

# 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 2025

- 1 CDC Defy
- 2 Transcend
- 3 AAC Stronghold
- 4 CDC Precision
- 5 AAC Grainland

### 2025 EXECUTIVE SUMMARY

#### PRODUCTION

(5-year average, 2020-2024)

**5.2 million tonnes**

% of TOTAL WHEAT GROWN IN CANADA

**16%**



#### Protein

CWAD from the 2025 crop has good protein content, typical for the class.



#### Advice from an Expert

Semolina from the 2025 CWAD crop has a good balance of gluten strength and extensibility and lower ash content compared to last year.



#### Grading Factors

Majority of the 2025 CWAD crop graded No. 1, No. 2 or No. 3.



#### Milling Quality

CWAD from the 2025 crop has good test weight and thousand kernel weight with higher semolina yields compared to last year.

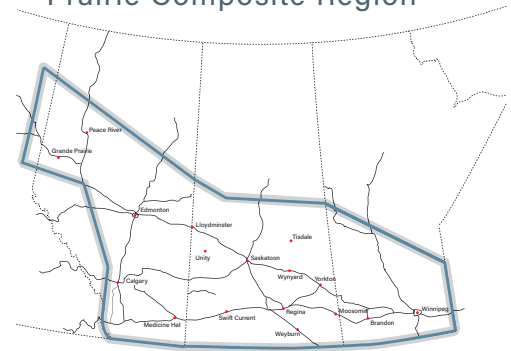


#### Application Performance

Spaghetti has excellent cooking quality with excellent texture and lower cooking loss than last year.

**FIGURE 2**

### 2025 Western Canada Prairie Composite Region



### PRAIRIE COMPOSITE

## No. 1 CWAD

### Canada Western Amber Durum

Quality Parameter <sup>a</sup>	Prairie Composite <sup>b</sup>		
	2025	2024	5 yr avg.
Wheat			
Test Weight, kg/hL	83	81	82
Weight Per 1000 Kernels, g	45.6	34.4	39.0
Hard Vitreous Kernels, %	94	92	93
Protein Content, %	14.2	14.7	15.0
Protein Content, % (dry matter basis)	16.4	17.0	17.3
Wet Gluten Content, %	34.1	32.3	33.8
Gluten Index, %	52	78	68
Ash Content, %	1.60	1.58	1.59
Falling Number, s	416	479	452
Particle Size Index <sup>c</sup> , %	43	41	-
Milling Semolina Yield Bühler Laboratory Mill			
Total Milling Yield, %	69.9	67.5	68.7
Semolina Yield, %	65.5	63.3	64.3

<sup>a</sup> Data are reported on a 13.5% moisture basis.

<sup>b</sup> Refer to crop region map (Figure 2).

<sup>c</sup> Unable to calculate 5-year average for particle size index due to change in method.

### PRAIRIE COMPOSITE

## No. 2 CWAD

### Canada Western Amber Durum

Quality Parameter <sup>a</sup>	Prairie Composite <sup>b</sup>		
	2025	2024	5 yr avg.
Wheat			
Test Weight, kg/hL	81	79	79
Weight Per 1000 Kernels, g	45.7	32.8	37.2
Hard Vitreous Kernels, %	88	93	87
Protein Content, %	14.8	15.7	15.5
Protein Content, % (dry matter basis)	17.1	18.2	17.9
Wet Gluten Content, %	36.3	34.3	35.2
Gluten Index, %	49	84	70
Ash Content, %	1.58	1.69	1.62
Falling Number, s	288	441	394
Particle Size Index <sup>c</sup> , %	46	42	-
Milling Semolina Yield Bühler Laboratory Mill			
Total Milling Yield, %	68.2	65.1	67.2
Semolina Yield, %	63.7	60.4	62.6

### PRAIRIE COMPOSITE

## No. 3 CWAD

### Canada Western Amber Durum

Quality Parameter <sup>a</sup>	Prairie Composite <sup>b</sup>	
	2025	2024
Wheat		
Test Weight, kg/hL	80	78
Weight Per 1000 Kernels, g	44.7	31.4
Hard Vitreous Kernels, %	87	95
Protein Content, %	15.2	16.5
Protein Content, % (dry matter basis)	17.6	19.1
Wet Gluten Content, %	36.6	36.2
Gluten Index, %	44	79
Ash Content, %	1.66	1.77
Falling Number, s	212	481
Particle Size Index <sup>c</sup> , %	42	43
Milling Semolina Yield Bühler Laboratory Mill		
Total Milling Yield, %	68.0	65.6
Semolina Yield, %	63.3	61.1

Harvest assessment composites represent grain available for export and were prepared from samples received up to October 16, 2025. Composites were graded according to Export Grade Determination Tables in the Official Grain Grading Guide (<https://www.grainscanada.gc.ca/en/grain-quality/official-grain-grading-guide/>). Milling, analytical and end-product analysis was conducted by Cereals Canada following the Methods of Analysis on Cereals Canada's website (<https://cerealscanada.ca/analytical-methods/>).

