	1	2	2070.8	49.8	47.5
16MH6004	Cargill Inc	CL	12	176.5	47.5	1	2	1615.8	49.7	47.9
CS2500 CL	Meridian Seeds, LLC.	CL	13.2	175.5	52.8	1	2	1646.5	49	48.4
16CH4181	Cargill Inc	Conventional	13.8	175.5	51.2	1	2	1737.2	47.3	49.1
NCC101S	PHOTOSYNTECH, LLC.	Conventional	13.8	169	48	1	2	1964.8	49.3	47
InVigor L233P	BASF Corporation	LL	14.2	177	52.8	1	2	2318.2	48	48.4
InVigor L234P	BASF Corporation	LL	14.8	179.2	54	1	2	2493.2	47.4	47.8
InVigor L255P	BASF Corporation	LL	14.5	180.8	54	1	2	2424.2	49.1	50.6
4187RR	Brett Young	RR	14.2	177.2	55.8	1	2	2520.2	48.1	49.4
6090RR	Brett Young	RR	13.8	177	59.5	1	2	2111.5	48.1	48.6
CS2100	Meridian Seeds, LLC.	RR	13	175.5	52.8	1	2	1947.2	49.1	48.8
CS2300	Meridian Seeds, LLC.	RR	11	178.2	60.8	1	2	2231.5	48.3	49.3
CP930RR	Winfield United	RR	14	173	50.5	1	2	1981	48.2	51.1
CP955RR	Winfield United	RR	13.5	176	50.8	1	2	1847.8	48.6	50.3
DKTF91SC	Dekalb/Bayer	TruFlex RR	13.8	171.5	47.5	1	2	2000	49	49.6
DKTF92SC	Dekalb/Bayer	TruFlex RR	16	172	49.5	1	2	1965.3	49.4	48.5
Mean			13.7	175.8	52.2	1	2	2047.6	48.7	48.8
CV%			21.8	1	6.1			18.1	0.5	1.7
LSD			NS	2.6	4.5			NS	0.4	1.3
P-Value			0.9560	<0.001	<0.001			0.0194	<0.001	<0.001

Bold = top-performing cultivar

Bold = statistically equivalent to top-performer

Fisher's protected LSD not significant when CV% > 15 (YIELD only) and/or P-Value > 0.05

Table 2. MSU spring canola variety trial (dryland), Northern Agricultural Research Center, Havre, MT, 2019.

CULTIVAR	SOURCE	HERB RES	COUNT (soft)	FLWR DATE (julian)	CNPY HT (in)	LDGE (1-9)	SHTTR (1-9)	YIELD (lb/ac)	TEST WT (lb/bu)	OIL (%)
5545CL	Brett Young	CL	6.4	168	41.8	1	1	3868.5	51.7	43.8
16MH6001	Cargill Inc	CL	5.5	168	40	1	1	3660.2	51.3	43.2
16MH6004	Cargill Inc	CL	4.3	167	38.3	1	1	3468	51.6	42.1
CS2500 CL	Meridian Seeds, LLC.	CL	6	168	44.2	1	1	3451.2	52	43.8
16CH4181	Cargill Inc	Conventional	5	166.8	41.3	1	1	3790.8	50.8	44
NCC101S	PHOTOSYNTECH, LLC.	Conventional	6.7	162	34.9	1	1	3915.2	52.8	39
4187RR	Brett Young	RR	6.3	169	44.8	1	1	3774.8	51.4	44.1
6090RR	Brett Young	RR	5.8	168	44.7	1	1	3932.5	51.2	43.8
CS2100	Meridian Seeds, LLC.	RR	6.7	166.2	42.4	1	1	3663.2	52.5	42.2
CS2300	Meridian Seeds, LLC.	RR	6.2	168.2	49.5	1	1	4060.8	51.7	43.7
CP930RR	Winfield United	RR	6.3	164.8	41	1	1	4037	50.7	46.8
CP955RR	Winfield United	RR	6.6	166.2	42.5	1	1	4334.2	51.6	44.4
DKTF91SC	Dekalb/Bayer	TruFlex RR	6	164.5	39.6	1	1	3975	51.5	42.7
DKTF92SC	Dekalb/Bayer	TruFlex RR	7	164	39.2	1	1	4404	52.2	41.9
Mean			6.1	166.5	41.7	1	1	3881.1	51.6	43.2
CV%			10.9	0.3	6.5			5.3	0.7	2
LSD			0.9	0.7	3.9			296.1	0.5	1.2
P-Value			<0.001	<0.001	<0.001			<0.001	<0.001	<0.001

