

ISSN 2818-2340

Quality of Canadian canola 2025

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Également disponible en français sous le titre :
Qualité du canola canadien 2025

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Catalogue No.: A92-45E-PDF

ISSN: 2818-2340

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Summary

In 2025, the percentage of canola samples graded No. 1 Canada was 95.0%. This was higher than the 2024 value of 90.0%, the 5-year mean of 92.0%, and the 10-year mean of 89.5% (Table 1). Alberta-Peace River had the highest percentage of No. 1 canola samples at 96.6% (83.7% in 2024), followed by Saskatchewan at 93.9% (96.1% in 2024) and Manitoba at 93.8% (89.3% in 2024). Saskatchewan census agricultural region 01 had the lowest percentage of No. 1 canola samples (65.4% in 2025 versus 95.2% in 2024) followed by Manitoba crop district 01 (87.0% in 2025 versus 93.1% in 2024) and Ontario (88.2% in 2025 versus 90% in 2024).

Canadian No. 1 canola was characterized by a higher mean oil content in 2025 (43.6%) than in 2024 (42.4%) and a lower mean protein content in 2025 (21.5%) than in 2024 (22.9%) (Table 1). The mean chlorophyll content for No. 1 canola in 2025 was 8 milligrams per kilogram (mg/kg), identical to the 2024 mean (Table 1). The mean total glucosinolate content of seeds in 2025 was 12 micromoles per gram ($\mu\text{mol/g}$), similar to the 2024 mean.

The fatty acid composition data for the 2025 and 2024 canola crops are found in Table 1. The 2025 mean oleic acid content (64.2%) was higher than the 2024 mean (63.4%), slightly higher than the 5-year mean of 64.0% and higher than the 10-year mean of 63.5%. The mean alpha-linolenic acid content in 2025 (9.0%) was similar to the 2024 mean (9.2%), while the mean linoleic acid content in 2025 (17.7%) was lower than the 2024 mean (18.4%). The mean total saturated fatty acid content in 2025 (6.7%) was similar to the 2024 mean (6.6%) and identical to the 5-year and 10-year means. This resulted in a lower iodine value of the oil for the 2025 canola crop (111.0 units) compared to the 2024 crop (111.9 units).

The mean free fatty acid content of the oil for No. 1 canola (0.20%) was similar to the 2024 mean (0.25%) (Table 1), although some Manitoba crop districts had means that ranged between 0.43% and 0.96%. The mean free fatty acid content for No. 1 canola samples from Ontario (0.33%) was much higher than the Canadian mean.

Table 1 Quality data for 2024 and 2025 harvest samples of Canola, No. 1 Canada

Quality parameter	2025	2024	5-year mean (2020-2024)	10-year mean (2015-2024)
Number of samples received	1,516	1,786	2,099	2,254
Number of samples graded Canola, No. 1 Canada	1,440	1,607	1,930	2,009
Percentage of samples graded Canola, No. 1 Canada	95.0	90.0	92.0	89.5
Oil content, %, 8.5% moisture	43.6	42.4	42.6	43.5
Protein content of seeds ¹ , %, 8.5% moisture	21.5	22.9	22.4	21.4
Protein content of oil-free meal, %, 12% moisture ²	39.4	41.1	40.2	39.2
Chlorophyll content, mg/kg ³	8	8	9	10
Total glucosinolate content of seeds, µmol/g ⁴ , 8.5% moisture	12	13	11	11
Total glucosinolate content of oil-free meal, µmol/g, 8.5% moisture	20	24	21	21
Free fatty acids, %	0.20	0.25	0.22	0.19
Oleic acid, % in oil	64.2	63.4	64.0	63.5
Linoleic acid, % in oil	17.7	18.4	18.2	18.4
Alpha-linolenic acid, % in oil	9.0	9.2	8.8	9.2
Erucic acid, % in oil	0.00 ⁵	0.01	0.01	0.01
Total SFA ⁶ , % in oil	6.7	6.6	6.7	6.7
Iodine value of oil, units	111.0	111.9	110.9	111.9
Total PUFA ⁷ , % in oil	26.7	27.6	27.1	27.7
Total MUFA ⁸ , % in oil	65.9	65.0	65.6	65.1

¹ Protein content calculated from nitrogen (N) content using N x 6.25.

² Trading rules for the North American sale of canola meal requires that calculations for protein claims must be reported on a 12% moisture basis with N x 6.25.

³ mg/kg = milligrams per kilogram.

⁴ µmol/g = micromoles per gram.

⁵ Level was below the limit of quantification.

⁶ SFA = saturated fatty acids. Total SFA is the sum of lauric (C12:0), myristic (C14:0), palmitic (C16:0), stearic (C18:0), arachidic (C20:0), behenic (C22:0) and lignoceric (C24:0) acids.

⁷ PUFA = polyunsaturated fatty acids. Total PUFA is the sum of linoleic (C18:2), alpha-linolenic (C18:3) and eicosadienoic (C20:2) acids.

⁸ MUFA = monounsaturated fatty acids. Total MUFA is the sum of palmitoleic (C16:1), oleic (C18:1), eicosenoic (C20:1), erucic (C22:1) and nervonic (C24:1) acids.

Introduction

This report presents quality data and information based on canola samples received from western Canada and eastern Canada (Ontario and Quebec) by the Canadian Grain Commission's Harvest Sample Program in 2025. Samples were submitted throughout the harvest period by producers, grain companies and oilseed crushing companies. The following canola quality parameters were measured: oil, protein, chlorophyll, total glucosinolates, free fatty acids, fatty acid composition and iodine value of the oil. The Canadian means are weighted according to small areas and provincial production estimates, as a result, the eastern canola quality data have little influence on the Canadian means.

Figure 1 shows the distribution of canola production per province in Canada in 2025, and Figure 2 shows the estimated canola production for the crop districts in Manitoba and Alberta and the census agricultural regions (CAR) in Saskatchewan. Prior to 2018, all canola production reporting in the Prairie provinces was based on small area data (SAD) that corresponded to crop districts. In 2018, Statistics Canada began using CAR to describe production areas in Saskatchewan instead of SAD. The new CAR approach does not correspond well with the crop districts in Saskatchewan, which makes the comparison of historical data difficult. Samples received from the Peace River area of British Columbia (crop district 7) were combined with Alberta samples to calculate the Alberta-Peace River means. Quality data for these samples are listed under Alberta-Peace River. No small area production data are available for Ontario and Quebec from Statistics Canada. The main areas of canola production in Quebec are Abitibi-Témiscamingue, Bas-Saint-Laurent, Capitale-Nationale, Chaudière-Appalaches (Sainte-Marie region) and Saguenay-Lac Saint Jean.

Figure 1 Estimated 2025 canola production (metric tonnes) for Canada according to province

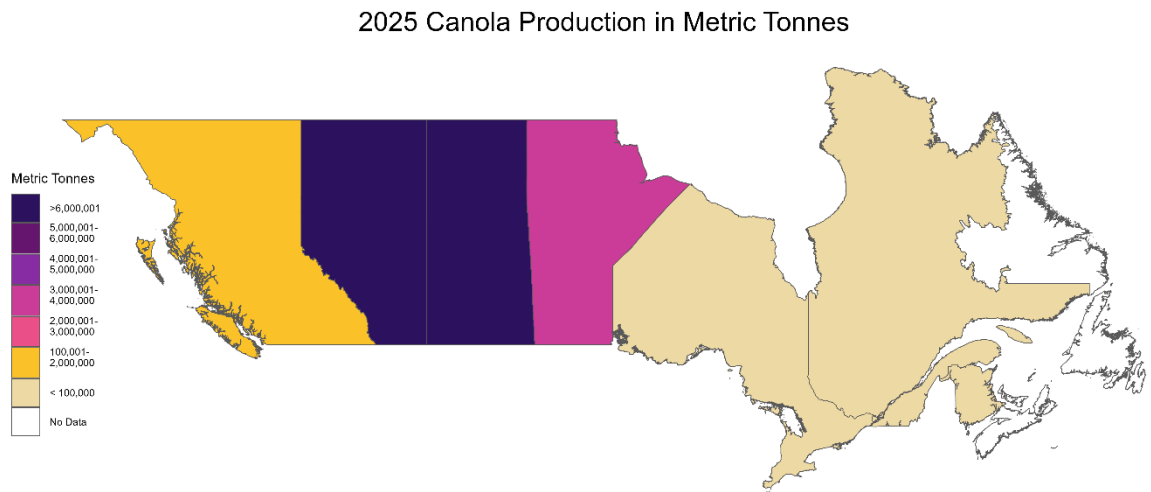
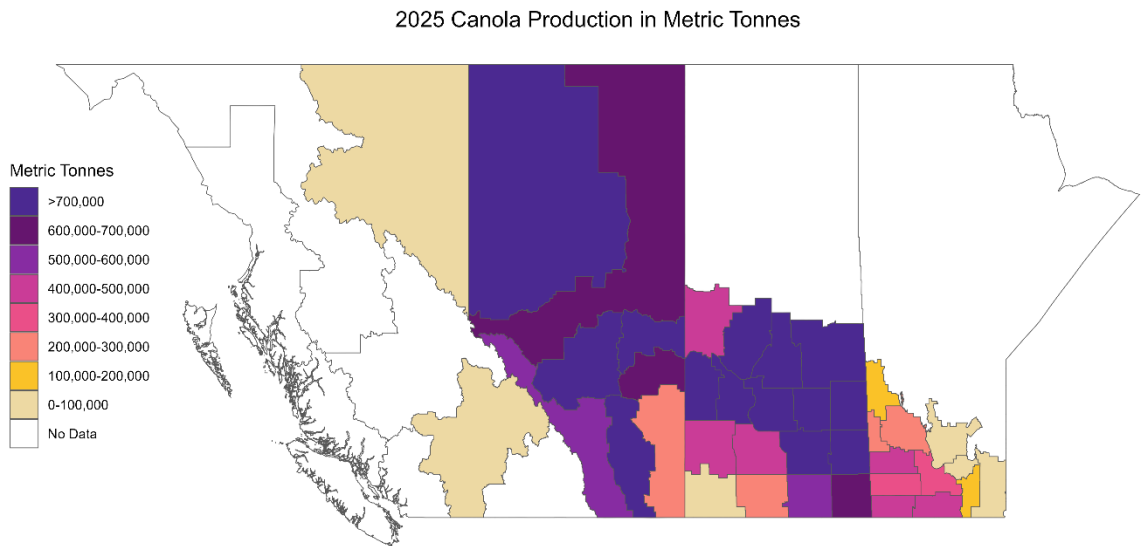


Figure 2 Estimated 2025 canola production (metric tonnes) in western Canada according to crop districts (Manitoba and Alberta-Peace River) and census agricultural regions (Saskatchewan)



Weather and production review

The agroclimate maps (Figure 3, Figure 4, Figure 5 and Figure 6) were obtained from [Agriculture and Agri-Food Canada](#). Seeding and harvest progress graphs (Figure 7 and Figure 8) were created using data obtained from provincial reports for [Manitoba](#), [Saskatchewan](#) and [Alberta](#). The growing conditions and the harvest information for Quebec and Ontario were obtained from [La Financière agricole du Québec: L'état des cultures de la FADQ, bilan au 2 décembre 2025](#) and [Canola seasonal summary – November 6, 2025 – Field Crop News](#). The number of hectares (ha) seeded with canola (Figure 9) and production data (Figure 10) were obtained from [Statistics Canada](#).

