Western Crop Innovations

FB22816

Six-row general purpose barley

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

Strengths of FB22816

- 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 FB22816 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.

FB22816 was developed by Western Crop Innovations and is available through SeedNet.

Table 1. Averaged grain yield (kg/ha) of FB22816 over the 2022 and 2023 Western Cooperative Feed and Forage Barley Registration Trials.

Entry	Western Black & Grey Wooded Soil		Eastern Black Soil Zone		Brown Soil Zone		Irrigated		Overall	
	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
FB22816	7921	107	5555	105	5920	107	11671	106	6579	106
Station Years	7		9		8		1		25	

Table 2. Agronomic traits of FB22816 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
FB22816	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 FB22816 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
FB22816	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 – in-vitro true digestibility; TDN – total digestible nutrients.

Table 4. Disease reactions of FB22816 from the 2022 and 2023 Western Cooperative Feed and Forage Barley Registration Test.

Entry	Net Blotch		Scald	Spot Blotch	Smut		Stem Rust	FHB
	Net Form	Spot Form			Surface	Loose		
AB Cattlelac	I	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
FB22816	MS	MR	R	MR	R	R	MR	S

R — resistant, MR – Moderately resistant, I – intermediate resistance, MS – moderately susceptible, S—susceptible, FHB - Fusarium Head Blight.