

# Technical Bulletin

Genes that fit *your* farm.

**SeCan**

Canada's Seed Partner

## AB Advantage 6-Row Feed & Forage Barley



Progress Through Research  
Le progrès grâce à la recherche

### Description:

AB Advantage is a dual purpose smooth awned 6-row barley with excellent grain and forage yield potential. AB Advantage is a full height 6-row that stands very well and has large plump kernels. With a smooth awn, and high biomass AB Advantage is well suited to forage/silage/ feed for western Canada.

Parentage: H97098003/Sundre

### Strengths:

- Grain yield 105% of Vivar and 102% of CDC Austenson in registration cooperative trials
- Forage yield 102% of Vivar and CDC Austenson in forage barely registration trials
- **Smooth awned**
- High % plump and heavy TKW and bushel weight compared to Vivar and AC Ranger
- Better lodging tolerance than AC Ranger and slightly weaker than Vivar in registration trials

### Neutral Traits:

- Full height - +18cm compared to Vivar
- Intermediate resistance to surface-borne smuts, loose smut, stem rust, scald, spot blotch and spotted form net blotch
- Medium-Late maturity, +2 days later than Vivar
- Forage quality similar to the checks Vivar and AC Ranger

### Weaknesses:

- Moderately susceptible to netted net blotch
- Susceptible to FHB

### Breeder:

Dr. Joseph Nyachiro  
Field Crop Development Centre  
Alberta Agriculture and Rural Development  
Lacombe, Alberta

**PBR 91 Protected**

### 2016 and 2017 Western Cooperative Six-Row Barley Registration Trials

Variety	Grain Yield % AC Ranger	Heading (days)	Maturity (days)	Height (cm)	Lodging 1 = erect 9 = flat	1000 Kernel Weight (gm)	Test Weight (g/hl)	% Plump
AC Ranger	100	56.3	91.8	85.5	5.2	40.3	61.0	79.7
Vivar	101	56.9	90.5	79.8	3.4	40.8	61.1	83.3
CDC Mayfair	94	54.9	89.6	84.8	4.3	38.5	61.1	89.9
Celebration	97	54.6	88.2	86.0	4.1	36.7	62.9	88.0
<b>AB Advantage</b>	<b>106</b>	<b>57.4</b>	<b>92.4</b>	<b>97.8</b>	<b>3.6</b>	<b>45.0</b>	<b>62.5</b>	<b>89.8</b>

### 2016 and 2017 Western Cooperative Forage Barley Registration Trials

Variety	Forage Yield % AC Ranger	Height (cm)	Lodging 1 = erect 9 = flat	Crude Protein %	NDF %	ADF %	IVTD %	Starch %	CC (cow d/ha)	ADG (kg/d)	NDF 30-NDF
AC Ranger	100	83.6	2.3	9.3	44.5	28.5	75.5	25.0	695	0.90	44.7
CDC Austenson	104	81.9	1.6	8.8	44.3	27.9	75.6	24.2	724	0.93	44.6
CDC Cowboy	107	103.7	2.2	8.4	46.4	30.0	73.4	23.2	753	0.75	42.3
Vivar	104	79.6	1.5	8.6	44.2	29.0	75.6	27.1	724	0.90	44.8
<b>AB Advantage</b>	<b>107</b>	<b>96.3</b>	<b>1.9</b>	<b>8.9</b>	<b>45.3</b>	<b>28.7</b>	<b>73.7</b>	<b>23.3</b>	<b>747</b>	<b>0.86</b>	<b>41.6</b>

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

For more information, call 1-800-665-7333 or visit [www.secan.com](http://www.secan.com)

### Seed Manitoba 2023 - Barley Comparison

Variety	Site Years Tested	Yield bu/ac	Protein %	Relative Maturity +/- 88 days	Height +/- 89cm	Test Weight +/- 48.7lb/bu	Rough or Smooth Awns	Lodging	Loose Smut	Surface Borne Smut	Root Rot	Netted Net Blotch	Spotted Net Blotch	Spot Blotch	Stem Rust	FHB
AB Tofield (6R)	29	108	12.2	+1	+5	+1	S	VG	MR	MR	---	MS	I	I	R	S
CDC Austenson (2R)	55	112	12.3	+1	0	+0.5	R	G	S	R	I	MS	R	MR	I	I
CDC Churchill (2R)*	35	110	12.3	+1	-5	-0.2	R	G	MS	MR	---	MR	MR	I	MR	MS
CDC Durango (2R)	10	111	12.7	+2	-3	+0.1	R	G	S	R	---	MR	MS	I	I	I
CDC Renegade (2R)	28	104	12.7	+1	7	-0.3	S	F	I	MR	---	MS	MR	MS	MR	MR
Esmas (2R) <b>VUA</b>	29	112	12.2	+1	-10	-0.4	---	G	NT	NT	NT	NT	NT	NT	NT	NT
<b>AB Advantage (6R)</b>	<b>30</b>	<b>106</b>	<b>13.3</b>	<b>+1</b>	<b>+15</b>	<b>0</b>	<b>S</b>	<b>VG</b>	<b>MR</b>	<b>I</b>	<b>---</b>	<b>MS</b>	<b>I</b>	<b>I</b>	<b>I</b>	<b>S</b>

