



Quality of western Canadian canola varieties 2013

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.

Variety ¹	No. of samples	Oil content ²	Protein content % ³	Protein meal % ⁴	Free fatty acid (% in oil)	Chlorophyll content mg/kg ⁵	Glucosinolates, μ mole/g ⁶
5440	40	42.69	20.97	39.30	0.13	8.2	11.8
73-75 RR	21	44.20	20.10	38.88	0.33	11.2	8.4
L130	41	43.44	20.50	39.02	0.16	7.3	11.8
L150	28	44.05	20.59	39.69	0.21	10.5	11.5
L154	10	42.93	20.41	38.44	0.16	7.2	12.2
L159	11	42.44	21.44	39.98	0.13	14.6	12.4

Alberta

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

Variety ¹	No. of samples	Oil content ²	Protein content % ³	Protein meal % ⁴	Free fatty acid (% in oil)	Chlorophyll content mg/kg ⁵	Glucosinolates, μ mole/g ⁶
1990	15	44.39	19.31	37.50	0.16	14.9	10.3
43E02	10	44.00	20.23	38.97	0.13	14.7	10.1
45H29	12	45.83	19.11	38.29	0.10	11.2	12.2
45S52	22	44.41	19.82	38.52	0.15	15.2	10.7
5440	29	43.72	19.86	38.03	0.08	12.3	12.1
73-45 RR	25	46.08	18.88	38.04	0.21	17.5	9.2
74-44 BL	25	46.57	19.18	39.05	0.16	11.1	7.5
L120	19	44.25	19.53	37.82	0.21	14.1	11.3
L130	54	44.02	19.89	38.33	0.17	9.4	11.3
L135C	16	42.89	20.27	38.16	0.22	14.8	11.5
L150	37	45.65	19.03	37.98	0.12	10.3	10.6

L159	12	44.28	19.53	37.85	0.11	13.9	11.2
VR 9559 G	12	45.34	19.64	38.93	0.09	11.1	11.4
VR 9560 CL	10	43.53	21.26	40.56	0.03	12.8	9.3
VT 500 G	20	44.26	20.97	40.61	0.08	16.0	11.5

Saskatchewan

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

Variety ¹	No. of samples	Oil content ²	Protein content % ³	Protein meal % ⁴	Free fatty acid (% in oil)	Chlorophyll content mg/kg ⁵	Glucosinolates, μ mole/g ⁶
1990	14	45.22	18.42	36.42	0.12	16.5	11.5
45H29	23	44.82	19.92	39.05	0.08	10.7	11.4
5440	41	44.35	19.42	37.69	0.02	8.2	10.9
6060 RR	18	45.42	18.30	36.33	0.08	12.8	12.3
72-65 RR	9	45.93	19.63	39.42	0.06	13.0	10.0
74-44 BL	11	46.44	18.53	37.63	0.09	8.5	7.7
D3153	12	44.39	20.22	39.28	0.08	11.6	10.0
L120	19	45.26	18.68	36.96	0.11	9.6	10.2
L130	77	44.23	19.40	37.55	0.12	8.7	11.4
L150	93	45.95	19.17	38.52	0.05	9.3	10.0
L154	13	44.41	19.07	37.06	0.05	9.4	13.1
L159	30	44.97	18.15	35.69	0.06	10.5	10.6
VT 500 G	44	45.46	19.84	39.44	0.11	12.0	11.4

¹ As designated by producer

² 8.5% moisture

³ 8.5% moisture

⁴ %, oil free basis, 8.5% moisture basis

⁵ as is seed basis

⁶ total of all glucosinolates; whole seed, 8.5% m.b

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

Variety	No. of Samples	Fatty acid composition					Total saturates	Total mono-unsaturated fatty acid	Total poly-unsaturated fatty acid	Iodine value (units, in oil)
		Stearic acid	Oleic acid	Linoleic acid	alpha-Linolenic acid	Erucic acid				
5440	40	1.89	62.54	18.35	9.99	0.00	6.78	64.28	28.44	113.18
73-75 RR	21	1.94	64.07	17.92	8.50	0.00	7.25	65.61	26.49	109.70
L130	41	1.82	62.86	18.32	9.76	0.00	6.70	64.60	28.17	112.80
L150	28	1.67	61.55	19.70	9.81	0.00	6.57	63.25	29.61	114.18
L154	10	1.95	63.58	18.44	8.81	0.00	6.88	65.21	27.33	111.04
L159	11	1.82	61.10	19.51	10.21	0.00	6.78	62.84	29.82	114.54

