

Technical Bulletin

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SeCan

Canada's Seed Partner

CDC Bow 2-Row Malting Barley



CDC Bow is a high yielding strong strawed 2-row malting barley with large plump kernels and lower grain protein. CDC Bow has grain protein similar to CDC Copeland, malt enzyme activity between AC Metcalfe and CDC Copeland, extract greater than both checks, malt β -glucan lower than both checks and friability and FAN greater than both checks. CDC Bow is widely adapted across the Canadian Prairies and is presently undergoing market development trials with maltsters and brewers.

Strengths:

- 9% higher yield than AC Metcalfe (2011 & 2012 Coop Trials)
- Straw strength greater than the checks including Xena
- Grain protein 8/10% lower than AC Metcalfe, similar to CDC Copeland
- Low malt β -glucan,
- Test weight and kernel weight greater than the checks
- Higher % plump kernels than the checks
- Resistant to covered smut and stem rust

Neutral Traits:

- 1cm taller than AC Metcalfe
- 1 day later maturing than AC Metcalfe
- Intermediate resistance to spot blotch
- Malt enzyme activity between AC Metcalfe and CDC Copeland

Weaknesses:

- Susceptible or moderately susceptible to true loose smut, false smut, scald, septoria and FHB

Breeders:

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PBR 91 Protected

Currently undergoing malt barley market development

Averaged Characteristics from 2011 & 2012 Western Cooperative Two-Row Barley Registration Trials

Variety	Yield (% of AC Metcalfe)	Maturity (days)	Grain Protein (%)	Height (cm)	Lodging 1 = best 9 = flat	Kernel Weight (mg)	% Plump	Test Weight (kg hl)
CDC Copeland	106	92.7	11.3	85.9	3.5	44.2	87.6	63.4
Xena	112	92.9	--	81.5	3.2	47.6	88.8	65.6
AC Metcalfe	100	92.4	12.2	81.5	3.6	43.1	86.8	64.7
CDC Bow	109	93.4	11.4	83.0	2.2	47.2	92.5	65.5

Seed Manitoba 2021 - Malting Barley Comparison

Variety	Site Years Tested	Yield bu/ac	Protein +/- check	Maturity +/- 88 days	Height +/- 89cm	Test Tw. +/- 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	Fusarium Head Blight
AC Metcalfe	217	97	12.9	0	0	0	R	F	R	I	I	S	I	I	MR	I
AAC Synergy	44	113	12.2	0	-2	-0.4	R	G	S	I	I	MR	R	R	MR	I
CDC Churchill	31	110	12.2	+1	-5	-0.2	R	G	MS	MR	---	MR	MR	I	MR	MS
CDC Copeland	51	98	12.4	0	+5	-0.5	R	F	MS	I	I	I	I	S	MR	I
CDC Fraser	38	108	12.1	+1	0	-0.7	R	G	R	MR	MS	MR	MR	MR	MR	I
CDC Bow	50	105	12.1	+1	+3	+0.5	R	G	S	I	MS	S	MR	I	MR	MS

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

2021 Saskatchewan Varieties of Grain - Malting Barley Comparison

Variety	# Rows	Awn Type	Yield as % of AAC Synergy		Relative Maturity	Lodging	Resistance to:								
			Area 1 & 2	Area 2 & 3			Net-Form Net Blotch	Spot-Form Net Blotch	Spot Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	Fusarium Head Blight
AAC Synergy	2	R	100	100	M	F	MR	R	R	S	S	I	I	MR	I
AC Metcalfe	2	R	87	86	M	F	S	I	I	MS	R	I	I	MR	I
CDC Churchill	2	R	103	102	M	G	MR	MR	I	S	MS	MR	---	MR	MS
CDC Copeland	2	R	92	93	M	F	I	I	S	MS	MS	I	I	MR	I
CDC Fraser	2	R	100	98	M	G	MR	R	MR	MS	R	R	MS	MR	I
CDC Bow	2	R	94	93	M	VG	S	MR	I	MS	S	I	MS	MR	MS

M=Medium; L=Late; G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

2021 Alberta Seed Guide - Malting Barley Comparison

Variety	2 or 6 Row	Awn	All sites	Station Years	Low <75 bu/ac	Medium 75-100 bu/ac	High 100-125 bu/ac	Very High >125 bu/ac	Maturity Days +/- AC Metcalfe	Test Weight lb/bu	Kernel Weight g/1000k	Height (cm)	Lodging	Disease Tolerance						
														Loose Smut	Other Smuts	Scald	Spot Form Net blotch	Net Form Net Blotch	Spot Blotch	Tolerance to FHB
AC Metcalfe (bu/ac)					60	87	109	137												
AC Metcalfe	2	R	100	564	100	100	100	100	97	52	46	79	F	R	I	S	I	S	I	I
CDC Churchill	2	R	115	41	XX	118	114	115	1	52	48	82	G	MS	MR	S	MR	MR	I	MS
CDC Copeland	2	R	103	163	98	104	104	105	1	51	48	84	F	MS	I	S	I	I	S	I
CDC Fraser	2	R	109	39	XX	114	110	108	1	51	49	76	G	R	MR	MS	MR	MR	MR	I
CDC Kindersley	2	R	104	47	XX	102	104	104	-1	53	43	78	G	S	R	S	MR	MS	I	I
Lowe	2	R	111	42	XX	113	117	106	3	51	50	87	F	R	R	MR	MR	I	I	MR
CDC Bow	2	R	104	42	XX	106	105	104	1	51	48	77	VG	S	I	MS	MR	S	I	MS

Fl. & Cov. Smut=False Loose & Covered Smuts; R=Rough; G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor

Disease Ratings: R=Resistant; MR=Moderately Resistant; I=Intermediate; MS=Moderately Susceptible; S=Susceptible

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