



Quality of western Canadian canola varieties 2015

Quality of composites of canola, No. 1 Canada - Brassica napus, by province and variety

Manitoba

Table contains variety, number of samples, data on oil, protein and chlorophyll content as well as glucosinolates.

Cultivar ¹	Number samples in composite	Seed oil content, % ²	Seed protein content, % ³	Seed total glucosinolates, $\mu\text{mole/g}^4$	Seed chlorophyll, mg/Kg ⁵	Oil-free-meal protein content, % ⁶	Oil-free-meal glucosinolates, $\mu\text{mole/g}^7$
46H75	16	43.5	21.6	10	14	39.6	18
5440	48	42.3	21	12	11	38.2	22
74-44 BL	15	44.9	20.6	9	12	38.9	17
L130	29	42.4	21.7	12	9	38.8	21
L140P	26	42.5	20.9	12	6	37.6	21
L252	72	44.5	20.4	10	9	38.3	19

Saskatchewan

Table contains variety, number of samples, data on oil, protein, chlorophyll, oil-free-meal protein content and glucosinolate

Cultivar ¹	Number samples in composite	Seed oil content, % ²	Seed protein content, % ³	Seed total glucosinolates, $\mu\text{mole/g}^4$	Seed chlorophyll, mg/Kg ⁵	Oil-free-meal protein content, % ⁶	Oil-free-meal glucosinolates, $\mu\text{mole/g}^7$
1990	14	45.1	19.3	12	14	36.6	23
45H31	13	45.6	20.2	11	10	38.7	20
45S54	10	45.1	21.1	11	12	40.0	21
5440	66	44.0	20.2	12	9	37.3	22
73-75 RR	10	46.9	18.7	10	16	36.9	19
74-44 BL	46	45.9	19.9	9	11	38.3	7
L130	87	43.8	20.5	12	7	37.8	22

L140P	40	43.4	20.9	13	7	38.3	23
L150	19	44.6	20.9	11	10	39.2	21
L159	15	44.3	19.7	12	12	36.7	22
L252	86	45.4	19.4	10	8	37.0	19
PV 530 G	29	44.6	20.4	13	19	38.2	24
VT 500 G	15	44.4	21.3	13	15	39.9	24

Alberta and Peace River B.C.

Table contains variety, number of samples, data on oil, protein, chlorophyll, oil-free-meal protein content and glucosinolate

Cultivar ¹	Number samples in composite	Seed oil content, % ²	Seed protein content, % ³	Seed total glucosinolates, $\mu\text{mole/g}^4$	Seed chlorophyll, mg/Kg ⁵	Oil-free-meal protein content, % ⁶	Oil-free-meal glucosinolates, $\mu\text{mole/g}^7$
1990	11	43.0	21.4	14	24	38.8	25
45H29	11	44.2	20.7	13	14	38.6	25
45H33	16	44.2	20.9	13	17	38.9	25
5440	18	42.8	21.7	13	12	39.2	24
74-44 BL	52	45.3	20.2	10	15	38.6	19
74-54 RR	23	44.5	21.2	12	18	39.6	22
L120	16	43.5	21.3	12	13	39.1	21
L130	37	42.6	21.4	13	10	38.5	23
L135C	67	42.1	22.1	13	13	39.4	23
L140P	16	42.6	22.1	13	9	39.7	24
L150	11	45.1	20.0	12	13	37.8	23
L252	44	45.1	20.2	12	10	38.3	23
VR 9562 GCO	13	43.8	21.6	13	19	39.9	23

Fatty acid composition of composites of canola, No. 1 Canada - Brassica napus, by province and variety

Manitoba

Table contains variety, data on fatty acid composition, total saturates, and iodine value in the oil

Cultivar ¹	No. of Samples	Free Fatty Acid, %	Stearic acid, % (C18:0)	Oleic acid, % (C18:1)	Linoleic acid, % (C18:2)	α -Linolenic acid, % (C18:3)	Erucic acid, % (C22:1)	Total saturates, % ⁵ (C18:0)	Total mono-unsaturates, % ⁶ (C18:1)	Total poly-unsaturates, % ⁷ (C18:2)	Iodine value (units, in oil) ⁸ (C18:3)
46H75	16	0.35	1.7	63.7	18.9	8.3	0.00	6.6	65.4	27.3	111
5440	48	0.29	1.8	62.3	18.8	9.9	0.00	6.8	64.0	28.7	113
74-44 BL	15	0.20	1.6	61.9	20.0	8.9	0.00	7.1	63.5	29.0	113
L130	29	0.33	1.9	63.6	18.3	9.0	0.00	6.8	65.3	27.4	111
L140P	26	0.36	1.9	64.1	18.4	8.6	0.00	6.7	65.7	27.1	111
L252	72	0.30	1.8	61.4	20.0	9.6	0.00	6.9	63.0	29.6	114