Seeding

In the spring of 2025, canola seeding conditions in Ontario and Quebec were generally cooler and wetter than normal. This led to some localized delays in planting, but most fields were seeded within the optimal window. Above-average precipitation improved soil moisture but slowed early fieldwork and emergence in parts of both provinces. Most spring canola was seeded in May, with some later planting occurring in June. Cool soil conditions led to slow or uneven emergence in several areas.

April was warmer than normal across parts of the Prairies (Figure 3), which allowed seeding to begin earlier than last year (Figure 7). Canola seeding was already underway before May, with 10% progress reported for Saskatchewan by May 5, and 6% progress reported for Alberta by May 6. In Manitoba, seeding began around May 13. May remained warmer than normal (Figure 3), and although precipitation was isolated, conditions generally supported rapid seeding with few interruptions.

As May advanced, soil moisture levels declined (Figure 5) due to variable and limited precipitation across most of the canola growing regions (Figure 4). Seeding concluded in early June in all three Prairie provinces. In 2025, seeding progress in each province consistently outpaced last year, finishing one to two weeks earlier than in 2024 (Figure 7) and ahead of the five-year average.

Growing season

In eastern Canada, dry growing conditions prevailed as the season progressed, even during the seed filling stage in August ([2025 – Field Crop News, Ontario Ministry of Agriculture, Food and Agribusiness](#)).

Throughout June and July, isolated rainfall and thunderstorms produced uneven precipitation patterns across the Prairies (Figure 4). By the end of June, 60% of Saskatchewan's canola crop and 58.1% of Alberta's canola crop were rated in good to excellent condition. Most of the crop entered the flowering stage in July under cooler than normal temperatures (Figure 3), which supported a longer flowering period that often led to higher yields. By late July, 68% of Saskatchewan's canola crop was rated good to excellent, compared with 60.3% in Alberta, as precipitation was uneven in the Prairies (Figure 4). August brought warmer temperatures (Figure 3) and widespread rainfall (Figure 4), which improved soil moisture conditions (Figure 5). However, the improved conditions might have been too late to significantly benefit the crops that were seeded early.

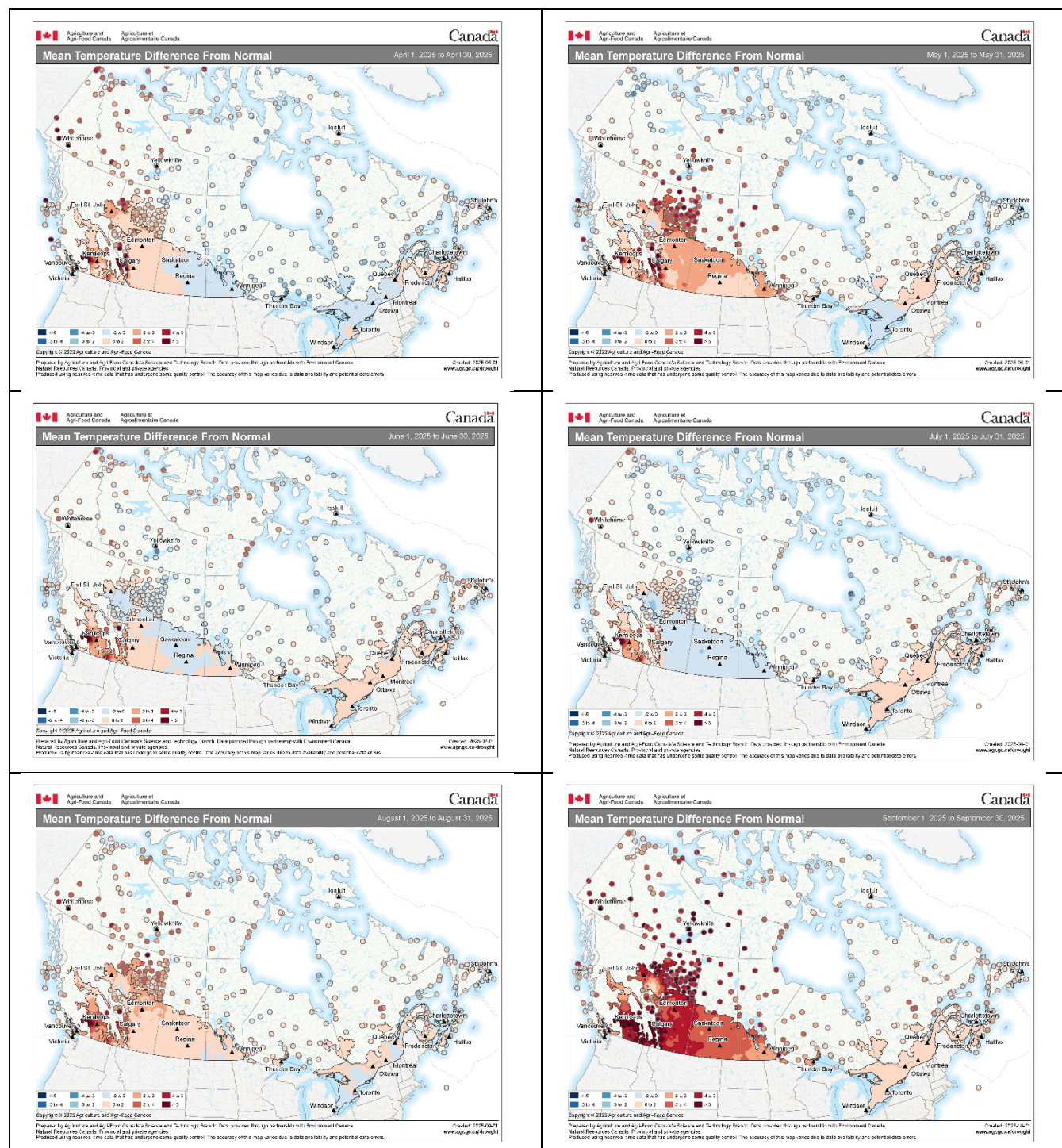
Harvest conditions

In Ontario and Quebec, 2025 harvest conditions were generally favourable with little precipitation, which allowed the harvest to proceed in a timely manner. Uneven maturity and lighter crops were reported in some

areas where crops had experienced stress early in the growing season. Overall, harvest progress was smooth, with limited delays, but yields were variable where summer dryness, insect pressure, or disease had affected crop development.

The canola harvest began in late August in Manitoba, Saskatchewan, and Alberta, and followed a timeline that was similar to 2024 (Figure 8). September was warmer than in 2024 (Figure 3) and had limited precipitation. This allowed harvest to progress with minimal delays, except in Manitoba where heavy rainfall slowed operations (Figure 4). By the third week of October, the canola harvest was considered completed across the Prairies, similar to 2024 (Figure 8).

Figure 3 Mean temperature differences from normal in Canada from April 1 to September 30, 2025



Source [Agriculture and Agri-Food Canada](#)

Source: [Agriculture and Agri-Food Canada](#)

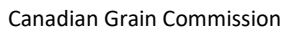
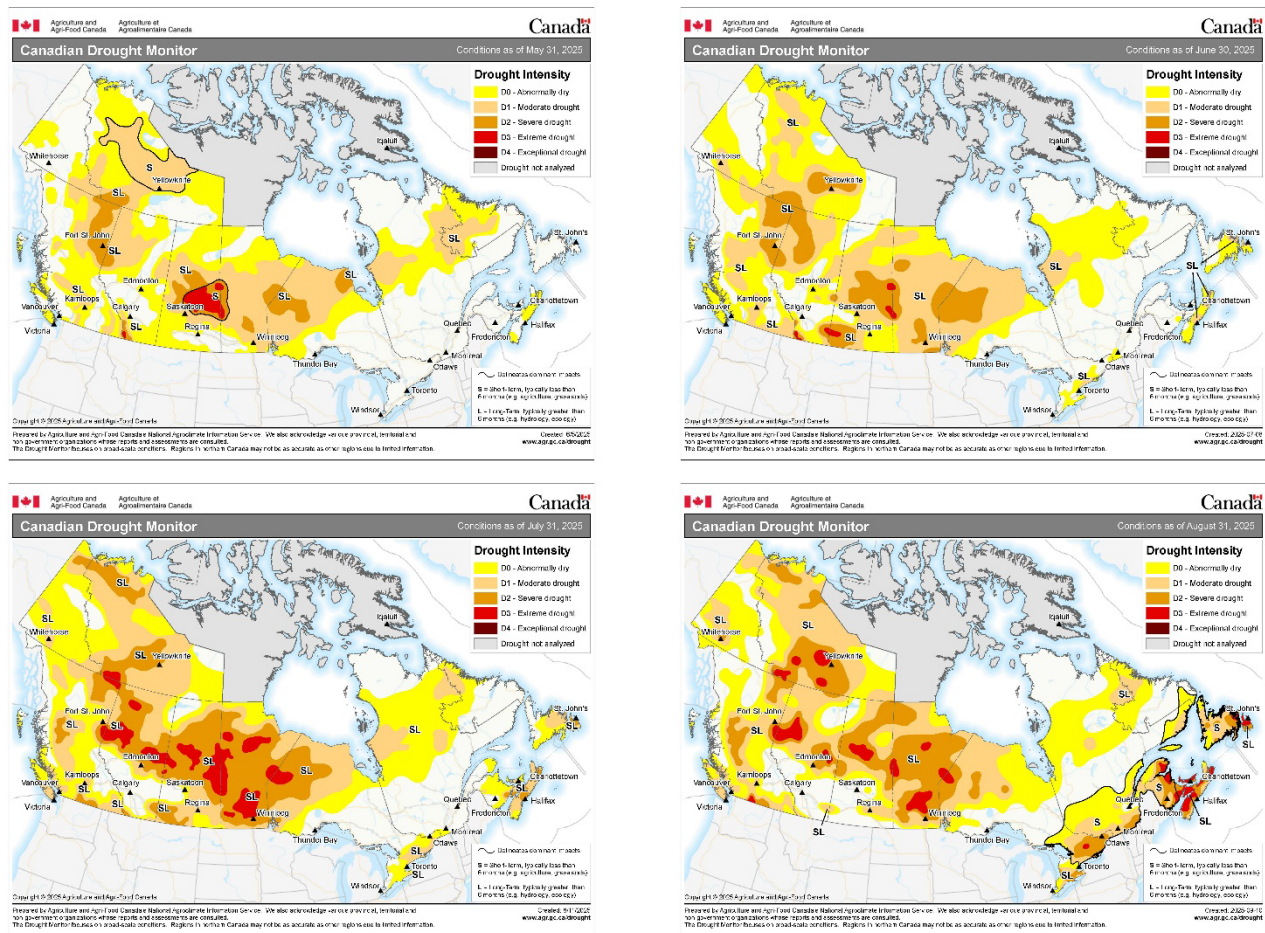


