



## FB24623

### Two-row feed barley

- Mean grain yield is 8% higher than CDC Austenson, and 13% higher in the Brown Soil zone
- Good lodging resistance, with plant height 4cm shorter than CDC Austenson
- Higher percent plumps than CDC Austenson, with similar test and kernel weights

### Description

FB24623 is a two-row, hulled feed barley line with broad adaptability across western Canada and an exceptional ability to retain yield under drought stress conditions. It was evaluated in the 2024 and 2025 Western Cooperative Feed and Forage Barley Registration Trials. This line has demonstrated consistently high grain yield across Prairie environments, outyielding the check CDC Austenson by 7% and 9% in the 2024 and 2025 growing seasons, respectively.

FB24623 is shorter in height than CDC Austenson and demonstrates strong lodging resistance. It produces plump kernels with good test weight. Derived from a cross involving Altorado, FB24623 combines improved disease resistance with superior agronomic and kernel quality traits in a well-adapted background.

### Strengths of FB24623

- Mean grain yield is 8% higher than CDC Austenson
- Excellent grain yield performance in Brown Soil zone, outyielding CDC Austenson by 13%.
- Shorter plant height, 4cm shorter than CDC Austenson.
- Resistant to lodging > CDC Austenson and Sirish.
- Plump kernels > CDC Austenson, with test weight and kernel weight similar to CDC Austenson.
- Good disease resistance package, with resistant (R) ratings to surface-borne smuts, stem rust, and loose smut, and intermediate resistance to FHB, spot form of net blotch, and spot blotch.

## Neutral Traits

- Days to maturity similar to checks.

Approximately 200kg of Breeder Seed will be available for FB24623 in spring of 2026.

**Table 1a.** Yield and agronomic traits of FB24623 averaged over the 2024 and 2025 Western Cooperative Feed and Forage Barley Registration Trials.

Entry	Western Black Soil		Eastern Black Soil		Brown Soil		Irrigated		Overall	
	kg/ha	% CDC Austenson	kg/ha	% CDC Austenson	kg/ha	% CDC Austenson	kg/ha	% CDC Austenson	kg/ha	% CDC Austenson
AB Cattlelac	5525	104	5632	95	5642	97	9702	98	5863	98
CDC Austenson	5335	100	5927	100	5823	100	9879	100	5968	100
CDC Cowboy	4549	85	4722	80	5250	90	8125	82	5005	84
Sirish	5088	95	5038	90	5370	92	8233	83	5335	89
<b>FB24623</b>	<b>5935</b>	<b>111</b>	<b>6303</b>	<b>106</b>	<b>6597</b>	<b>113</b>	<b>9335</b>	<b>94</b>	<b>6446</b>	<b>108</b>
CV (%)	9.8		8.5		9.0		6.1		8.8	9.0
LSD <sub>0.05</sub>	279.1		231.2		329.2		664.6		153.0	286.7
Stn. Years	10		12		7		2		31	31

Entry	Heading (days)	Maturity (days)	Plant		Test wt. (kg/hl)	1000 Kernel wt. (g)	Plump >6/64 (%)	Thins < 6/64 (%)	NIT Protein (%)
			Height (cm)	Lodging (1-9)					
AB Cattlelac	57.5	90.3	86.7	3.1	63.1	42.5	88.2	3.0	12.9
CDC Austenson	61.0	90.9	76.9	2.4	66.0	48.2	90.6	3.3	13.0
CDC Cowboy	58.6	91.8	98.9	4.3	65.6	54.8	95.9	1.1	13.3
Sirish	59.8	90.5	64.6	2.2	63.6	46.4	94.4	1.6	12.5
<b>FB24623</b>	<b>58.9</b>	<b>90.4</b>	<b>72.8</b>	<b>2.1</b>	<b>65.9</b>	<b>48.9</b>	<b>92.5</b>	<b>2.0</b>	<b>12.6</b>
CV (%)	2.0	1.6	5.2	53.6	3.2	8.1	4.8	78.6	5.3
LSD <sub>0.05</sub>	0.4	0.5	1.3	0.6	0.6	1.2	1.3	0.5	0.4
Stn. Years	25	26	26	12	29	27	28	25	9

**Table 1b.** Yield and agronomic traits of FB24623 averaged over the 2025 Western Cooperative Feed and Forage Barley Registration Trials.

