

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

Esma 2-Row Barley



Progress Through Research
Le progrès grâce à la recherche

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

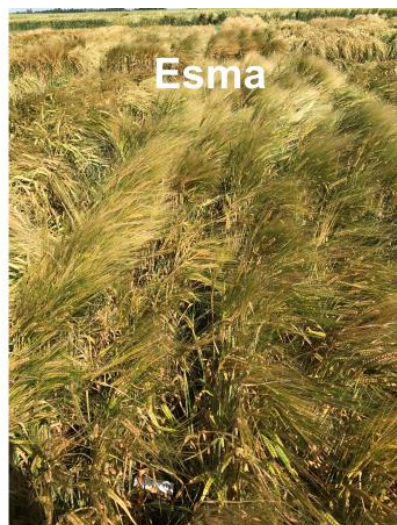
Breeder:

Ackermann Saatzucht GmbH & Co. KG,
Irlbach, Germany

PBR 91 Protected

VUATM

Pictures taken in August 2017 at Bon Accord, AB



For more information, call 1-800-665-7333 or visit 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 Advantage (6R)	30	106	13.3	+1	+15	0	S	VG	MR	I	---	MS	I	I	I	S
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
KWS Kellie (2R) VUA	28	103	12.1	+1	-11	-1.5	---	P	NT	NT	NT	NT	NT	NT	NT	NT
Esma (2R) VUA	29	112	12.2	+1	-10	-0.4	---	G	NT	NT	NT	NT	NT	NT	NT	NT

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 Advantage	7	6	S	103	100	VL	VG	MS	I	I	I	MR	I	---	I	S
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
KWS Kellie VUA	3	2	R	113	102	L	G	---	---	---	---	---	---	---	---	---
Esma VUA	3	2	R	110	102	M	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

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
CDC Copeland (bu/ac)					110	83	135												
CDC Copeland	2	R	2022	182	100	100	100	98	51	50	84	F	MS	I	S	I	I	S	I
AB Advantage	6	S	2020	32	108	104	110	1	50	50	95	G	MR	I	I	I	MS	I	S
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
KWS Kellie VUA	2	R	2022	26	119	126	115	+3	50	52	65	VG	NT	NT	NT	NT	NT	NT	NT
Esma VUA	2	R	2022	26	115	119	112	1	51	53	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

*Malting barley for comparison

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