Lodging Ratings: F=Fair; G=Good; VG=Very Good; Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible, NT = Not tested

### 2023 Saskatchewan Varieties of Grain - Barley Comparison

Variety	Years Tested	# Rows	Awn Type	Yield (% of AAC Synergy)		Relative Maturity	Lodging	Net Form Net Blotch	Spot-Form Net Blotch	Spot Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	FHB
				Area 1&2	Area 3&4											
AAC Synergy	7	2	R	100	100	M	F	MR	R	R	S	S	I	I	MR	I
AB Tofield	5	6	S	109	107	L	G	MS	I	I	I	---	MR	---	R	S
CDC Austenson	7	2	R	102	103	M	G	MS	R	MR	S	S	R	I	I	I
CDC Churchill*	7	2	R	105	104	M	G	MR	MR	I	S	MS	MR	---	MR	MS
CDC Durango	4	2	R	109	108	M	VG	MR	MS	I	MS	S	MR	---	I	I
CDC Renegade	3	2	S	109	104	M	F	I	MR	MS	S	MS	MR	---	MR	MR
Esmas <b>VUA</b>	3	2	R	110	102	M	G	---	---	---	---	---	---	---	---	---
KWS Kellie <b>VUA</b>	3	2	R	113	102	L	G	---	---	---	---	---	---	---	---	---
<b>AB Advantage</b>	<b>7</b>	<b>6</b>	<b>S</b>	<b>103</b>	<b>100</b>	<b>VL</b>	<b>VG</b>	<b>MS</b>	<b>I</b>	<b>I</b>	<b>I</b>	<b>MR</b>	<b>I</b>	<b>---</b>	<b>I</b>	<b>S</b>

M=Medium; L=Late; F=Fair; G=Good; VG=Very Good; P=Poor; VP=Very Poor; Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

### 2023 Alberta Seed Guide – Feed and Food Barley Comparison

Variety	2 or 6 Row	Awn Type	Most Recent Year of Testing	Station Years	Yield % CDC Copeland			Maturity Days +/- CDC Copeland	Test Weight lb/bu	TKW (g)	Height (cm)	Resistance to Lodging	Disease Tolerance						
					Overall Yield	Low <113 (bu/ac)	High >113 (bu/ac)						Loose Smut	Other Smuts	Scald	Spot Form Net blotch	Net Form Net Blotch	Spot Blotch	FHB
<b>CDC Copeland (bu/ac)</b>					<b>110</b>	<b>83</b>	<b>135</b>												
CDC Copeland	2	R	2022	182	100	100	100	98	51	50	84	F	MS	I	S	I	I	S	I
AB Tofield	6	S	2021	24	108	106	109	0	50	45	82	G	MR	MR	I	I	MS	I	S
CDC Austenson	2	R	2022	87	107	106	108	2	52	51	80	G	S	R	S	R	MS	MR	I
CDC Churchill*	2	R	2020	32	110	113	111	0	52	49	74	G	MS	MR	S	MR	MR	I	MS
CDC Durango	2	R	2022	31	112	108	113	+3	52	51	79	G	S	R	MS	MS	MR	I	I
CDC Renegade	2	S	2022	26	106	114	101	+2	51	53	89	F	I	MR	S	MR	I	MS	MR
Esmas <b>VUA</b>	2	R	2022	26	115	119	112	1	51	53	68	VG	NT	NT	NT	NT	NT	NT	NT
KWS Kellie <b>VUA</b>	2	R	2022	26	119	126	115	+3	50	52	65	VG	NT	NT	NT	NT	NT	NT	NT
<b>AB Advantage</b>	<b>6</b>	<b>S</b>	<b>2020</b>	<b>32</b>	<b>108</b>	<b>104</b>	<b>110</b>	<b>1</b>	<b>50</b>	<b>50</b>	<b>95</b>	<b>G</b>	<b>MR</b>	<b>I</b>	<b>I</b>	<b>I</b>	<b>MS</b>	<b>I</b>	<b>S</b>

R=Rough; VG=Very Good, G=Good, F=Fair; P=Poor; VP=Very Poor; Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible, NT = Not tested  
\*Malting barley for comparison

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