Entry	Overall Yield		Heading (days)	Maturity (days)	Plant height (cm)	Lodging (1-9)	Test wt. (kg/ha)	1000 Kernel wt. (g)	Plump > 6/64 (%)	Thins <5/64 (%)	NIT Protein (%)
	kg/ha	% CDC Austenson									
AB Cattlelac	6345	100	57.1	94.1	84.0	2.8	64.8	43.7	90.1	2.1	12.3
CDC Austenson	6335	100	60.9	94.5	75.3	2.1	67.2	49.8	94.4	1.4	12.8
Sirish	5810	92	58.9	93.8	63.1	1.7	65.4	48.4	96.6	0.9	12.7
CDC Cowboy	5246	83	58.1	95.3	97.2	4.7	66.7	55.7	97.1	0.8	13.4
<b>FB24623</b>	<b>6902</b>	<b>109</b>	<b>58.5</b>	<b>93.7</b>	<b>71.2</b>	<b>2.2</b>	<b>67.1</b>	<b>49.1</b>	<b>94.9</b>	<b>1.3</b>	<b>12.9</b>
CV (%)	8.2		2.2	1.7	5.0	59.6	2.9	7.7	3.6	76.7	4.7
LSD <sub>0.05</sub>	221.7		0.6	0.7	1.7	1.3	0.8	1.5	1.3	0.5	0.5
Stn. Years	15		13	13	12	3	16	16	16	11	3

**Table 1c.** Yield and agronomic traits of FB24623 averaged over the 2024 Western Cooperative Feed and Forage Barley Registration Trials.

Entry	Overall Yield		Heading (days)	Maturity (days)	Plant height (cm)	Lodging (1-9)	Test wt (kg/ha)	1000 Kernel wt (gm)	Plump > 6/64 (%)	Thins <5/64 (%)	NIT Protein (%)
	kg/ha	% CDC Austenson									
AB Cattlelac	5410	96	58.0	86.6	89.0	3.2	61.0	40.9	85.7	3.6	13.2
CDC Austenson	5623	100	61.2	87.3	78.2	2.4	64.4	45.8	85.5	4.8	13.1
CDC Cowboy	4778	85	59.2	88.3	100.3	4.2	64.2	53.6	94.3	1.4	13.2
Sirish	4890	87	60.7	87.1	66.0	2.4	61.4	43.4	91.4	2.1	12.5
<b>FB24623</b>	<b>6019</b>	<b>107</b>	<b>59.4</b>	<b>87.1</b>	<b>74.1</b>	<b>2.0</b>	<b>64.3</b>	<b>48.6</b>	<b>89.4</b>	<b>2.5</b>	<b>12.4</b>
CV (%)	9.4		1.9	1.5	5.2	51.7	2.3	5.6	5.5	66.1	9.3
LSD <sub>0.05</sub>	211.6		0.5	0.6	1.8	0.7	1.1	1.9	3.3	1.1	1.1
Stn. Years	16		12	13	14	9	13	11	12	14	6

**Table 2.** Overall disease ratings for FB24623 from the 2024 and 2025 Western Cooperative Feed and Forage Barley Registration Test disease reaction report.

Entry	Net form of net blotch	Spot form of net blotch	Scald	Spot Blotch	Loose smut	Surface Smuts	Stem Rust	Fusarium Head Blight
AB Cattlelac	MS	I	MR	MR	R	R	MR	S
CDC Austenson	I	I	MS	MR	MR	R	R	I
Sirish	MS	I	MR	MS	I	R	MS	MS
CDC Cowboy	I	I	MS	I	I	R	R	MR
<b>FB24623</b>	<b>MS</b>	<b>I</b>	<b>S</b>	<b>I</b>	<b>R</b>	<b>R</b>	<b>R</b>	<b>I</b>

S – susceptible, MS – moderately susceptible, I – intermediate, MR – moderately resistant, R – resistant

**Table 3.** Disease reactions of FB24623 from the 2024 and 2025 Western Cooperative Feed and Forage Barley Registration Test disease reaction report.

Entry		Net Blotch					Spot Blotch					
		Seedling			Lacombe							
		102	858	MBV25	Net-form Rating	Spot-form Rating	1903	Brandon	Lacombe	Rosthern	Melfort	Brandon
<b>AB Cattlelac</b>	2024	6	9	5	0.0	2.0	4.0	2.0	3.0	5.0	6.0	2.3
	2025	4	1	2	2.5	3.5	6.0	2.0		5.0	4.0	2.3
<b>Overall</b>		<b>MS/ I</b>					<b>MR</b>					
<b>CDC Austenson</b>	2024	2	7	5	0.0	2.0	2	3.5	2.5	7.0	5.5	2.7
	2025	1	1	7	4.0	4.0	3	3.0		5.0	4.5	3.3
<b>Overall</b>		<b>I/I</b>					<b>MR</b>					
<b>Sirish</b>	2024	7	8	5	3.0	3.5	7	6.0	3.0	7.5	6.0	5.3
	2025	4	2	5	5.5	5.0	6	5.5		5.5	6.0	4.3
<b>Overall</b>		<b>MS / I</b>					<b>MS</b>					
<b>CDC Cowboy</b>	2024	5	7	5	3.0	3.0	4	5.0	3.0	7.5	5.5	3.3
	2025	2	2	4	4.0	5.0	6	5.5		5.0	6.0	4.0
<b>Overall</b>		<b>I/ I</b>					<b>I</b>					
<b>FB24623</b>	2024	8	8	5	1.5	2.5	2	4.0	1.0	7.5	7.0	3.3
	2025	5	5	5	4.5	3.5	3	4.5		5.0	6.0	4.3
<b>Overall</b>		<b>MS/I</b>					<b>I</b>					