Figure 5 Extent and intensity of drought between May 31 and August 31, 2025



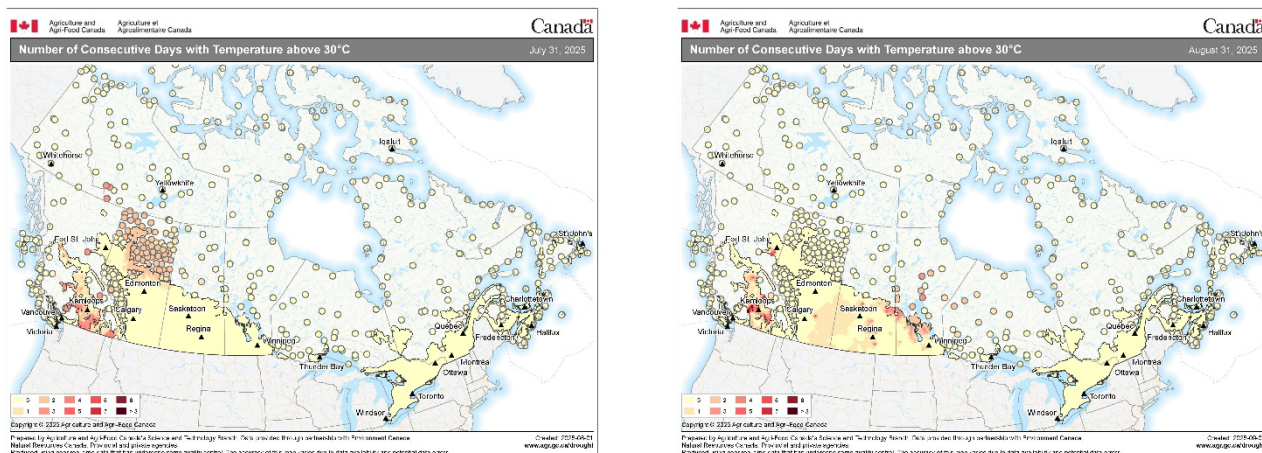
Source: [Agriculture and Agri-Food Canada](#)

Wildfire conditions

Wildfire smoke lingered over the Prairies for almost the entire 2025 growing period. The wildfire season began unusually early, with more than 160 wildfires in May across Manitoba, Saskatchewan, and Ontario. Both Saskatchewan and Manitoba declared a state of emergency at the end of May due to the wildfires. Wildfires later in the season in Alberta and British Columbia added even more smoke to the region.

In 2025, the persistent smoky haze reduced the amount of solar energy reaching the earth's surface, which kept daytime temperatures cooler. The haze also made nights warmer as heat became trapped and disrupted normal evapotranspiration. All these factors likely participated in the slowing of canola crop development. It is probable that the 2025 wildfire season, and its associated persistent smoke, caused canola plants to move through their growth stages more slowly than in 2024, pushing the harvest later and likely influencing the overall crop quality and yield.

Figure 6 Number of consecutive days with temperatures above 30°C in Canada on July 31 and August 31, 2025



Source: [Agriculture and Agri-Food Canada](#)

Figure 7 Seeding progress (%) in Manitoba, Saskatchewan and Alberta during the 2024 and 2025 growing seasons¹

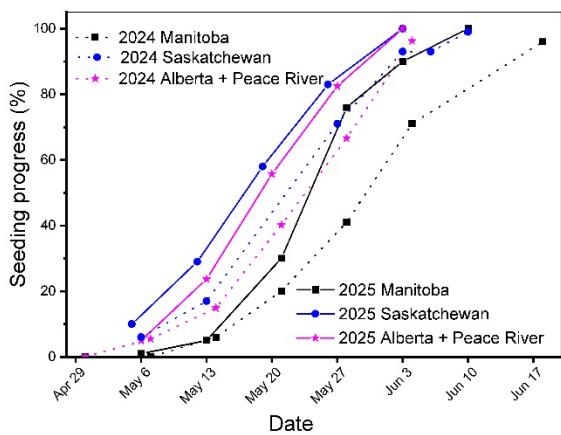
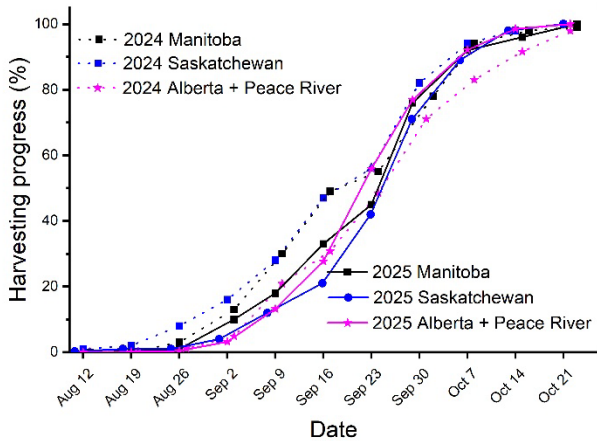


Figure 8 Harvest progress (%) in Manitoba, Saskatchewan and Alberta during the 2024 and 2025 growing seasons¹



¹ No data was available to produce similar graphs for Quebec and Ontario.

Production

The number of hectares seeded with canola in Canada since 2000 is given in Figure 9. It was estimated that canola producers seeded approximately 159,300 ha less in 2025 than in 2024 (8,748,200 ha in 2025 versus 8,907,500 ha in 2024). The 2025 seeded area was similar to the 5-year average (8,785,640 ha) but 565,200 ha less than the record set in 2017 when 9,313,400 ha of canola was seeded (Figure 9).

According to Statistics Canada there were nearly 22,900 ha of both winter canola (seeded in 2024) and spring canola seeded in Ontario in 2025, 100 ha less than in 2024 (22,800 ha).

Figure 9 Area seeded with canola (hectares) in Canada from 2000 to 2025

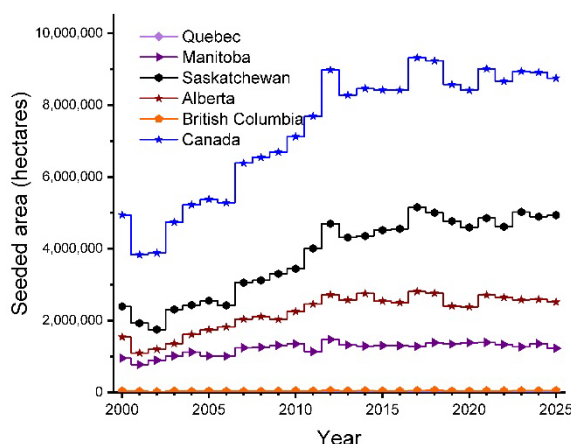
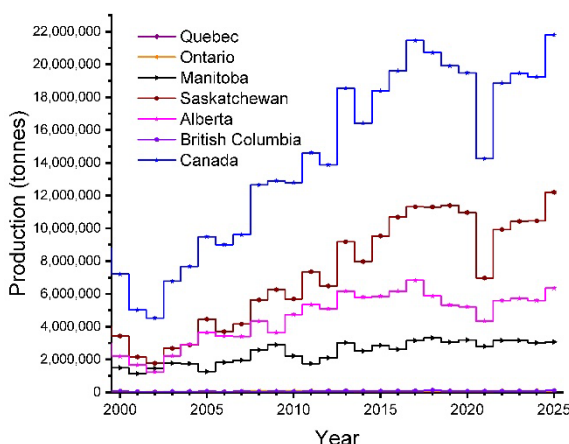


Figure 10 Canola production (metric tonnes) in Canada from 2000 to 2025



[Statistics Canada](#) estimated the average canola yield for western Canada in 2025 to be 2,507 kilograms per hectare (kg/ha). This was higher than the 2024 average (2,175 kg/ha), the 5-year average (2,100 kg/ha) and the 10-year average (2,202 kg/ha). The highest average yield was reported for Ontario (2,789 kg/ha in 2025 versus 2,763 kg/ha in 2024), followed by Alberta (2,544 kg/ha in 2025 versus 2,191 kg/ha in 2024), Manitoba (2,510 kg/ha in 2025 versus 2,253 kg/ha in 2024), Saskatchewan (2,488 kg/ha in 2025 versus 2,146 kg/ha in 2024) and British-Colombia (2,372 kg/ha in 2025 versus 1,635 kg/ha in 2024). The lowest average yield was reported for Quebec (2,247 kg/ha in 2025 versus 2,342 kg/ha in 2024). In the west, the cooler temperatures contributed to the 2025 yield being higher than the 2024 yield. In Quebec, the lack of moisture was likely responsible for the yield in 2025 being lower than the 2024 yield.

As of February 2025, Statistics Canada estimated Canadian canola production at 21,803,968 metric tonnes (MT). This is higher than last year's revised production of 19,239,463 MT (Figure 10) and the 5-year average of 17,285,165 MT. The increased production in 2025 was due to a yield increase of 332 kg/ha, which is linked to the more favorable growing conditions in the Prairies compared to 2024.

In 2025, 56.0% of the canola in Canada was produced in Saskatchewan (54.3% in 2024). Quebec produced 0.1% (0.2% in 2024), Ontario produced 0.3% (0.3% in 2024), Alberta produced 29.1% (29.1% in 2024), Manitoba produced 14.0% (15.7% in 2024) and British Columbia produced 0.5% (0.4% in 2024).

