

Technical Bulletin

Genes that fit *your* farm.

SeCan

Canada's Seed Partner

CDC Bow 2-Row Malting Barley



Progress Through Research
Le progrès grâce à la recherche

CDC Bow is a high yielding strong strawed two-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:

- 1 cm 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

Breeder:

Dr. Aaron Beattie
Crop Development Centre
University of Saskatchewan
Saskatoon, Saskatchewan

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

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

Seed Manitoba 2017 - 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	165	94	12.8	0	0	0	R	F	R	I	I	S	I	I	MR	I
CDC Copeland	61	95	12.5	0	+5	-0.5	R	F	MS	I	I	I	I	S	MR	I
CDC Fraser	18	105	12.0	+1	0	-0.7	R	G	R	MR	MS	MR	MR	MR	MR	I
CDC Kindersley	33	100	12.6	-1	-3	0	R	G	S	R	I	MS	MR	I	MR	I
CDC Bow	30	100	11.9	+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

2017 Saskatchewan Varieties of Grain - Malting Barley Comparison

Variety	# Rows	Awn Type	Yield as % of AC Metcalfe		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	
AC Metcalfe	2	R	100	100	M	G	S	I	I	I	MS	R	I	I	MR	I
CDC Copeland	2	R	107	108	M	G	I	I	S	MS	MS	I	I	MR	I	
CDC Fraser	2	R	113	116	M	G	MR	R	MR	MS	R	R	MS	MR	MR	
CDC Kindersley	2	R	105	107	E	G	MS	MR	I	S	S	R	I	MR	I	
CDC Bow	2	R	116	111	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

2017 Alberta Seed Guide - Malting Barley Comparison

Variety	2 or 6 Row	Awn	All sites	Station Years	Low <60 bu/ac	Medium 60-90 bu/ac	High 90-120 bu/ac	Very High >120 bu/ac	Maturity Days +/- AC Metcalfe	Test Weight lb/bu	Kernel Weight g/1000k	Height (cm)	Lodging	Disease Tolerance						
														Loose Smut	Other Smuts	Root Rot	Scald	Spot Form Net blotch	Net Form Net Blotch	Tolerance to FHB
AC Metcalfe (bu/ac)					47	78	103	134												
AC Metcalfe	2	R	100		100	100	100	100	M	51	46	79	G	R	I	I	S	I	S	I
CDC Copeland	2	R	103+	137	96	101	106+	104+	M	51	47	81	F	MS	I	I	S	I	I	I
CDC Fraser	2	R	107+	27	XX	106	109	107+	M	51	49	75	G	R	MR	MS	MS	MR	MR	I
CDC Kindersley	2	R	104+	47	XX	102	104	104+	E	53	43	78	G	S	R	I	S	MR	MS	I
CDC Bow	2	R	104+	42	XX	106	105	104	M	51	48	77	VG	S	I	MSI	MS	MR	S	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

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