Bold = top-performing cultivar

Bold = statistically equivalent to top-performer

Fisher's protected LSD not significant when CV% > 15 (YIELD only) and/or P-Value > 0.05

Table 3. MSU spring canola variety trial (dryland), Central Agricultural Research Center, Moccasin, MT, 2019.

CULTIVAR	SOURCE	HERB RES	COUNT (soft)	FLWR DATE (julian)	CNPY HT (in)	LDGE (1-9)	SHTTR (1-9)	YIELD (lb/ac)	TEST WT (lb/bu)	OIL (%)
5545CL	Brett Young	CL	9.5	177	46	1	1	1136.8	48.9	PENDING
16MH6001	Cargill Inc	CL	8.9	176	41.5	1	1	1156.5	45.9	PENDING
16MH6004	Cargill Inc	CL	9.4	176.2	40.8	1	1	1025.8	44	PENDING
CS2500 CL	Meridian Seeds, LLC.	CL	9.2	177.5	47	1	1	866	45.2	PENDING
16CH4181	Cargill Inc	Conventional	10.6	174	42.8	1	1	1175.2	44.1	PENDING
NCC101S	PHOTOSYNTECH, LLC.	Conventional	9.9	171.8	39.8	1	1	1154.2	41.4	PENDING
4187RR	Brett Young	RR	9.5	179	45.2	1	1	1184.5	49.2	PENDING
6090RR	Brett Young	RR	7.7	177.2	47.5	1	1	1120.2	46.7	PENDING
CS2100	Meridian Seeds, LLC.	RR	10	174.7	43.7	1	1	1229	48.9	PENDING
CS2300	Meridian Seeds, LLC.	RR	8.7	177.2	45	1	1	1253.5	47.5	PENDING
CP930RR	Winfield United	RR	9.7	174	42	1	1	1098.5	45.9	PENDING
CP955RR	Winfield United	RR	10.6	174.5	41.2	1	1	1071.5	47.1	PENDING
DKTF91SC	Dekalb/Bayer	TruFlex RR	10.1	173.8	42.5	1	1	1165	47	PENDING
DKTF92SC	Dekalb/Bayer	TruFlex RR	10.4	173	41.8	1	1	915.8	43.3	PENDING
CP9978TF	Winfield United	TruFlex RR	11.5	175	43.2	1	1	851.8	43.5	PENDING
Mean			9.7	175.4	43.3	1	1	1091.3	45.9	PENDING
CV%			13.4	0.4	4.3			13.5	3.5	
LSD			NS	1	2.7			226.3	2.4	
P-Value			0.0514	<0.001	<0.001			0.0038	<0.001	

Bold = top-performing cultivar

Bold = statistically equivalent to top-performer

Fisher's protected LSD not significant when CV% > 15 (YIELD only) and/or P-Value > 0.05

Table 4. MSU spring canola variety trial (irrigated), Eastern Agricultural Research Center, Sidney, MT, 2019.