Harvest samples and grade distribution

The Canadian Grain Commission's Harvest Sample Program collected canola samples from producers, crushing plants and grain handling offices across Canada. The samples were cleaned to remove dockage prior to grading and testing. Canadian Grain Commission grain inspectors assigned grades based on Chapter 10 of the [Official Grain Grading Guide](#), which applies to canola and rapeseed.

Individual harvest samples were analyzed for oil, protein, chlorophyll and total glucosinolate content using a near-infrared (NIR) spectrometer. This report, however, is based on the analyses, by reference methods, of composite samples. Canola composites were prepared by combining:

- No. 1 Canada samples from each provincial crop district or CAR and each eastern province
- No. 2 Canada and No. 3 Canada samples from each province
- Sample Canada samples from western Canada

Oil, protein and total seed glucosinolate content are reported on an 8.5% moisture basis to permit annual and regional comparisons. The protein content of oil-free meal is reported on a 12% moisture basis, while the glucosinolate content of oil-free meal is reported on an 8.5% moisture basis to reflect meal trading rules established by the Canadian Oilseed Processors Association (COPA).

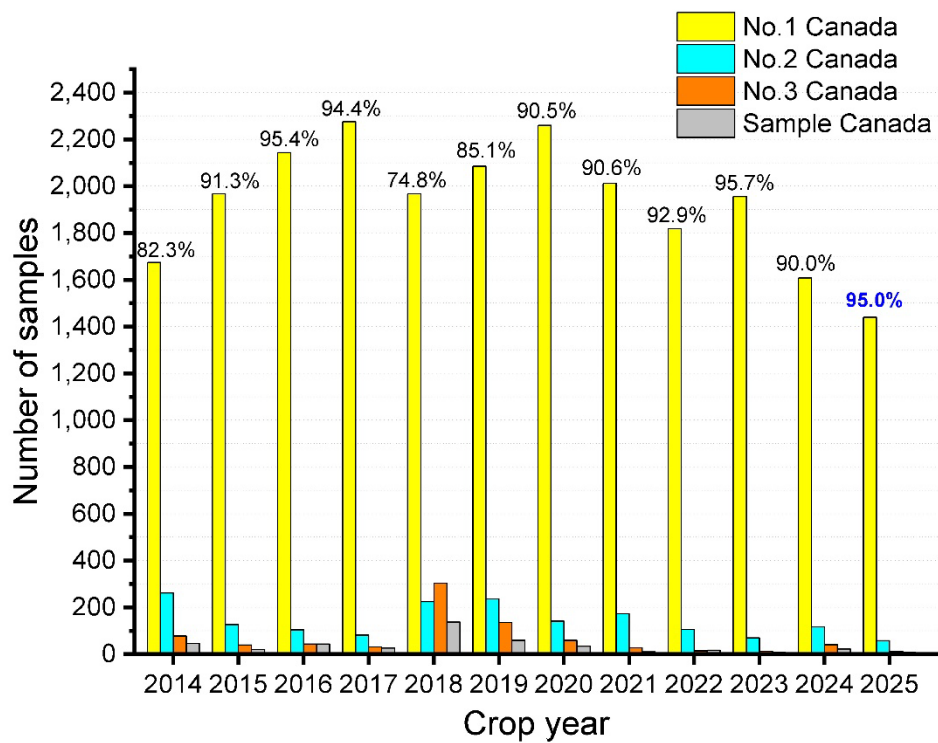
Data obtained by NIR spectroscopy for individual samples were used to report the quality data ranges.

Quality data for Manitoba and Alberta crop districts and Saskatchewan CARs can be acquired through the Canadian Grain Commission. [Canola variety data](#) are also published yearly.

This report is based on the analyses of 1,516 individual canola samples from the 2025 harvest, which included 1,440 samples that were graded No. 1 (Table 1). Composites of No. 1 canola were made from samples for each crop district and CAR (Manitoba, Saskatchewan, Alberta and British Columbia) and for each eastern province (Ontario and Quebec). Crop district, CAR and provincial composites of No. 1 canola samples were prepared using 1,422 samples. Specialty oil samples, such as high oleic acid, low linolenic acid and high erucic acid, are excluded from this report. In 2025, the number of samples we received was 271 fewer than in 2024, 583 fewer than the 5-year average and 738 fewer than the 10-year average (Table 1). It was the lowest number of samples received in the past decade.

Canadian export samples of commercially clean (CC) canola from August 2025 to December 2025 had a mean dockage of 1.9%, with individual values ranging from 0.6% to 2.5%. This dockage could negatively affect quality factors such as oil, chlorophyll and free fatty acid contents. Canola exports containing more than 2.5% dockage are considered not commercially clean (NCC) and their quality factors are usually affected even more.

Figure 11 Number of canola samples received by the Harvest Sample Program and their grade distribution from 2014 to 2025



In 2025, 95.0% of the canola harvest samples were graded No. 1. This is much higher than the 2024 percentage (90.0%), higher than the 5-year average of 92.0% and significantly higher than the 10-year average of 89.5% (Figure 10). The grade distribution of the 2025 canola crop varied greatly between provinces and between crop districts within provinces. The level of distinctly green seeds was 0.5% (0.5% in 2024) for No. 1 canola, 2.2% (2.4% in 2024) for No. 2 canola, 2.3% (3.8% in 2024) for No. 3 canola and 0.3% (0.5% in 2024) for Sample grade. In 2025, brown damaged seeds remained an issue, appearing in 44.9% of Manitoba samples,13.4% of Saskatchewan samples and 15.4% of Alberta samples. Sprout damage, usually caused by rainfall at harvest, was detected in 19.4% of Manitoba samples, 13.4% of Saskatchewan samples and 14.2% of Alberta samples.

It is important to note that the numbers of samples from each province and for each grade may not be representative of the total production or grade distribution. There were enough samples, however, to provide good quality information for each province and grade. Provincial and western Canadian means were calculated using the quality results for each crop district or CAR, weighted with the production data (5-year mean) and the grade percentile for each crop district or CAR.

Quality characteristics

Table 2 and Table 3 contain detailed information on the quality of Canadian canola harvested in 2025 in Quebec, Ontario, Manitoba, Saskatchewan, Alberta and British Columbia. Table 4 compares the quality of harvest samples to recent canola export samples. All the means presented in the report are weighted with the production data. The weighted means from eastern Canada had little effect on the Canada-wide means as production in Quebec and Ontario (79,650 MT) is minimal compared to production in western Canada (21,723,009 MT). The provincial data that have the most influence on the Canada-wide means are from Saskatchewan, since 56% of Canadian canola was produced in Saskatchewan in 2025.

There were not enough samples graded No. 2 or lower from eastern Canada to prepare aggregates of the lower grades and conduct statistical analyses. The lower grade results reflect the quality of canola from western Canada.

Oil content

In 2025, No. 1 canola had a mean oil content of 43.6% (Table 1). This is significantly higher than the 2024 mean (42.4%), higher than the 5-year mean (42.6%) and similar to the 10-year mean (43.5%). The 5-year mean and the 10-year mean are greatly affected by the record low oil content values observed in 2021 and 2022 (Figure 12) and are much lower than the 2005 to 2020 mean (44.3%). The 2025 mean oil content for No. 1 canola showed a noticeable rebound from 2021, with the highest level recorded since that year (Figure 12).

Canola graded No. 1 from the Alberta-Peace River region had a mean oil content of 44.5% (43.1% in 2024 and 43.8% in 2023). This was higher than the Manitoba mean of 42.7% (42.1% in 2024 and 42.8% in 2023) and the Saskatchewan mean of 43.3% (42.2% in 2024 and 43.1% in 2023) (Table 2). Samples from eastern Canada had a higher mean oil content than samples from western Canada. Samples from Ontario had a mean oil content of 43.6% (43.6% in 2024 and 43.9% in 2023), identical to the Canadian mean.

The oil content of individual canola samples graded No. 1 ranged from 39.0% to 49.1% in Manitoba (38.5% to 50.0% in 2024), 37.8% to 49.0% in Saskatchewan (32.5% to 49.1% in 2024), 38.5% to 50.8% in the Alberta-Peace River region (35.6% to 49.8% in 2024) and 41.4% to 48.2% in Ontario (41.5% to 46.5% in 2024) (Table 2).

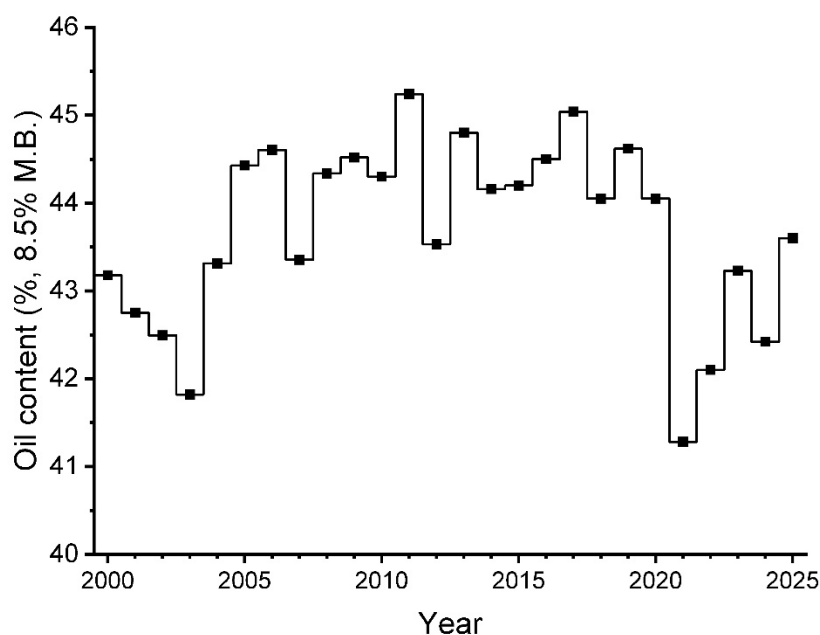
In 2025, the mean oil content of No. 2 canola from western Canada (42.9%) was lower than the mean oil content of No. 1 canola from western Canada (43.6%). No. 2 canola from Alberta-Peace River had a mean oil content of 44.0% (42.4% in 2024), which is higher than the mean of 42.9% for No. 2 canola from Saskatchewan (42.8% in 2024) and the mean of 41.4% for No. 2 canola from Manitoba (40.8% in 2024). Oil content for No. 2 canola samples from western Canada ranged from 37.2% to 47.9%, compared to 37.6% to 48.1% in 2024 (Table 2). The mean oil content of canola graded No. 3 from western Canada was 41.8% (42.0% in 2024) and was 41.5% (42.2% in 2024) for canola graded Sample.

