



WCI FORTIFY

Six-row general purpose barley

- Excellent grain yield, outperforming checks
- "Ultra" smooth-awned
- Improved disease package, resistant to scald

Strengths of WCI Fortify

- Mean grain yield is 6% higher than AB Cattlelac, 23% higher than the two-row forage check CDC Cowboy and 3% higher than the two-row feed check CDC Austenson.
- Resistant to lodging, better than the checks, with a mean rating of 2.3 for WCI Fortify vs. 2.9 for AB Cattlelac.
- Ultra smooth awn, suitable for forage utilization.
- Biomass yield is similar to the forage check varieties AB Cattlelac and CDC Cowboy.
- Good disease resistance package with R or MR overall ratings to scald, surface-borne smut, loose smut, stem rust, spot form of net blotch, and spot blotch.

WCI Fortify was developed by Western Crop Innovations and will be available through SeedNet.

Table 1. Averaged grain yield (kg/ha) of WCI Fortify over the 2022 and 2023 Western Cooperative Feed and Forage Barley Registration Trials.

	Western Black & Grey Wooded Soil		Eastern Black Soil Zone		Brown Soil Zone		Irrigated		Overall	
Entry	kg/ha	AB Cattlelac %	kg/ha	AB Cattlelac %	kg/ha	AB Cattlelac %	kg/ha	AB Cattlelac %	kg/ha	AB Cattlelac %
AB Cattlelac	7391	100	5289	100	5556	100	11018	100	6192	100
CDC Austenson	7550	102	5436	103	5912	106	11084	101	6406	103
CDC Cowboy	6490	88	4491	85	4890	88	8160	74	5326	86
WCI Fortify	7921	107	5555	105	5920	107	11671	106	6579	106
Station Years	7		9		8		1		25	

Table 2. Agronomic traits of WCI Fortify averaged over the 2022 and 2023 Western Cooperative Feed and Forage Barley Registration Trials.

Entry	Heading days	Maturity days	Height cm	Lodging 1-9	Test Wt kg/hL	Kernel Wt mg	Plump >6/64 %	Thins <5/64 %	NIR Protein %
AB Cattlelac	54.5	89.4	86.3	2.9	65.3	41.6	87.3	2.6	11.6
CDC Austenson	57.5	90.1	76.4	2.4	67.1	47.7	91.7	2.1	11.2
CDC Cowboy	55.9	90.3	96.1	4.0	66.7	54.2	94.5	1.8	11.9
WCI Fortify	56.9	90.4	79.8	2.3	64.7	38.5	84.7	3.6	11.2
Station Years	25	27	28	9	29	26	26	23	7

Lodging score 1-9, 9 being up to 100% lodged; NIR protein - near infrared spectroscopy measurement of protein content.

Table 3. Dry matter yield and forage quality traits of WCI Fortify averaged over the 2022 and 2023 Western Cooperative Feed and Forage Barley Registration Trials.

Entry	DM Yield kg/ha	AB Cattlelac %	Starch %	Protein %	NDF %	ADF %	NDF 30 %	IVTD %	Lignin %	TDN %
AB Cattlelac	12615	100	8.5	8.8	52.0	29.6	43.0	70.4	3.3	66.4
CDC Austenson	12642	100	9.9	8.8	49.2	28.1	43.1	72.0	3.3	68.4
CDC Cowboy	12660	100	6.8	8.1	52.2	31.0	41.9	69.6	3.2	64.6
WCI Fortify	12500	99	8.7	9.1	51.0	28.9	41.8	70.4	3.3	67.3
Station Years	12		10	11	11	11	11	11	11	11

NDF - neutral detergent fiber; NDF 30 – digestible NDF after 30 hours of incubation in rumen fluid; ADF - acid detergent fiber, IVTD – invitro true digestibility; TDN – total digestible nutrients.

Table 4. Disease reactions of WCI Fortify from the 2022 and 2023 Western Cooperative Feed and Forage Barley Registration Test.

	Net E	Blotch			Sn	nut		
Entry	Net Form	Spot Form	Scald	Spot Blotch	Surface	Loose	Stem Rust	FHB
AB Cattlelac	[I	I	MR	R	R	R	S
CDC Austenson	MR	MS	MS	MR	R	S	MR	MS
Sirish	MS	I	MR	MS	R	-	MS	I
CDC Cowboy	I	I	MS	I	MR	I	R	MR
WCI Fortify	MS	MR	R	MR	R	R	MR	S

 $R-mesistant, MR-moderately \ resistant, I-intermediate \ resistance, MS-moderately \ susceptible, S-susceptible, FHB-Fusarium \ Head \ Blight.$