

OntarioWheat Technical Information



Ontario Wheat

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ONTARIO WHEAT

Ontario wheat producers have the experience and a history of innovation in wheat production to meet the quality demands of the international marketplace. Our producers have been growing export quality wheat for over fifty years. Ontario hard red winter wheat's flour yield, lower ash content and medium strength protein numbers ensure a high performing wheat for flat breads, noodles, pizza dough and other specialty products.

Ontario wheat is graded by the Canadian Grain Commission (CGC), an internationally recognized standard of grain quality. CGC monitoring ensures our shipments of grain will consistently meet contract specifications for quality, safety and quantity.

Situated between the Great Lakes and the St. Lawrence River Basin, Ontario's temperate climate and fertile soils are key components to producing top quality wheat. Ontario's varied geography and size results in diversified wheat production - from soft wheats in the southwest to hard wheats in the east. Other key advantages to Ontario wheat include our proximity to a strong transportation infrastructure of highways, rail lines and river access to ocean ports and our ample supply of energy resources.

2008 WHEAT, CANADA EASTERN RED - HARD RED WINTER WHEAT

Quality data for Canada Eastern Red wheat composites representing hard red winter wheat varieties are shown in the table on page 2. Test weight and kernel weight are a strong attribute of Ontario wheat with a seven year average of 82 kg/hL and 38.1 g per hundred kernels respectively. Wheat protein is ideal for many flat bread, noodle and pizza dough applications at 11.3 % and 13.1 % on a dry matter basis over seven years. Wheat falling number, flour amylograph peak viscosity values and alpha-amylase activity indicate soundness in this wheat class. Milling yield is quite consistent with an average of 75.7 %.

CANADA EASTERN RED WINTER - EXPORT GRADE SPECIFICATIONS*

	No. 2 CEHRW	No. 3 CEHRW
Minimum test weight, kg/hL	74	69
Total foreign material including other cereal grains	(Max.) 1.5	(Max.) 3.5
Fusarium damage, %	1.0	1.5
Heated, %	0.75	2.0
Shrunken, %	10	12
Broken, %	10	10
Total shrunken & broken, %	11	13
Smudge, %	1	5
Total smudge and blackpoint, %	20	35
Sprouted, %	2.5	8

* abridged from the Canadian Grain Commission's Official Grain Grading Guide

For complete official grain standards, see <http://www.grainscanada.gc.ca/Pubs/GGG/ggg-e.htm>

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WHEAT, CANADA EASTERN RED – HARD RED WINTER WHEAT VARIETIES

Quality data for 2000-2008 harvest survey grade composite samples

	2008	2007	2006	2005	2003	2002	2001
WHEAT							
Test weight, kg/hL	83.2	83.3	80.8	82.1	80.5	81.1	84.3
Weight per 100 kernels, g	40.4	41.0	38.9	38.2	37.0	35.9	35.1
Protein content, %	10.9	10.9	10.8	12.5	11.4	11.6	11.3
Protein content, % (dry matter basis)	12.6	12.6	12.5	14.5	13.2	13.4	13.0
Ash content, %	1.47	1.45	1.50	1.49	1.52	1.57	1.54
Alpha-amylase activity, units/g	13.5	38.0	10.0	6.5	9.0	9.0	22.5
Falling number, s	345	280	345	375	375	350	305
Flour yield, %	77.8	75.9	75.3	75.6	73.8	75.5	75.7
PSI, %	53	55	57	56	58	58	62
FLOUR							
Protein content, %	10.3	10.1	9.7	11.7	10.8	10.9	10.7
Wet gluten content, %	25.9	25.0	23.7	29.0	27.3	27.4	27.4
Ash content, %	0.51	0.46	0.46	0.48	0.51	0.54	0.53
Grade colour, Satake units	-0.3	-1.6	-1.4	-0.9	-0.7	-0.6	-0.6
AGRON colour, %	59	68	69	66	66	68	67
Starch damage, %	7.3	8.2	7.7	7.4	7.0	6.1	6.1
Alpha-amylase activity, units/g	5.0	11.0	5.0	2.5	5.0	5.0	7.0
Amylograph peak viscosity, BU	230	105	200	390	235	415	190
Maltose value, g/100g	2.6	3.6	2.9	2.5	2.5	2.1	2.4
FARINOGRAM							
Absorption, %	60.6	61.3	60.8	63.0	59.9	58.3	59.8
Development time, min	4.00	1.75	1.75	3.75	3.50	3.25	3.25
Mixing tolerance index, BU	40	40	45	15	40	40	60
Stability	6.5	4.5	3.0	10.0	6.5	5.5	5.0
EXTENSOGRAM							
Length, cm	17	20	16	20	20	17	18
Height at 5 cm, BU	250	355	350	340	235	280	190
Maximum height, BU	370	570	500	570	355	380	240
Area, cm squared	80	150	115	155	100	95	60
ALVEOGRAM							
Length, mm	78	72	89	95	119	91	99
P (height x 1.1), mm	98	119	110	117	77	70	61
W, x 10-4 joules	258	300	340	419	284	213	167
BAKING (REMIX-TO-PEAK BAKING TEST)							
Absorption, %	57	58	55	59	55	55	56
Remix time, min	2.4	3.4	3.3	3.2	2.4	1.9	1.3
Loaf volume, cm cubed/100 g flour	720	705	690	770	740	685	660

Unless otherwise specified, data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for flour