Oil content is influenced by both genetic and environmental factors. The Canadian canola variety registration system has been developed, however, to ensure that new varieties meet minimum standards for quality, with oil content being a key quality parameter. For any known canola variety, hot and dry growing conditions rather than cool conditions, will result in canola seeds with a lower oil content.

In 2025, the early-seeded canola crop was able to become well established under adequate moisture conditions. However, as May progressed, declining soil moisture likely hindered the emergence of later-seeded crops. Cooler temperatures in July (Figure 3) and the absence of days above 30°C (Figure 6) supported an extended flowering period, which contributed to higher yield potential. These favourable conditions also helped produce canola with a higher oil content than last year. Wildfire smoke slowed crop development by reducing sunlight, delaying maturity even though seeding occurred roughly two weeks earlier than the previous year (Figure 7). Warmer than normal temperatures in September allowed producers to harvest a mature crop (distinctly green seeds at 0.5%) with higher oil content than the previous season.

The mean oil content of CC No. 1 canola exports was 42.6% for December 2025 (with 2.1% dockage) and 42.3% for August to November 2025 (with 1.8% dockage) (Table 4). For the NCC No. 1 canola exports, the mean oil content was 41.0% (with 3.1% dockage) for December 2025 and 42.1% (with 2.9% dockage) for August to November 2025 (Table 4). Harvest samples are completely clean (0% dockage) whereas the tolerance for CC exports is a maximum of 2.5% dockage. Compared to the harvest samples, the CC and the NCC export samples of No.1 canola had a lower mean oil content due to dilution from dockage. For last year's shipping season (August 2024 to July 2025), the mean oil content of CC No.1 canola exports was 42.0% (with 1.41% dockage). The oil content of the exports from the beginning of this year's shipping season (August 2025 to December 2025) showed an increase in oil content compared to last season, which corresponds to the increase in oil content found in the 2025 harvest samples compared to 2024.

Figure 12 Oil content (% , 8.5% moisture) for Canola, No. 1 Canada



Protein content

The mean protein content of canola seed (8.5% moisture) and the calculated mean protein content of oil-free meal (12% moisture) from 2000 to 2025 are given in Figure 13 and Figure 14, respectively. The mean seed protein content for all Canadian samples was 21.5% for No. 1 canola, 22.0% for No. 2 canola, 22.3% for No. 3 canola and 22.3% for canola graded Sample (Table 2). The mean protein content for No. 1 canola seed in 2025 (21.5%) was lower than the 2024 mean (22.9%) and the 5-year mean (22.4%), similar to the 10-year mean (21.4%), but much lower than the record high 2021 mean (24.0%) (Table 1 and Figure 13). The protein content of individual No. 1 canola seed samples ranged from 18.0% to 22.8% for Ontario, 16.9% to 25.0% for Manitoba, 15.2% to 26.2% for Saskatchewan and 15.6% to 26.5% for Alberta-Peace River (Table 2). The protein content for western Canadian samples ranged from 17.7% to 25.8% for No. 2 canola seed, 17.7% to 27.2% for No. 3 canola seed and 19.8% to 27.1% for canola seed graded Sample (Table 2).

A strong inverse relationship between oil and protein content can be observed in canola seeds. In 2025, the mean oil content for seeds was 1.2% higher than in 2024 and the mean protein content for seeds concurrently decreased by 1.4% compared to 2024.

The mean protein content of CC exports of No. 1 canola seed was 21.7% for December 2025 and 22.1% for August to November 2025 (Table 4). Mean protein content for canola seed for the August 2024 to July 2025 shipping season (23.3%) was significantly higher than the mean for this year’s shipping season, which is consistent with the 2025 mean protein content for harvest samples (Table 4).

Figure 13 Protein content of seeds (% , 8.5% moisture) for Canola, No. 1 Canada

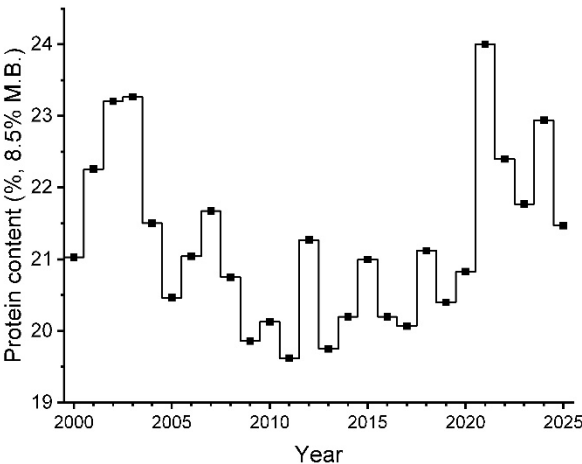
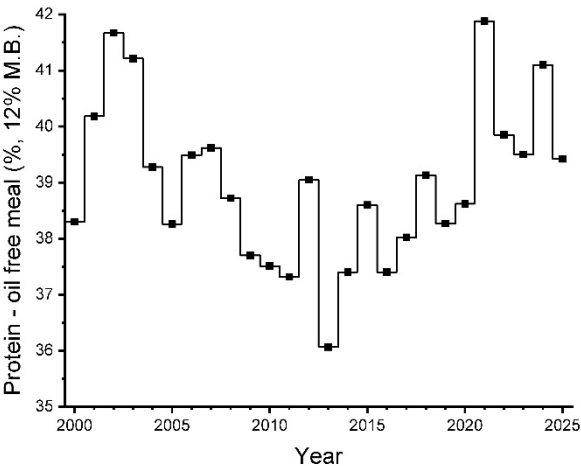


Figure 14 Protein content of oil-free meal (% , 12% moisture) for Canola, No. 1 Canada



The calculated protein content of oil-free meal is the maximum protein content of a theoretical meal that would be obtained if a crushing plant was able to extract 100% of the oil from the seeds. In 2025, the calculated mean protein content of oil-free meal at 12% moisture was 39.4%. This is significantly lower than the 2024 mean

(41.1%) and the 5-year mean (40.2%), much lower than the record 2021 mean (41.9%), but similar to the 10-year mean (39.2%) (Table 1 and Figure 4). The calculated mean protein content of oil-free meal at 12% moisture was highest for samples from Ontario (43.4% in 2025 versus 39.1% in 2024), followed by Alberta-Peace River (39.9% in 2025 versus 42.3% in 2024), Manitoba (39.3% in 2025 versus 39.5% in 2024) and Saskatchewan (39.2% in 2024 versus 41.0% in 2024) (Table 2).

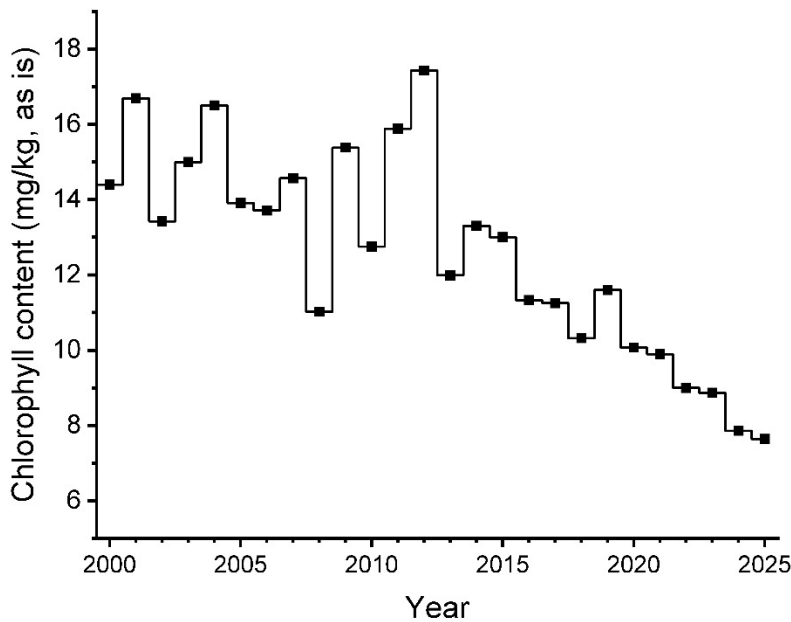
The calculated mean protein content of oil-free meal at 12% moisture for CC export samples of No. 1 canola was 39.5% for August to November 2025 and 39.1% for December 2025. These results are lower than the mean of 41.0% for CC export samples of No. 1 canola from the previous shipping season (August 2024 to July 2025) (Table 4).

Chlorophyll content

In 2025, the mean chlorophyll content for harvest samples graded No. 1 was 8 mg/kg for Canada, 5 mg/kg for Ontario, 5 mg/kg for Manitoba and 8 mg/kg for Saskatchewan and Alberta-Peace River (Table 2). The Canada-wide mean was identical to the 2024 mean, similar to the 5-year mean (9 mg/kg) and lower than the 10-year mean (10 mg/kg) (Table 1). The 2025 and 2024 means were the lowest means for chlorophyll content observed in the last 10 years (Figure 15). Individual samples of No. 1 canola showed variations in chlorophyll content due to variable growing conditions. Chlorophyll content values for No. 1 canola samples ranged from 4 mg/kg to 14 mg/kg for Ontario, less than 3 mg/kg to 33 mg/kg for Manitoba, less than 3 mg/kg to 32 mg/kg in Saskatchewan and less than 3 mg/kg to 37 mg/kg in Alberta-Peace River (Table 2). Canola from Saskatchewan CAR 15 (north-central area) and Alberta crop district 3 (western area) had the highest means for chlorophyll content (12 mg/kg and 11 mg/kg, respectively).

The mean chlorophyll content of canola harvest samples graded No. 2 was 20 mg/kg (Table 2), which was similar to the 2024 mean (19 mg/kg). Canola samples graded No. 3 had a mean chlorophyll content of 19 mg/kg, which was lower than the 2024 mean (27 mg/kg) and canola samples graded Sample had a mean chlorophyll content of 9 mg/kg, which was similar to 2024 mean (10 mg/kg). In 2025, canola samples were downgraded for several factors other than immaturity, including sprouted seeds and brown damaged seeds.

Figure 15 Chlorophyll content of seed (mg/kg, as is moisture) for Canola, No. 1 Canada



Historical means for chlorophyll content vary greatly from year to year (Figure 15) due to variable growing conditions. High chlorophyll content can be related to one or more factors, including delays in seeding due to cold temperatures and rain, poor growing conditions due to lack of heat units, and an early frost. In 2025, seeding started and ended earlier than in 2024 for Saskatchewan and Alberta-Peace River (Figure 7).

