



AB ADVANTAGE

Six-row general purpose barley

- Smooth awned feed and forage barley
- Grain and forage yield is higher than checks
- Good grain and forage quality

Strengths of AB Advantage

- Grain yield is 106% of AC Ranger and 105% of Vivar in the Six-row Coop, and 102% of CDC Austenson in the Forage Coop.
- Forage yield is 107% of AC Ranger, similar to CDC Cowboy.
- Percent plump seed is higher than the feed checks in both the Six-row and Forage Coops and similar to the malting and two-row checks.
- Thousand kernel weight is higher than the six-row checks in the Six-row and Forage Coop.
- Test weights are higher than the feed checks and CDC Mayfair, similar to the malting check Celebration.
- Carrying capacity is higher than AC Ranger and similar to other checks in the Forage Coop.
- Lodging resistance is better than AC Ranger and similar to Vivar in both the Six-row and Forage Coops.
- Intermediate disease resistance to the surface-borne smuts, loose smut, stem rust, scald, spot blotch, and spotted net-blotch.

AB Advantage was developed by Western Crop Innovations and is available through <u>SeCan</u>.

Table 1. Yield and agronomic traits of AB Advantage averaged over the 2016 and 2017 Western Cooperative Six-Row Barley Registration Trials.

Entry	Yield kg/ha	AC Ranger %	Heading days	Height cm	Lodging 1-9	Maturity days	Kernel Wt mg	Test Wt g/hl	Plump >6/64 %
AC Ranger	7034	100	56.3	85.5	5.2	91.8	40.3	61.0	79.7
Vivar	7089	101	56.9	79.8	3.4	90.5	40.8	61.1	83.3
CDC Mayfair	6626	94	54.9	84.8	4.3	89.6	38.5	61.1	89.9
Celebration	6832	97	54.6	86.0	4.1	88.2	36.7	62.9	88.0
AB Advantage	7440	106	57.4	97.8	3.6	92.4	45.0	62.5	89.8
Station Years	31		30	34	15	23	27	30	28

Lodging scored 1-9, with 9 being up to 100% lodged.

Table 2. Forage data for AB Advantage averaged over the 2016 and 2017 Western Cooperative Forage Barley Test.

Entry	DM Yield kg/ha	AC Ranger %	CP %	NDF %	ADF %	IVTD %	Starch %	CC Cow d/ha	ADG kg/ha	NDF 30 %
AC Ranger	12332	100	9.3	44.5	28.5	75.5	25.0	695	0.90	44.7
CDC Austenson	12856	104	8.8	44.3	27.9	75.6	24.2	724	0.93	44.6
CDC Cowboy	13161	107	8.4	46.4	30.0	73.4	23.2	753	0.75	42.3
Gadsby	12965	105	8.8	44.8	28.8	75.9	23.3	735	0.90	45.8
Vivar	12886	104	8.6	44.2	29.0	75.6	27.1	724	0.90	44.8
AB Advantage	13177	107	8.9	45.3	28.7	73.7	23.3	747	0.86	41.6
Station Years	12		13	13	13	13	7	13	11	13

CP – crude protein; NDF - neutral detergent fiber; ADF - acid detergent fiber; IVTD - in vitro true digestibility; CC – carrying capacity; ADG – average daily gain; NDF 30 – digestible NDF after 30 hours of incubation in rumen fluid.

Table 3. Grain quality traits of AB Advantage averaged over the 2016 and 2017 Western Cooperative Six-Row Barley Registration Trials.

Entry	Digest. Energy Kcal/kg	AC Ranger %	Starch %	Protein %	Protein Digest. %	Lysine %	Beta- Glucan %	Soluble Fibre %	Total Fibre %
AC Ranger	2944	100	59.2	12.4	74.8	0.4	4.7	5.9	20.3
Vivar	2981	101	59.4	12.2	71.1	0.4	4.4	5.3	20.2
CDC Mayfair	3004	102	60.1	12.7	75.2	0.5	4.0	4.9	19.4
Celebration	3053	103	60.6	13.6	76.0	0.5	4.0	4.6	18.7
Amisk	2943	100		13.1	83.0	0.5	4.7		20.5
AB Advantage	2928	100	59.5	13.6	73.0	0.5	4.9	6.4	20.3
Station Years	6		6	6	6	6	6	6	6

Table 4. Overall disease ratings of AB Advantage averaged over the 2016 and 2017 Western Cooperative Six-row Barley Registration Trials.

	Net E	Blotch			Smut				
	Net	Spot		Spot			Stem		DON
Entry	Form	Form	Scald	Blotch	Loose	Other	Rust	FHB	†(ppm)
AC Ranger	F	G	Р	G	Р	F	VG	VP	62.9
Vivar	F	G	F	F	F	VG	G	VP	84.7
CDC Mayfair	Р	G	VP	F	VP	G	F	Р	48.2
Amisk	F	G	F	G	VP	Р	F	VP	56.5
AB Advantage	Р	F	F	F	G	F	F	VP	52.6

VG-very good, G-good, F-fair, P-poor and VP-very poor; FHB – fusarium head blight; DON – deoxynivalenol. $^\dagger DON$ averaged over 4 sites