

# Quality of the 2005 canola crop in Canada

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More highlights from the 2005 Quality Report :

"Western Canadian farmers planted 5.5 million hectares of canola in 2005, which was a 6 percent increase from previous year's area . Statistics Canada's *Field Crop Reporting Series No. 8* reported that the 2005 western Canada mean yield of 1800 kg/ha was higher than the 1600 kg/ha reported for 2004 and well above the 10-year mean of 1372 kg/ha. With the increases in yield and harvested area, total canola production in western Canada rose to 9.6 million tonnes, well above the 10-year average of 6.4 million tones. According to Statistics Canada's December 7th, 2005 estimate of provincial production, Manitoba, Saskatchewan, and Alberta/B.C. accounted for 13%, 48% and 39% respectively of the total canola production.

The 2005 western Canadian canola crop was significantly above average in oil content and below average in protein content. Compared to 2004, the mean oil content of Canola, No.1 Canada was 1.1% higher at 44.4%, while the mean protein content, 20.5%, was 1.0% lower. Compared to the 10-year means, the oil content was 1.6% higher while the protein content was 1.0% lower. The mean chlorophyll content for Canola, No.1 Canada was 14 mg/kg, significantly lower than the 17 mg/kg in 2004. The 2005 canola crop was higher in oleic acid content, 59.8%, and slightly lower in linolenic acid content, 11.0%. For Canola, No.1 Canada seed, the total saturated fatty acid content remained at 7.0%. This resulted in an oil with a slightly lower mean iodine value of 116 units. The erucic acid, 0.1%, and the total seed glucosinolates, 9 µmoles/gram, were all similar to the previous year and well below canola specifications. The free fatty acid (FFA) levels in Canola, No.1 Canada seed were notably lower than those in the 2004 crop."

**Table 1 Canola, No.1 Canada Quality data for 2005 harvest survey**

Quality parameter	2005	2004	1995-2004 Mean
Oil content, % (1)	44,4	43,3	42,8
Protein content, % (2)	20,5	21,5	21,5
Oil-free protein content	39,8	40,8	40,4
Chlorophyll content, mg/kg in seed	14	17	14
Total glucosinolates, mmol/g	9	9	11
Free fatty acids, % in oil	0,06	0,12	0,21
Erucic acid, % in oil	11,0	11,2	9,9
Oleic acid, % in oil	59,8	58,9	61,0
Total saturated fatty acids, % in oil (3)	7,0	7,0	7,1
Iodine value	116	117	114

<sup>(1)</sup> moisture basis

<sup>(2)</sup> 6.25, 8.5% moisture basis

<sup>(3)</sup> Total saturated fatty acids are the sum of palmitic (C16:0), stearic (C18:0), arachidic (C20:0), behenic (C22:0), and lignoceric (C24:0)