Wildfire smoke over the Prairies during most of the 2025 growing season led to cooler growing conditions compared to 2024. This resulted in delayed crop development, which led to a start time for the 2025 harvest that was similar to 2024, even though seeding had finished approximately two weeks earlier. There was no early frost, and temperatures remained above normal in September until the end of the growing season (Figure 3). This allowed the 2025 canola crop to mature fully without problems and led to comparable 2025 and 2024 means for chlorophyll content.

Canola graded No. 1 must contain no more than 2% distinctly green (DGR) seeds. The mean DGR seed content in No. 1 canola samples were identical in 2025 and 2024 for Ontario (0.4%), Manitoba (0.7%), Saskatchewan (0.4%) and Alberta-Peace River (0.6%). The mean DGR seed content for all Canadian samples was 0.5%.

The chlorophyll content of Canadian canola exports is affected by DGR seed and dockage content. The mean DGR seed content was 0.4% for the December 2025 CC canola exports and the August to November 2025 CC canola exports, and 0.3% for the August to December 2025 NCC canola exports (Table 4). The mean chlorophyll content was similar for CC export samples for December 2025, August to November 2025 and August 2024 to July 2025 (Table 4).

Glucosinolate content

The mean total glucosinolate content of canola seeds at 8.5% moisture and the calculated mean total glucosinolate content of oil-free canola meal at 8.5% moisture from 2000 to 2025 are presented in Figure 16 and Figure 17, respectively.

In 2025, canola No. 1 had a mean total glucosinolate content of 12 micromoles per gram of seeds ($\mu\text{mol/g}$), which is similar to the 2024 mean (13 $\mu\text{mol/g}$ of seeds) (Table 2) and the 5-year and 10-year means (11 $\mu\text{mol/g}$ of seeds). This is the fourth highest mean for total glucosinolate content in the last 10 years (Figure 8). Mean total glucosinolate content was 11 $\mu\text{mol/g}$ of seeds for Ontario (10 $\mu\text{mol/g}$ of seeds in 2024), 12 $\mu\text{mol/g}$ of seeds for Manitoba (11 $\mu\text{mol/g}$ of seeds in 2024), 12 $\mu\text{mol/g}$ of seeds for Saskatchewan (13 $\mu\text{mol/g}$ of seeds in 2024) and 11 $\mu\text{mol/g}$ of seeds for Alberta-Peace River (14 $\mu\text{mol/g}$ of seeds in 2024). Samples from Saskatchewan CAR 08 (southwestern area) and Manitoba crop district 5 (northwestern area) had the highest means for total glucosinolate content (15 $\mu\text{mol/g}$ of seeds and 14 $\mu\text{mol/g}$ of seeds, respectively). Individual samples of canola No. 1 had total glucosinolate content values ranging from 5 to 12 $\mu\text{mol/g}$ of seeds for Ontario, less than 3 to 19 $\mu\text{mol/g}$ of seeds for Manitoba, 5 to 28 $\mu\text{mol/g}$ of seeds for Saskatchewan and 5 to 22 $\mu\text{mol/g}$ of seeds for Alberta-Peace River.

The canola growing areas were affected by a lack of moisture during the 2025 growing season, with the Prairies suffering from severe to extreme drought during most of the growing season (Figure 5) even though some moisture was received (Figure 4). Figure 6 shows that there were very few days in July and August with temperatures over 30°C. Average temperatures in June and July were cooler than last year and warmer in August and September (Figure 3). Since 2021, there have been drought conditions during the entire canola growing season.

Our glucosinolate observations align with a research study from Australia that showed hot and dry conditions after flowering increases total glucosinolate levels in canola seed. Since 2021, limited moisture has contributed to elevated total glucosinolate concentrations in Canadian canola and to the wide range of values observed for individual samples in 2025.

The December 2025 and the August to November 2025 CC canola exports had a mean total glucosinolate content of 10 $\mu\text{mol/g}$ of seeds, which is identical to the mean for the previous shipping season (Table 4).

In 2025, 12 $\mu\text{mol/g}$ of total glucosinolates in seed corresponded to 20 $\mu\text{mol/g}$ of total glucosinolates in oil-free meal on an 8.5% moisture basis (Table 1). This is lower than the 2024 mean of 24 $\mu\text{mol/g}$ for oil-free meal and slightly lower than both the 5-year and 10-year means (21 $\mu\text{mol/g}$) (Figure 17 and Table 1). Total glucosinolate content in Canadian canola meal obtained from conventional crushing plants (expeller press followed by solvent extraction) is much lower than this calculated value. The calculated value assumes that 100% of the oil is recovered from the seed during crushing and that no glucosinolates are destroyed during processing, which is never the case.

Figure 16 Total glucosinolate content of seeds ($\mu\text{mol/g}$, 8.5% moisture) for Canola, No. 1 Canada

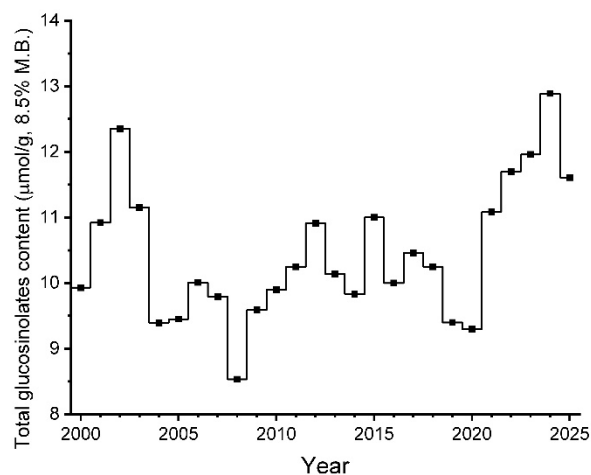
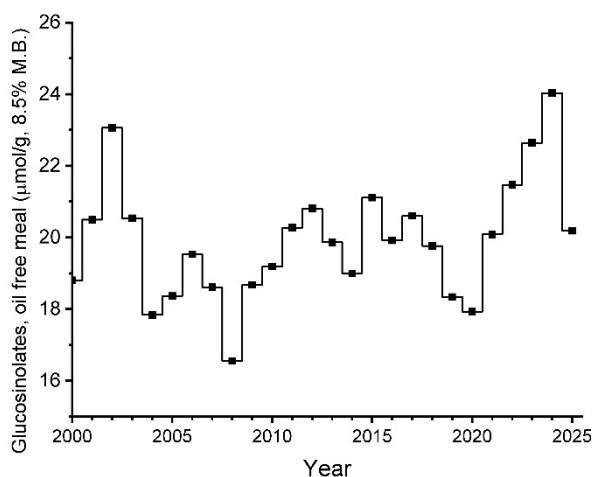


Figure 17 Total glucosinolate content of oil-free meal ($\mu\text{mol/g}$, 8.5% moisture) for Canola, No. 1 Canada



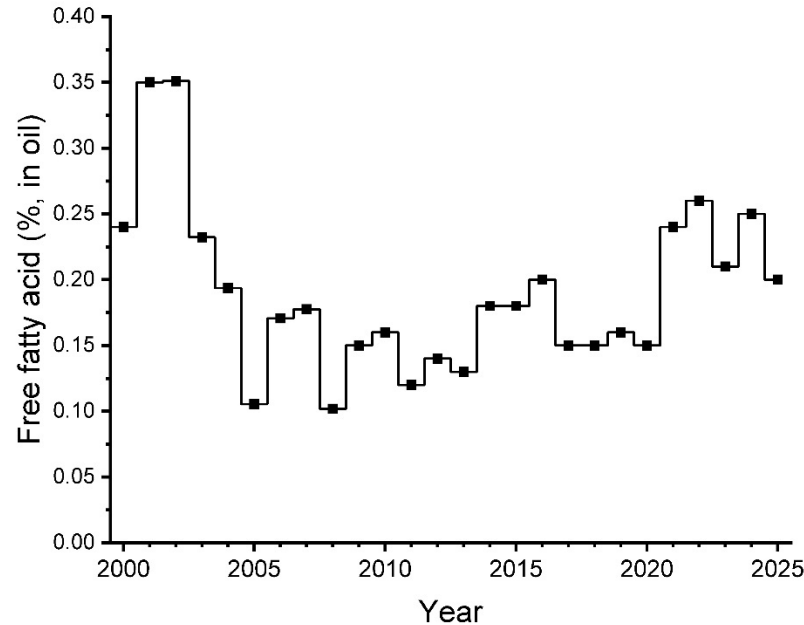
Free fatty acid content

In 2025, the mean free fatty acid (FFA) content of canola samples graded No. 1 was 0.20% (as oleic acid). This was lower than the 2024 mean (0.25%) and the 5-year mean (0.22%), and higher than the 10-year mean (19%) (Table 1 and Figure 18). The 2025 mean FFA content for No. 1 canola samples from Manitoba (0.49% in 2025 and 0.43% in 2024) was higher than the Ontario mean (0.33% in 2025 and 0.41% in 2024), Alberta-Peace River mean (0.15% in 2025 and 0.28% in 2024) and Saskatchewan mean (0.15% in 2025 and 0.19% in 2024) (Table 2). Manitoba No. 1 canola samples had a mean FFA content that was higher than the western Canada mean. The FFA content for Manitoba ranged from 0.28% to 1.00%, which may pose a problem for local crushers.

Western Canada canola samples graded No. 2 had a higher mean FFA content (0.52% in 2025 versus 0.57% in 2024) than those graded No. 1 (Table 2). Manitoba samples had the highest mean FFA content (1.23% in 2025 versus 1.21% in 2024), which was significantly higher than the Saskatchewan mean (0.44% in 2025 versus 0.40% in 2024) and the Alberta mean (0.19% in 2025 versus 0.44% in 2024).

Plant stress and seed sprouting that is due to hot and dry growing conditions and/or rain at harvest can often lead to an increase in FFA content. In 2025, brown damaged seeds were observed in a large number of samples, especially in Manitoba. This damage was the result of plant stress, likely due to the lack of moisture. Sprouting was also noticed in some 2025 canola samples, which was due to rain during harvest (Figure 4).

Figure 18 Free fatty acid content (% in oil, as oleic acid) for Canola, No. 1 Canada



The mean FFA content for CC canola No. 1 was 0.20% for the December 2025 exports and 0.30% for the August to November 2025 exports (Table 4). For individual CC canola No. 1 export samples, the FFA content values ranged from 0.12% to 1.0% (0.10% to 0.69% for the previous shipping season).

