# Technical Bulletin

Genes that fit your farm.



## Esma 2-Row Barley



Esma is an exciting new 2-row barley with exceptionally short strong straw and high grain yield potential. Esma is ideally suited to high moisture and high fertility growing conditions of Western Canada. Esma was registered in Ontario as a malt variety but in Western Canada it fits best as a feed barley as it's malt profile does not match our normal western malt varieties.

### Strengths:

- Yield 129% of AC Metcalfe and 109% of AAC Synergy (2018 & 2019 Ontario Orthogonal Registration Trials)
- 105% of CDC Austenson in SeCan western Canadian EuroBarley trials in 2017 and 2019
- Approximately 14cm shorter than CDC Austenson in SeCan western Canadian EuroBarley trials
- Very good lodging rating, in SeCan western EuroBarley trials Esma rated 1.3 vs 2.7 for CDC Austenson on a 1 to 9 scale where 1 = no lodging and 9 = flat

#### **Neutral Traits:**

- Slightly lower bushel weight compared to Canadian check varieties
- similar maturity to CDC Austenson
- Intermediate resistance to spot blotch

#### Weaknesses:

Susceptible disease resistance rating to FHB and stem rust

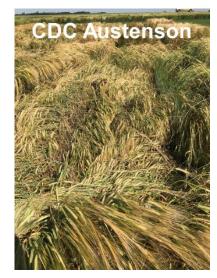
#### **Breeder:**

Ackermann Saatzucht GmbH & Co. KG, Irlbach, Germany

**PBR 91 Protected** 



Pictures taken in August 2017 at Bon Accord, AB





For more information, call 1-800-665-7333 or visit www.secan.com

Seed Manitoba 2022 - 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 Advantage (6R)	30	106	13.3	+1	+15	0	S	VG	MR			MS	I	I	I	S
AB Tofield (6R)	29	109	12.2	+1	+5	+1	S	VG		MR		MS	I	I	R	S
CDC Austenson (2R)	55	112	12.3	+1	0	+0.5	R	G	S	R	ı	MS	R	MR	I	ı
CDC Churchill (2R)	31	110	12.2	+1	-5	-0.2	R	G	MS	MR		MR	MR	I	MR	MS
KWS Kellie VUA	18	105	12.0	1	-11	-1.5		Р								
Esma (2R) VUA	19	112	12.2	+1	-10	-0.4		G								

Lodging Ratings: F=Fair; G=Good; VG=Very GoodDisease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

2022 Saskatchewan Varieties of Grain - Barley Comparison

					eld Synergy)			Net	Spot-							
Variety	Years Tested	# Rows	Awn Type	Area 1&2	Area 3&4	Relative Maturity	Lodging	Form Net Blotch	Form Net Blotch	Spot Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	FHB
AAC Synergy	7	2	R	100	100	М	F	MR	R	R	S	S	ı	ı	MR	I
AB Advantage	6	6	S	104	99	VL	VG	MS	I	I	ı	MR	ı		I	S
AB Tofield	4	6	S	106	106	L	G	MS	I	I	ı		MR		R	S
CDC Austenson	7	2	R	102	103	М	G	MS	R	MR	S	S	R	ı	I	ı
CDC Churchill	6	2	R	104	104	М	G	MR	MR	I	S	MS	MR		MR	MS
KWS Kellie VUA	2	2	R	115	109	L	G	-								
Esma VUA	2	2	R	115	105	М	G									

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

2022 Alberta Seed Guide - Barley Comparison

				Yield %	6 CDC Co	peland	Maturity Days							Dise	ase Tolerar	nce		
Variety	2 or 6 Row	Awn Type	Station Years	Overall Yield	Low <113 (bu/ac)	High >113 (bu/ac)	+/- CDC Copeland	Test Weight Ib/bu	TKW (g)	Height (cm)	Resistance to Lodging	Loose Smut	Other Smuts		Spot Form	Net Form Net Blotch	Spot Blotch	FHB
CDC Copeland (bu/ac) 108 86 138																		
CDC Copeland	2	R	147	100	100	100	98	51	50	84	F	MS		S	ı	I	S	ı
AB Advantage	6	S	32	108	104	110	1	50	50	95	G	MR		I	I	MS	I	S
AB Tofield	6	S	24	108	106	109	1	50	45	82	G	XX	MR	I	ı	MS	1	S
CDC Austenson	2	R	52	108	107	109	2	53	51	79	G	S	R	S	R	MS	MR	ı
CDC Churchill	2	R	32	110	113	109	0	52	49	74	G	MS	MR	S	MR	MR	I	MS
KWS Kellie VUA	2	R	15	120	126	114	2	50	52	66	VG	NT	NT	NT	NT	NT	NT	NT
Esma VUA	2	R	15	116	119	114	1	51	51	68	VG	NT	NT	NT	NT	NT	NT	NT

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