CWAD Canada Western Amber Durum

Canada is the world's leading exporter of durum wheat. CWAD is recognized for its high protein content and semolina yield. Development of new CWAD varieties has resulted in improvements in yellow colour and gluten strength.

Top Five CWAD Varieties Grown in 2023

1. Transcend
2. CDC Precision
3. AAC Stronghold
4. CDC Defy
5. CDC Alloy

2023 EXECUTIVE SUMMARY

PRODUCTION
(5-year average, 2018-2022)

5.2 million tonnes

TOTAL WHEAT GROWN IN CANADA

17%

Advice from an Expert

Semolina milled from the 2023 CWAD crop has high yellow pigment content, low ash content and good processing quality.

Grading Factors

83% of the 2023 CWAD crop has graded No. 1 and No. 2.

Protein

Protein content remains high at 14.9%, which is higher than the 10-year average of 14.1%.

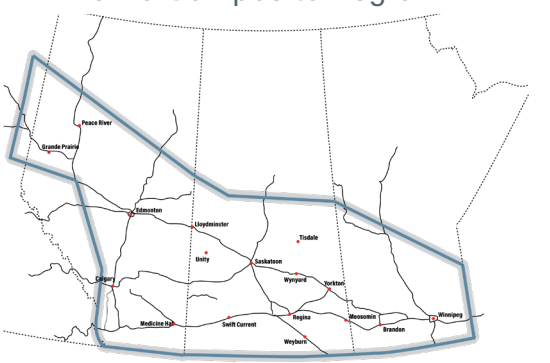
Milling Quality

Lower ash content for both No. 1 and No. 2 CWAD compared to 2022.

Application Performance

Spaghetti has bright, yellow colour with excellent texture and low cooking loss.

FIGURE 2
2023 Western Canadian Prairie Composite Region



PRAIRIE COMPOSITE

No. 1 CWAD
Canada Western Amber Durum

Quality Parameter [a]	Prairie Composite [b]	
Wheat	2023	2022
Test Weight, kg/hL	80.7	81.6
Weight Per 1000 Kernels, g	37.9	38.1
Hard Vitreous Kernels, %	95	95
Protein Content, %	15.4	14.7
Protein Content, % (dry matter basis)	17.8	16.9
Ash Content, %	1.52	1.68
Falling Number, s	418	478
Particle Size Index, %	40	37
Milling Semolina Yield Bühler Laboratory Mill		
Total Milling Yield, %	67.0	71.5
Semolina Yield, %	63.1	66.7

PRAIRIE COMPOSITE

No. 2 CWAD
Canada Western Amber Durum

Quality Parameter [a]	Prairie Composite [b]	
Wheat	2023	2022
Test Weight, kg/hL	79.1	79.1
Weight Per 1000 Kernels, g	35.7	34.0
Hard Vitreous Kernels, %	92	80
Protein Content, %	15.7	15.1
Protein Content, % (dry matter basis)	18.1	17.4
Ash Content, %	1.51	1.71
Falling Number, s	386	494
Particle Size Index, %	40	35
Milling Semolina Yield Bühler Laboratory Mill		
Total Milling Yield, %	64.9	70.6
Semolina Yield, %	60.9	65.6

[a] Data are reported on a 13.5% moisture basis for wheat.
[b] Refer to crop region map (Figure 2).

CEREALS CANADA
Commission canadienne des grains
Canadian Grain Commission
Canada

PRAIRIE COMPOSITE

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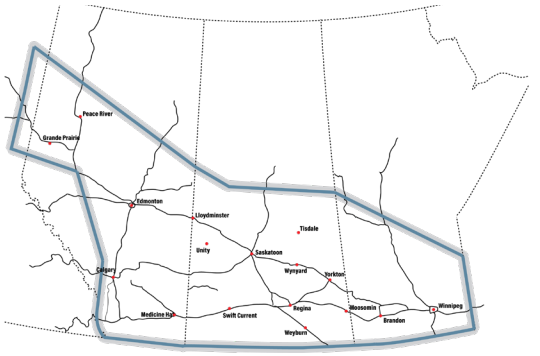