CULTIVAR	SOURCE	HERB RES	COUNT (soft)	FLWR DATE (julian)	CNPY HT (in)	LDGE (1-9)	SHTTR (1-9)	YIELD ¹ (lb/ac)	TEST WT (lb/bu)	OIL (%)
5545CL	Brett Young	CL	14.5	196	19	1	1	1028.8	54	46
16MH6001	Cargill Inc	CL	12	194	17	1	1	1165.5	54.1	45
16MH6004	Cargill Inc	CL	9.8	193	18.8	1	1	1434.8	53.3	44.5
16CH4181	Cargill Inc	Conventional	12	193	24.8	1	1	1293.5	52.2	44
NCC101S	PHOTOSYNTECH, LLC.	Conventional	16	193	17.2	1	1	360.2	48.5	35.4
InVigor L233P	BASF Corporation	LL	12.2	194	17.5	1	1	998	52.4	42.4
InVigor L234P	BASF Corporation	LL	15	196	15.2	1	1	908.5	52.4	42
InVigor L255P	BASF Corporation	LL	14	195	15.5	1	1	873.2	54.5	44.6
4187RR	Brett Young	RR	14.5	193	19.8	1	1	1550.8	53.7	46.6
6090RR	Brett Young	RR	11.6	195.7	16	1	1	698	53	43.5
CP930RR	Winfield United	RR	12.5	193.2	24.2	1	1	1414.2	53.9	46.7
CP955RR	Winfield United	RR	13.2	193	26.8	1	1	1392.2	54.1	46.2
DKTF91SC	Dekalb/Bayer	TruFlex RR	12.5	194	18.8	1	1	911.2	52.7	42.4
DKTF92SC	Dekalb/Bayer	TruFlex RR	10.2	193	16	1	1	598	50.7	41
Mean			12.8	194	19.1	1	1	1051.1	53	43.6
CV%			21.9	0.7	13.8			25.6	1.7	2.9
LSD ²			NS	-	4.1			NS	-	1.9
P-Value			0.1490	-	<0.001			<0.001	-	<0.001

Bold = top-performing cultivar

Bold = statistically equivalent to top-performer

¹Severe early season flea beetle damage likely reduced yield and increased variability among cultivars

²Fisher's protected LSD not significant when CV% > 15 (YIELD only) and/or P-Value > 0.05

Table 5. MSU spring canola variety trial (irrigated), Western Agricultural Research Center, Corvallis, MT, 2019.

CULTIVAR	SOURCE	HERB RES	COUNT (soft)	FLWR DATE (julian)	CNPY HT (in)	LDGE (1-9)	SHTTR (1-9)	YIELD (lb/ac)	TEST WT (lb/bu)	OIL (%)
5545CL	Brett Young	CL	21.5	177.2	41	1	1	2499.2	49.9	44.1
16MH6001	Cargill Inc	CL	19.1	180.5	36.6	1	1	2150.8	49.8	42.3
16MH6004	Cargill Inc	CL	17.7	180.8	35.5	1	1	2080.2	49.2	43.9
16CH4181	Cargill Inc	Conventional	22.5	178.2	37.2	1	1	2157.8	49	45.1
NCC101S	PHOTOSYNTECH, LLC.	Conventional	21.6	175.5	34.7	1	1	2878.8	50.3	39.7
4187RR	Brett Young	RR	21.3	183	39.5	1	1	2558	50.1	45.5
6090RR	Brett Young	RR	21.5	182	40.9	1	1	2205.5	50.3	46.2
CP930RR	Winfield United	RR	22	178.2	35.6	1	1	2631.8	49.9	46
CP955RR	Winfield United	RR	18	180.8	35.9	1	1	2316	49.1	45.6
DKTF91SC	Dekalb/Bayer	TruFlex RR	23.7	175.2	35.1	1	1	1931	49.4	45.2
DKTF92SC	Dekalb/Bayer	TruFlex RR	21.2	175.2	36.7	1	1	2402.8	49.1	43.2
Mean			20.9	178.8	37.2	1	1	2346.5	49.6	44.2
CV%			17.4	1.4	5.9			16.1	2.2	6.4
LSD			NS	3.6	3.2			NS	NS	-
P-Value			0.429	<0.001	0.001			0.0498	0.6454	-

Bold = top-performing cultivar

Bold = statistically equivalent to top-performer

Fisher's protected LSD not significant when CV% > 15 (YIELD only) and/or P-Value > 0.05