

AB Advantage

Six-row 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 the Field Crop Development Centre and is distributed by SeCan.

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)	% of AC Ranger	Heading (days)	Height (cm)	Lodging (1-9)	Maturity (days)	1000 KWt (g)	Test Wt (g/hL)	Plumps (%)
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
Mean	7160		56.9	86.8	4.0	90.8	39.9	61.8	85.2
Stn. Yrs.	31		30	34	15	23	27	30	28

Table 2. Forage data for AB Advantage from the 2016 and 2017 Western Cooperative Forage Barley Registration Trials.

Entry	DM Yld (kg/ha)	AC Ranger (%)	CP (%)	NDF (%)	ADF (%)	IVTD (%)	Starch (%)	CC (cow d/ha)	ADG (kg/d)	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
Stn. Yrs.	12		13	13	13	13	7	13	11	13

CP=crude protein, NDF= neutral detergent fibre, ADF=acid detergent fibre, IVTD=in-vitro true digestibility, CC=carrying capacity, ADG=average daily gain

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
Mean	2985		60.0	12.5	73.4	0.5	4.4	5.4	19.7
Stn. Yrs.	6		6	6	6	6	6	6	6

Table 4. Disease traits of AB Advantage averaged over the 2016 and 2017 Western Cooperative Six-Row Barley Registration Trials.

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

VG=very good, G=good, F=fair, P-poor and VP=very poor

[†] DON averaged over 4 sites