Alberta

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

Variety	No. of Samples	Fatty acid composition					Total saturates	Total mono-unsaturated fatty acid	Total poly-unsaturated fatty acid	Iodine value (units, in oil)
		Stearic acid	Oleic acid	Linoleic acid	alpha-Linolenic acid	Erucic acid				
1990	15	1.79	63.53	18.28	8.53	0.27	6.99	65.52	26.90	110.28
43E02	10	1.86	62.59	18.79	9.29	0.00	6.93	64.35	28.17	112.18
45H29	12	1.75	65.08	17.71	8.11	0.00	6.79	66.71	25.90	109.25
45S52	22	1.90	65.50	17.32	7.84	0.00	6.97	67.21	25.24	108.28
5440	29	1.84	63.55	17.58	9.88	0.00	6.66	65.28	27.55	112.42
73-45 RR	25	1.57	61.10	20.09	9.57	0.00	7.04	62.65	29.72	113.68
74-44 BL	25	1.64	62.40	19.33	8.96	0.17	6.92	64.13	28.37	112.04
L120	19	1.75	62.23	18.50	10.20	0.00	6.68	63.93	28.79	113.69
L130	54	1.82	64.15	17.47	9.47	0.00	6.61	65.88	27.03	111.67
L135C	16	1.74	62.02	18.49	10.45	0.00	6.66	63.71	29.03	114.15

L150	37	1.63	62.76	18.76	9.78	0.00	6.41	64.43	28.63	113.48
L159	12	1.76	63.05	18.20	9.93	0.00	6.49	64.71	28.23	113.16
VR 9559 G	12	1.81	64.97	17.07	9.06	0.00	6.65	66.68	26.22	110.60
VR 9560 CL	10	1.61	63.09	18.97	8.83	0.00	6.57	64.74	27.89	111.65
VT 500 G	20	1.79	62.18	19.10	9.46	0.00	6.87	63.89	28.64	112.74

Saskatchewan

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

Variety	No. of Samples	Fatty acid composition					Total saturates	Total mono-unsaturated fatty acid	Total poly-unsaturated fatty acid	Iodine value (units, in oil)
		Stearic acid	Oleic acid	Linoleic acid	alpha-Linolenic acid	Erucic acid				
1990	14	1.92	63.72	18.42	8.47	0.00	7.16	65.32	26.97	110.22
45H29	23	1.84	65.07	17.96	7.73	0.00	6.99	66.66	25.76	108.63
5440	41	1.95	63.41	17.85	9.74	0.00	6.74	65.09	27.67	112.34
6060 RR	18	2.10	66.29	17.02	7.33	0.04	7.11	67.90	24.43	107.05
72-65 RR	9	1.99	63.15	20.14	7.54	0.00	7.13	64.55	27.75	110.13
74-44 BL	11	1.72	62.32	19.72	8.68	0.06	7.08	63.89	28.47	111.80
D3153	12	1.92	65.03	17.89	8.01	0.00	6.85	66.59	25.98	109.21
L120	19	1.89	63.51	18.36	9.13	0.00	6.79	65.11	27.57	111.67
L130	77	1.96	64.23	17.74	8.90	0.00	6.86	65.91	26.73	110.68
L150	93	1.67	63.06	19.13	9.09	0.00	6.49	64.69	28.31	112.55
L154	13	1.93	64.01	18.13	8.86	0.00	6.80	65.62	27.08	111.02
L159	30	1.93	63.75	18.18	9.12	0.00	6.78	65.34	27.38	111.53
VT 500 G	44	1.89	62.76	19.13	8.85	0.00	7.01	64.38	28.05	111.63