It has been observed that FFA content can increase during the shipping season. Storage conditions can activate hydrolytic enzymes in seeds which leads to an increase in FFA production. FFA content can vary considerably from each load throughout the entire shipping season.

Fatty acid composition

The mean erucic acid (C22:1) content of all Canadian samples of canola graded No. 1 was considered to be 0.00% in 2025, below the limit of quantification. Over the last several years, the mean erucic acid content in canola samples graded No. 1 ranged from below the limit of detection to just over the limit of detection (Table 1 and Table 3, Figure 19). These low values are a direct result of plant breeding efforts by the Canadian canola industry.

In 2025, the mean alpha-linolenic acid (C18:3) content for all Canadian samples of No. 1 canola was 9.0%, which was similar to the 2024 mean (9.2%) and the 10-year mean (9.2%), and slightly higher than the 5-year mean of 8.8% (Table 1 and Figure 20). Samples from Ontario had the lowest mean alpha-linolenic acid content (8.4%) followed by samples from Manitoba (9.0%), Saskatchewan (9.0%) and Alberta-Peace River (9.2%). Alpha-linolenic acid content ranged from 7.5% to 9.9% for samples from eastern Canada and from 6.4% to 12.8% for samples from the Prairie provinces (Table 3).

In 2025, the mean oleic acid (C18:1) content of all Canadian samples of No. 1 canola was 64.2%, which was higher than the 2024 mean (63.4%) and similar to the 5-year mean of 64.0% (Table 1 and Figure 21). The lowest

mean oleic acid content was found in samples from Alberta-Peace River (64.2% in 2025 versus 63.2% in 2024) and the highest in Ontario (64.5 % in 2025 versus 65.0% in 2024) (Table 3). The oleic acid content ranged from 60.5% to 66.6% for samples from Ontario (63.5% to 66.5% in 2024), 58.2% to 66.8% for samples from Manitoba (58.7% to 66.7% in 2024), 57.9% to 68.2% for samples from Saskatchewan (57.1% to 67.5% in 2024) and 56.9% to 68.3% for samples from Alberta-Peace River (58.0% to 66.1% in 2024).

The mean total monounsaturated fatty acid (MUFA) content in 2025 was 66.0% in Ontario (66.5% in 2024), 65.5% in Manitoba (65.1% in 2024), 66.0% in Saskatchewan (65.1% in 2024) and 65.8% in Alberta-Peace River (64.9% in 2024). The mean for all the Canadian samples was 65.8% in 2025, higher than the 2024 mean (65.0%) and similar to the 5-year mean of 65.6% (Table 1 and Table 3).

The mean linoleic acid (C18:2) content in 2025 was 17.7%, lower than the 2024 mean (18.4%) and the 5-year mean of 18.2% (Figure 22 and Table 1). Since 2013, linoleic acid content has shown a continual decrease (Figure 22). Year-to-year changes in crop quality are usually related to environmental conditions and changes observed over more than ten years are usually related to genetic changes, suggesting the observed decrease in linoleic acid is likely related to plant genetics.

In 2025, the mean total polyunsaturated fatty acid (PUFA) content was 26.5% for Ontario (26.0% in 2024), 27.1% for Manitoba (27.4% in 2024), 26.7% for Saskatchewan (27.5% in 2024) and 26.9% for Alberta-Peace River (28.1% in 2024). The Canadian mean was 26.8% (27.7% in 2024), which was lower than the 5-year mean of 27.1% (Table 1 and Table 3). In canola, PUFA content is directly related to alpha-linolenic acid (C18:3) and linoleic acid (C18:2) contents. Compared to 2024, there was a 0.2% decrease in alpha-linolenic acid content and a 0.6% decrease in linoleic acid content, which accounted for the 0.8% decrease in PUFA content in 2025.

The mean saturated fatty acid (SFA) content for all canola No. 1 samples in 2025 was 6.7%, similar to the 2024 mean (6.6%) and identical to the 5-year and 10-year means (Table 1 and Table 3, Figure 23). Since 2009, the mean SFA content has varied between 6.6% and 6.9% (Figure 23). In 2025, the mean SFA content for No. 1 canola was 6.7% for Saskatchewan and Manitoba, 6.6% for Alberta-Peace River and 6.9% for Ontario (Table 3).

The 2025 mean iodine value for all No. 1 canola samples (111.0 units) showed some recovery from the record low value in 2022 (109.5 units) (Figure 24), but was still lower than the long term mean iodine value observed prior to 2020. In 2025, the mean iodine value for No. 1 canola was 110.5 units for Ontario (109.4 units in 2024), 111.9 units for Manitoba (111.1 units in 2024), 111.3 units for Saskatchewan (111.5 units in 2024) and 111.8 units for Alberta-Peace River (113.0 units in 2024) (Table 3). In 2025, the iodine value for individual canola seed samples graded No. 1 ranged from 106.2 units to 119.7 units, while in 2024 the value ranged from 103.6 units to 119.9 units. Canola samples graded No. 2 had higher means for iodine value, linoleic acid content and alpha-linolenic acid content, and a lower mean for oleic acid content than No. 1 canola samples (Table 3).

Compared to last year, an increase was observed in oleic acid content (64.2% in 2025 versus 63.4% in 2024) and oil content (43.6% in 2025 versus 42.4% in 2024) (Table 1, Figure 21 and Figure 12). A decrease was observed in alpha-linolenic acid content (9.0% in 2025 versus 9.2% in 2024), linoleic acid content (17.7% in 2025 versus 18.4% in 2024) and iodine value (111.0 units in 2025 versus 111.9 units in 2024) (Table 1, Figure 20, Figure 22 and Figure 24). The reported increase in oil content was associated with a decrease in total unsaturation of the oil. Hot and dry growing conditions favour low oil content and a reduction in the degree of unsaturation, which is indicated by higher oleic acid content, lower linoleic acid content, lower alpha-linolenic acid content and a lower iodine value, as was observed in 2025. In July, when most of the crop was flowering, temperatures were

0° to 2°C cooler than normal, whereas August (post flowering and pod filling stages for most of the crop) was 0° to 2°C warmer than normal (Figure 3).

According to the [2025 report on grain varieties by insured acreage](#), 232 different canola and rapeseed varieties were grown in western Canada (231 in 2024). The top variety was L340PC in 2025 (28.3%) and 2024 (25.2%), followed by L356PC (8.3% in 2025 and 9.8% in 2024), L345PC (3.8% in 2025 and 6.5% in 2024), L358HPC (3.7% in 2025 and 3.3% in 2024) and L330PC (3.6% in 2025 and 0% in 2024). Although there was a slight shift in variety representation compared to last year, it is unlikely that genetic factors alone explain why the fatty acid composition did not fully reflect what was expected from the effects of the 2025 growing conditions.

The fatty acid composition of the 2025 harvest samples corresponded well with the fatty acid composition of the August to December 2025 export samples (Table 4).

Figure 19 Erucic acid content (% in oil) for Canola, No. 1 Canada

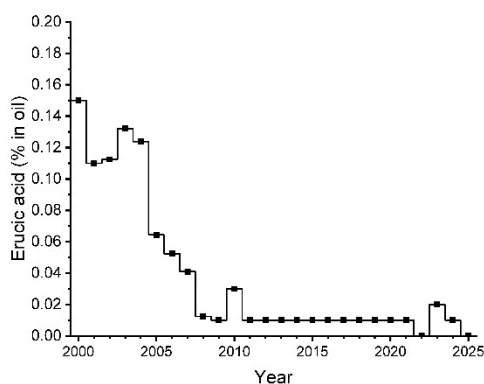


Figure 20 Alpha-linolenic acid content (% in oil) for Canola, No. 1 Canada

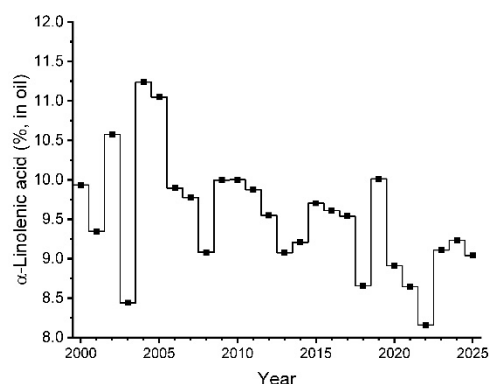


Figure 21 Oleic acid content (% in oil) for Canola, No. 1 Canada

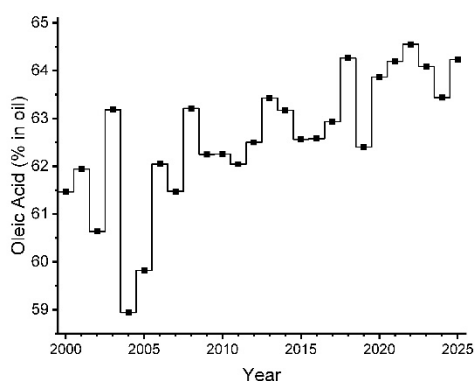


Figure 22 Linoleic acid content (% in oil) for Canola, No. 1 Canada

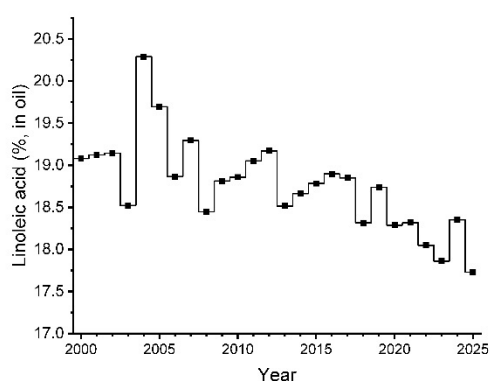


Figure 23 Saturated fatty acid content (% in oil) for Canola, No. 1 Canada

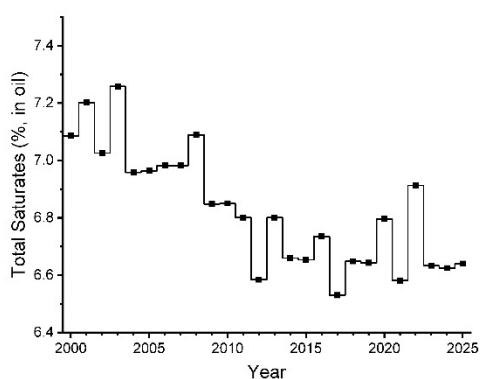


Figure 24 Iodine value (units in oil) for Canola, No. 1 Canada

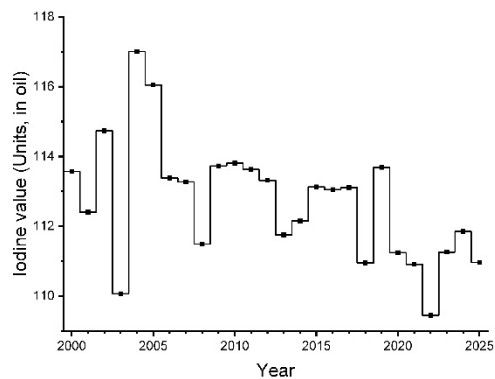


Table 2 Oil, protein, chlorophyll and total glucosinolate content and free fatty acid content of oil for 2025 canola harvest samples according to grade and province