No. 1 CWAD Prairie Composite<sup>b</sup>

Semolina <sup>a</sup>	2025	2024	5-Year Average
Protein Content, %	13.3	13.9	14.1
Protein Loss, %	0.9	0.8	0.9
Wet Gluten Content, %	35.5	35.0	36.1
Gluten Index, %	59	85	75
Ash Content, %	0.69	0.78	0.73
Yellow Pigment Content, ppm	9.9	11.6	11.1
Colour, b* (dry)	30.3	33.0	32.4
<b>Granulation</b>			
> 425 µm, %	0.7	1.7	1.1
> 250 µm, %	52.3	52.7	52.0
> 180 µm, %	31.0	30.2	30.9
> 150 µm, %	7.5	7.8	7.9
< 150 µm, %	8.6	7.6	8.0
<b>Semolina Speck Count per 50 cm<sup>2</sup></b>			
Total Specks	16	5	8
Dark Specks	3	0	1
Large Specks (≥0.06 mm <sup>2</sup> )	8	3	4
<b>Alveograph</b>			
P (height x 1.1), mm	85	101	100
L (length), mm	84	128	96
P/L	1.01	0.79	1.09
W, 10 <sup>-4</sup> J	211	367	298
Ie, %	46.0	55.8	54.1
<b>Spaghetti</b>			
Firmness, g	835	764	849
Cooking Loss, %	4.68	4.87	4.80
Colour L*	72.9	72.2	72.1
a*	5.18	4.91	4.92
b*	64.9	65.5	65.0

<sup>a</sup> Data are reported on a 14.0% moisture basis for semolina except Alveograph which is reported on a 15.0% moisture basis.

<sup>b</sup> Refer to crop region map (Figure 2).

# No. 2 CWAD Prairie Composite<sup>b</sup>

# No. 3 CWAD Prairie Composite<sup>b</sup>

Semolina <sup>a</sup>	2025	2024	5-Year Average	
Protein Content, %	13.7	14.7	14.5	
Protein Loss, %	1.1	1.0	1.0	
Wet Gluten Content, %	37.6	35.9	37.1	
Gluten Index, %	61	87	77	
Ash Content, %	0.69	0.79	0.74	
Yellow Pigment Content, ppm	9.7	11.5	11.2	
Colour, b* (dry)	29.4	32.8	32.1	
<b>Granulation</b>				
> 425 µm, %	0.5	1.2	0.8	
> 250 µm, %	51.7	52.2	51.4	
> 180 µm, %	31.9	31.2	31.3	
> 150 µm, %	7.8	7.8	8.1	
< 150 µm, %	8.1	7.6	8.4	
<b>Semolina Speck Count per 50 cm<sup>2</sup></b>				
Total Specks	32	6	12	
Dark Specks	6	1	2	
Large Specks (≥0.06 mm <sup>2</sup> )	20	3	7	
<b>Alveograph</b>				
P (height x 1.1), mm	87	99	98	
L (length), mm	80	138	100	
P/L	1.09	0.72	1.02	
W, 10 <sup>-4</sup> J	206	390	307	
le, %	44.6	58.0	54.9	
<b>Spaghetti</b>				
Firmness, g	905	798	886	
Cooking Loss, %	4.57	4.82	4.73	
Colour	L*	70.9	72.2	71.9
	a*	6.38	5.50	5.45
	b*	62.3	65.7	64.9

Semolina <sup>a</sup>	2025	2024 <sup>c</sup>	
Protein Content, %	14.0	15.7	
Protein Loss, %	1.2	0.8	
Wet Gluten Content, %	37.2	37.1	
Gluten Index, %	59	87	
Ash Content, %	0.70	0.82	
Yellow Pigment Content, ppm	9.5	11.8	
Colour, b* (dry)	28.7	32.8	
<b>Granulation</b>			
> 425 µm, %	0.5	1.3	
> 250 µm, %	51.2	51.2	
> 180 µm, %	31.7	31.2	
> 150 µm, %	7.7	8.0	
< 150 µm, %	8.9	8.3	
<b>Semolina Speck Count per 50 cm<sup>2</sup></b>			
Total Specks	39	6	
Dark Specks	7	1	
Large Specks (≥0.06 mm <sup>2</sup> )	23	3	
<b>Alveograph</b>			
P (height x 1.1), mm	86	103	
L (length), mm	76	130	
P/L	1.13	0.79	
W, 10 <sup>-4</sup> J	194	398	
le, %	43.1	58.5	
<b>Spaghetti</b>			
Firmness, g	717	873	
Cooking Loss, %	4.48	4.80	
Colour	L*	69.8	71.5
	a*	6.85	5.55
	b*	61.0	66.2

<sup>a</sup> Data are reported on a 14.0% moisture basis for semolina except Alveograph which is reported on a 15.0% moisture basis.

<sup>b</sup> Refer to crop region map (Figure 2).

<sup>c</sup> The 5-year average is not available for the No. 3 CWAD composite.