Quality Parameter [a]	Prairie Composite [b]	
Semolina	2023	2022
Protein Content, %	14.5	13.9
Protein Loss, %	0.9	0.8
Wet Gluten Content, %	35.6	36.5
Gluten Index, %	80	75
Ash Content, %	0.70	0.79
Yellow Pigment Content, ppm	11.3	11.4
Colour, b* (yellowness)	32.6	32.3
Granulation		
> 425 µm, %	1.1	1.2
> 250 µm, %	52.7	49.9
> 180 µm, %	30.3	30.9
> 150 µm, %	7.7	9.0
< 150 µm, %	8.1	9.0
Semolina Speck Count per 50 cm^2		
Total Specks	5	8
Dark Specks	1	2
Large Specks (≥0.06 mm^2)	3	4
Alveograph		
P (height x 1.1), mm	110	98
L (length), mm	91	107
P/L	1.21	0.92
W, 10^{-4} J	316	322
Ie, %	53.8	57.4
Spaghetti		
Firmness @ 9 min cook time, g	790	800
Cooking Loss, %	4.83	4.87
Colour L*	71.3	71.5
a*	4.04	5.31
b*	64.1	64.9

[a] Data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for semolina except Alveograph is reported on a 15.0% moisture basis.

[b] Refer to crop region map (Figure 2).

Harvest assessment composites represent grain available for export. Milling, analytical, and end-product analysis conducted by Cereals Canada following the Methods of Analysis on Cereals Canada's website (https://cerealscanada.ca/analytical-methods/).

PRAIRIE COMPOSITE

No. 2 CWAD

Canada Western Amber Durum

Quality Parameter [a]	Prairie Composite [b]	
Wheat	2023	2022
Test Weight, kg/hL	79.1	79.1
Weight Per 1000 Kernels, g	35.7	34.0
Hard Vitreous Kernels, %	92	80
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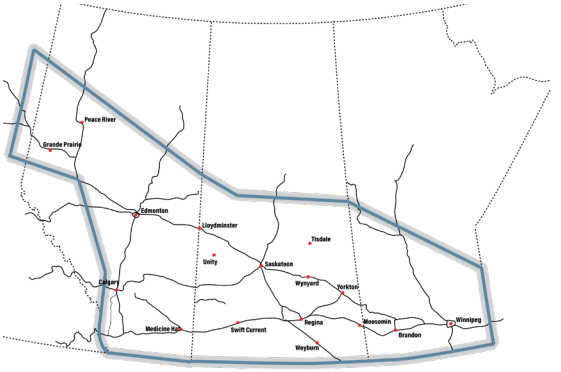

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Semolina	2023	2022
Protein Content, %	14.8	14.1
Protein Loss, %	0.9	1.0
Wet Gluten Content, %	37.4	36.7
Gluten Index, %	72	82
Ash Content, %	0.69	0.81
Yellow Pigment Content, ppm	11.3	12.2
Colour, b* (yellowness)	32.4	32.7
Granulation		
> 425 µm, %	0.5	1.0
> 250 µm, %	54.5	49.1
> 180 µm, %	29.0	31.9
> 150 µm, %	7.4	9.1
< 150 µm, %	8.6	8.9
Semolina Speck Count per 50 cm^2		
Total Specks	6	9
Dark Specks	2	2
Large Specks (≥0.06 mm^2)	3	5
Alveograph		
P (height x 1.1), mm	106	99
L (length), mm	96	109
P/L	1.10	0.91
W, 10^{-4} J	314	337
Ie, %	53.5	59.0
Spaghetti		
Firmness @ 9 min cook time, g	753	773
Cooking Loss, %	4.63	5.15
Colour L*	71.3	71.5
a*	4.12	5.89
b*	64.3	66.3

[a] Data are reported on a 13.5% moisture basis for wheat and a 14.0% moisture basis for semolina except Alveograph is reported on a 15.0% moisture basis.

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