Saskatchewan

Table contains variety, data on fatty acid composition, total saturates, and iodine value in the oil

Cultivar ¹	No. of Samples	Free Fatty Acid, %	Stearic acid, % (C18:0)	Oleic acid, % (C18:1)	Linoleic acid, % (C18:2)	α -Linolenic acid, % (C18:3)	Erucic acid, % (C22:1)	Total saturates, % ⁵ (C18:0)	Total mono-unsaturates, % ⁶ (C18:1)	Total poly-unsaturates, % ⁷ (C18:2)	Iodine value (units, in oil) ⁸ (C18:3)
1990	14	0.12	1.8	63.7	18.5	8.6	0.00	7.0	65.3	27.2	111
45H31	13	0.13	1.6	64.3	17.8	9.2	0.07	6.3	66.0	27.1	112
45S54	10	0.17	1.7	62.3	19.0	9.7	0.11	6.6	64.1	28.8	113
5440	66	0.12	1.8	62.6	18.4	10.2	0.00	6.6	64.3	28.7	114
73-75 RR	10	0.09	1.9	65.4	17.2	8.4	0.00	7.0	66.8	25.6	109
74-44 BL	46	0.10	1.6	61.7	19.8	9.5	0.00	6.9	63.2	29.4	114
L130	87	0.09	1.8	63.8	18.0	9.5	0.00	6.6	65.4	27.6	112
L140P	40	0.10	1.8	64.4	18.0	9.0	0.00	6.5	66.0	27.1	112
L150	19	0.12	1.6	62.0	19.5	9.9	0.00	6.4	63.7	29.5	114
L159	15	0.08	1.8	62.8	18.5	10.1	0.00	6.5	64.4	28.6	114
L252	86	0.12	1.7	61.5	19.8	9.9	0.00	6.8	63.0	29.8	114

PV 530 G	29	0.12	1.6	61.3	19.9	10.0	0.00	6.7	62.9	29.9	115
VT 500 G	15	0.12	1.7	60.8	19.9	10.1	0.00	6.8	62.5	30.1	115

Alberta and Peace River B.C.

Table contains variety, data on fatty acid composition, total saturates, and iodine value in the oil

Cultivar ¹	No. of Samples	Free Fatty Acid, %	Stearic acid, % (C18:0)	Oleic acid, % (C18:1)	Linoleic acid, % (C18:2)	α -Linolenic acid, % (C18:3)	Erucic acid, % (C22:1)	Total saturates, % ⁵ (C18:0)	Total mono-unsaturates, % ⁶ (C18:1)	Total poly-unsaturates, % ⁷ (C18:2)	Iodine value (units, in oil) ⁸ (C18:3)
1990	11	0.39	1.8	62.6	18.6	9.6	0.00	6.8	64.4	28.2	113
45H29	11	0.10	1.7	64.0	18.0	9.0	0.00	6.6	65.7	27.1	111
45S33	16	0.13	1.6	62.4	19.0	9.4	0.00	6.7	64.2	28.5	113
5440	18	0.17	1.8	62.8	18.2	10.2	0.00	6.6	64.5	28.4	113
74-44 BL	52	0.15	1.6	61.8	19.3	9.7	0.03	6.9	63.5	29.1	114
74-54 RR	23	0.14	1.6	63.2	17.9	10.0	0.00	6.6	64.9	28.0	113
L120	16	0.12	1.8	62.3	18.2	10.6	0.00	6.6	64.1	28.8	114
L130	37	0.17	1.8	63.3	17.8	10.1	0.00	6.5	65.0	28.0	113
L135C	67	0.24	1.7	61.8	18.3	11.1	0.00	6.4	63.6	29.5	115
L140P	16	0.14	1.8	65.1	17.2	9.1	0.00	6.4	66.7	26.4	111
L150	11	0.24	1.6	62.6	18.6	10.2	0.00	6.3	64.3	28.9	114
L252	44	0.12	1.7	61.6	19.1	10.7	0.00	6.4	63.2	29.8	115
VR 9562 GCO	13	0.08	1.5	62.7	18.7	9.7	0.00	6.5	64.5	28.4	113

¹ As designated by producer

² 8.5% moisture

³ N x 6.25

⁴ at 12% moisture

⁵ Sum of all saturates (C14:0, C16:0, C18:0, C20:0, C22:0, and C24:0)

⁶ Sum of all mono-unsaturates (C16:1, C18:1, C20:1, C22:1, and C24:1)

⁷ Sum of all poly-unsaturates (C18:2, C18:3, C20:2 and C22:2)

⁸ Calculated from fatty acid composition