Grade	Location	Number of samples	Oil content ¹ , %			Protein content ² , %			Chlorophyll content ³ , mg/kg ⁴			Glucosinolate content, µmol/g ⁵			Free fatty acid content, %
			Mean	Min ⁶	Max ⁶	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean
Canola, No. 1 Canada	Quebec	0	n/a ⁷	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Ontario	15	43.6	41.4	48.2	21.2	18.0	22.8	5	4	14	11	5	12	0.33
	Manitoba	302	42.7	39.0	49.1	21.8	16.9	25.0	5	< 3	33	12	3	19	0.49
	Saskatchewan	569	43.3	37.8	49.0	21.5	15.2	26.2	8	< 3	32	12	5	28	0.15
	Alberta-Peace River ⁸	536	44.5	38.5	50.8	21.3	15.6	26.5	8	< 3	37	11	5	22	0.15
	Canada⁹	1,422	43.6	37.8	50.8	21.5	15.2	26.5	8	< 3	37	12	3	28	0.20
Canola, No. 2 Canada	Manitoba	15	41.4	38.5	43.8	22.6	20.0	25.4	6	< 3	10	11	7	15	1.23
	Saskatchewan	25	42.9	37.2	47.3	22.0	18.1	25.5	23	3	45	13	7	18	0.44
	Alberta-Peace River	15	44.0	40.1	47.9	21.9	17.7	25.8	21	7	69	13	7	18	0.19
	Western Canada	55	42.9	37.2	47.9	22.0	17.7	25.8	20	< 3	69	12	7	18	0.52
Canola, No. 3 Canada	Manitoba	4	38.4	38.0	39.0	24.5	22.5	27.2	59	< 3	10	9	5	13	1.86
	Saskatchewan	6	42.7	41.4	43.4	21.7	20.2	25.3	7	3	45	13	8	22	0.28
	Alberta-Peace River	0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Western Canada	10	41.8	38.0	47.8	22.3	17.7	27.2	19	< 3	69	12	5	22	0.64
Canola, Sample Canada	Canada	5	41.5	37.0	45.0	22.3	19.8	27.1	9	8	19	10	5	12	1.27

¹ 8.5% moisture basis.

² Calculated from nitrogen (N) content using N x 6.25 on an 8.5% moisture basis.

³ As-is moisture basis.

⁴ mg/kg = milligrams per kilogram.

⁵ µmol/g = micromoles per gram.

⁶ Min = minimum, Max = maximum.

⁷ n/a = not applicable

⁸ Includes part of the Peace River area located in British Columbia.

⁹ Values are weighted averages based on provincial production estimates from Statistics Canada.

Table 3 Main fatty acid composition, total SFA¹, PUFA² and MUFA³ content and iodine value of oil for 2025 canola harvest samples according to grade and province

Grade	Location	Relative fatty acid composition of oil (%)															
		Oleic acid (C18:1)			Linolenic acid (C18:2)			Alpha-linolenic acid (C18:3)			Erucic acid (C22:1)	SFA ¹	PUFA ²	MUFA ³	Iodine value ⁴ (units)		
		Mean	Min ⁵	Max ⁵	Mean	Min	Max	Mean	Min	Max	Mean	Mean	Mean	Mean	Mean	Min	Max
Canola, No. 1 Canada	Quebec	n/a ⁶	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Ontario	64.5	60.5	66.6	18.1	17.0	20.5	8.4	7.5	9.9	0.00	6.9	26.5	66.0	110.0	107.8	114.9
	Manitoba	63.9	58.2	66.8	18.1	16.7	21.7	9.0	7.4	12.8	0.00	6.7	27.1	65.5	111.1	108.4	119.6
	Saskatchewan	64.3	57.9	68.2	17.6	16.2	21.8	9.0	6.4	12.3	0.00	6.7	26.7	66.0	110.7	106.2	119.6
	Alberta-Peace River ⁷	64.2	56.9	68.3	17.7	16.2	22.0	9.2	6.8	12.3	0.00	6.6	26.9	65.9	111.3	106.8	119.7
	Canada⁸	64.2	56.9	68.3	17.7	16.2	22.0	9.0	6.4	12.8	0.00	6.7	26.8	65.9	111.0	106.2	119.7
Canola, No. 2 Canada	Manitoba	63.65	61.4	65.8	18.4	17.5	20.2	8.8	7.7	10.2	0.00	6.81	27.2	65.3	110.9	109.9	115.0
	Saskatchewan	62.65	59.5	66.8	18.7	16.8	21.5	9.4	7.6	10.7	0.02	6.79	28.2	64.3	112.3	108.9	116.3
	Alberta-Peace River	63.18	59.5	65.3	18.6	17.9	20.7	9.6	8.2	11.0	0.00	6.35	28.3	64.8	113.0	110.5	116.5
	Western Canada	62.9	59.5	66.8	18.6	16.8	21.5	9.3	7.6	11.0	0.01	6.7	28.0	64.6	112.2	108.9	116.5
Canola, No. 3 Canada	Manitoba	60.50	60.1	61.8	18.6	18.9	20.0	10.2	9.1	9.9	0.03	7.5	28.8	62.4	112.4	112.3	115.1
	Saskatchewan	64.64	59.4	66.6	17.4	16.5	20.0	9.1	8.0	11.7	0.00	6.5	26.6	66.3	111.0	109.9	117.4
	Alberta-Peace River	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Western Canada	63.7	59.4	66.6	17.7	16.5	20.3	9.4	8.0	11.7	0.01	6.7	27.1	65.4	111.3	109.9	117.4
Canola, Sample Canada	Canada	64.2	60.7	66.1	17.9	17.0	19.5	8.4	7.9	10.1	0.01	6.8	26.4	65.9	109.8	108.2	115.4

¹ SFA = saturated fatty acids. Total SFA is the sum of lauric (C12:0), myristic (C14:0), palmitic (C16:0), stearic (C18:0), arachidic (C20:0), behenic (C22:0) and lignoceric (C24:0) acids.

² PUFA = polyunsaturated fatty acids. Total PUFA is the sum of linoleic (C18:2), alpha-linolenic (C18:3) and eicosadienoic (C20:2) acids.

³ MUFA = monounsaturated fatty acids. Total MUFA is the sum of palmitoleic (C16:1), oleic (C18:1), eicosenoic (C20:1), erucic (C22:1) and nervonic (C24:1) acids.

⁴ Calculated from fatty acid composition.

⁵ Min = minimum, Max = maximum.

⁶ n/a = not applicable

⁷ Includes part of the Peace River area located in British Columbia.

⁸ Values are weighted averages based on provincial production estimates from Statistics Canada.

Table 4 Comparison of quality data from 2025 harvest samples and recent export shipments for Canola, No. 1 Canada

Quality parameter	2025 Harvest Sample Program	Commercially clean exports		Not commercially clean exports	
		December 2025	August to November 2025	2024-2025 shipping season	August to December 2025
Oil content ¹ , %	43.6	42.6	42.3	42.0	41.0
Protein content of seeds ² , %	21.5	21.7	22.1	23.0	22.1
Protein content of oil-free meal ³ , %	39.4	39.1	39.6	41.0	38.5
Chlorophyll ⁴ , mg/kg of seeds ⁵	8	11	11	10	8.6
Total glucosinolates ¹ , µmol/g of seeds ⁶	12	10	10	9	9
Free fatty acids,% in oil, as oleic acid	0.20	0.20	0.30	0.32	0.5
Erucic acid, % in oil	0.00	0.01	0.01	0.02	0.00
Oleic acid, % in oil	64.2	64.4	64.4	63.8	65.2
Alpha-linolenic acid, % in oil	9.0	9.0	9.0	9.3	8.5
Total SFA ⁷ , % in oil	6.7	6.7	6.6	6.5	6.8
Iodine value of oil ⁸ , units	111.0	110.9	111.0	111.8	109.5
Total MUFA ⁹ , % in oil	65.9	66.0	66.0	65.5	65.9
Total PUFA ¹⁰ ,% in oil	26.8	26.7	26.8	27.4	26.9
Distinctly green (DGR) seed, %	0.5	0.4	0.4	0.4	0.3
Dockage, %	n/a ¹¹	2.1	1.8	1.4	3.1
Loading moisture, %	n/a	7.2	7.3	7.4	6.9
Number of export samples	n/a	15	58	236	11
Tonnage, metric tonnes	n/a	558,789	1,719,229	8,593,898	314,099

¹ 8.5% moisture basis.

² Protein content of seeds calculated using nitrogen x 6.25, on an 8.5% moisture basis.

³ Protein content calculated using nitrogen x 6.25, on a 12% moisture basis.

⁴ As-is moisture basis.

⁵ mg/kg of seeds = milligrams per kilogram of seeds.

⁶ µmol/g of seeds = micromoles per gram of seeds.

⁷ SFA = saturated fatty acids. Total SFA is the sum of lauric (C12:0), myristic (C14:0), palmitic (C16:0), stearic (C18:0), arachidic (C20:0), behenic (C22:0) and lignoceric (C24:0) acids.

⁸ calculated from fatty acid composition.

⁹ MUFA = monounsaturated fatty acids. Total MUFA is the sum of palmitoleic (C16:1), oleic (C18:1), eicosenoic (C20:1), erucic (C22:1) and nervonic (C24:1) acids.

¹⁰ PUFA = polyunsaturated fatty acids. Total PUFA is the sum of linoleic (C18:2), alpha-linolenic (C18:3) and eicosadienoic (C20:2) acids.

¹¹ n/a = not applicable

Acknowledgments

We acknowledge the cooperation of canola producers, grain companies and oilseed crushing plants in western and eastern Canada for supplying samples of newly harvested canola. We also thank the following groups within the Canadian Grain Commission: Industry Services, for grading canola samples; the Oilseeds Program staff, for technical assistance; Tiffany Chin, for providing the production map; and Digital and Creative Communications, for their assistance in the publication of this document.