S – susceptible, MS – moderately susceptible, I – intermediate, MR – moderately resistant, R – resistant

Table 3. Continued.

Entry		Scald			Surface Smuts			Stem Rust				
		2275	Lacombe	Edmonton	U of SK	AAFC-MRDC U. hordei	U. nigra	Field		CDC Rpg1 marker	Seedling	
								Coverage	Reaction		MCC	QCC
<b>AB Cattlelac</b>	2024	MR	3.5	5.0	0.0	8.0	0.0	1	R	+	1-	
	2025	MR	7.0	6.5	0.0	2.0	0.0	5	I	+	1-1	2
<b>Overall</b>		<b>MR</b>			<b>R</b>			<b>MR</b>				
<b>CDC Austenson</b>	2024	MS	3.5	4.0	1.3	5.0	6.0	2	MR	+	;1-	
	2025	MS	7.0	6.5	2.9	6.0	7.0	5	MR	+	0;	22+
<b>Overall</b>		<b>MS</b>			<b>R</b>			<b>R</b>				
<b>Sirish</b>	2024	MR	0.0	0.0	0.0	0.0	0.0	15	I	-	3-3	
	2025	R	4.0	5.5	2.6	0.0	0.0	10	I	-	11+	1-
<b>Overall</b>		<b>MR</b>			<b>R</b>			<b>MS</b>				
<b>CDC Cowboy</b>	2024	MS	3.5	1.0	13.4	15.0	14.0	1	R	+	;1-	
	2025	MS	7.5	6.5	2.2	13.0	7.0	3	I	+	1-	2
<b>Overall</b>		<b>MS</b>			<b>R</b>			<b>R</b>				
<b>FB24623</b>	2024	S	4.0	6.0	4.0	11.0	22.0	1	R	+		;1-
	2025	S	6.5	7.0	2.2	10.0	5.0	1	R	+	;1-	2-2
<b>Overall</b>		<b>S</b>			<b>R</b>			<b>R</b>				

S – susceptible, MS – moderately susceptible, I – intermediate, MR – moderately resistant, R – resistant

Table 3. Continued.

Entry		Fusarium Head Blight							Loose Smut	
		Rating		Charlottetown			DON		U. nuda	
		Brandon	Morden	Sev.	Inc.	Index	Brandon	Morden		Charlottetown
<b>AB Cattlelac</b>	2023	2.7	3.3	8.5	7.8	66.0	26.4	52.5	--	
	2024	3.2	2.8	7.8	8.0	62.0	32.1	24.9	0.0	
<b>Overall</b>		<b>S</b>							<b>R</b>	
<b>CDC Austenson</b>	2023	1.5	2.3	8.3	7.5	61.8	12.0	46.7	10.7	
	2024	2.2	1.3	6.8	8.0	54.0	10.3	25.2	7.1	
<b>Overall</b>		<b>I</b>							<b>MR</b>	
<b>Sirish</b>	2023	2.3	4.3	8.8	8.0	70.0	12.4	86.2	2.3	
	2024	3.5	3.0	6.8	8.0	54.0	8.4	38.5	35.3	
<b>Overall</b>		<b>MS</b>							<b>I</b>	
<b>CDC Cowboy</b>	2023	2.0	1.0	8.3	7.3	59.8	14.4	47.7	8.7	
	2024	1.2	1.7	6.8	8.0	54.0	9.6	20.4	100.0	
<b>Overall</b>		<b>MR</b>							<b>I</b>	
<b>FB23618</b>	2023	1.7	2.7	8.5	8.0	68.3	15.5	54.3	3.4	0.0
	2024	1.8	2.3	6.8	8.0	54.0	13.2	14.1		0.0
<b>Overall</b>		<b>I</b>							<b>R</b>	

S – susceptible, MS – moderately susceptible, I – intermediate, MR – moderately resistant, R – resistant



**Supplemental Information 1.** Breeder Seed Production of FB24623 at Olds, AB.