Technical Bulletin

Genes that fit your farm.



CDC Fraser 2-Row Malting Barley



CDC Fraser is a high yielding strong strawed 2-row malting barley with large plump kernels and lower grain protein. CDC Fraser 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 greater than both checks. CDC Fraser is widely adapted across the Canadian Prairies and is presently undergoing market development trials with maltsters and brewers.

Parentage: TR04280 x SM04261

Strengths:

- 114% higher yield than AC Metcalfe (2012 & 2013 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,
- Kernel weight greater than the malt checks
- Higher % plump kernels than the checks
- Resistant to loose smut and stem rust

Neutral Traits:

- Test weight similar to CDC Copeland
- 1 day later maturing than AC Metcalfe
- Malt enzyme activity between AC Metcalfe and CDC Copeland
- FAN lower than AC Metcalfe

Weaknesses:

 Susceptible or moderately susceptible to covered smut, false smut, loose smut, scald, CRR and FHB

Breeders:

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PBR 91 Protected

Averaged Characteristics from 2012 & 2013 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	93.3	11.0	86.8	3.7	45.3	87.6	63.7	
Xena	111	92.5		83.1	3.5	48.3	88.6	65.6	
AC Metcalfe	100	92.6	11.6	83.9	4.1	44.3	87.7	65.2	
CDC Fraser	114	93.8	10.7	82.5	2.8	46.8	91.4	64.2	

Seed Manitoba 2023 - Malting Barley Comparison

				Maturity	Height	Test Tw.	Rough or			Surface-		Netted	Spotted			Fusarium
	Site Years	Yield	Protein	+/-	+/-	+/-	Smooth		Loose	Borne	Root	Net	Net	Spot	Stem	Head
Variety	Tested	bu/ac	+/- check	88 days	89cm	48.7lb/bu	Awns	Lodging	Smut	Smut	Rot	Blotch	Blotch	Blotch	Rust	Blight
AC Metcalfe	221	97	13.0	0	0	0	R	F	R		ı	S	ı		MR	I
AAC Synergy	65	111	12.3	0	-2	-0.4	R	G	S		l	MR	R	R	MR	I
CDC Austenson*	65	114	12.3	+1	0	+0.5	R	G	S	R	ı	MS	R	MR		I
CDC Bow	54	104	12.2	+1	+3	+0.5	R	G	S		MS	S	MR	-	MR	I
CDC Churchill	35	110	12.3	+1	-5	-0.2	R	G	MS	MR		MR	MR	I	MR	MS
CDC Copeland	55	98	12.5	0	+5	-0.5	R	F	MS		I	Ī	I	S	MR	I
CDC Fraser	42	107	12.2	+1	0	-0.7	R	G	R	MR	MS	MR	MR	R	MR	I

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

2023 Saskatchewan Varieties of Grain - Barley Comparison

				Yield												
Variety	Years Tested	# Rows	Awn Type	(% of AAC Area 1&2	Synergy) Area 3&4	Relative Maturity	Lodging	Net Form Net Blotch	Spot- Form Net Blotch	Spot Blotch	Scald	Loose Smut	Other Smuts	Root Rot	Stem Rust	FHB
AAC Synergy	7	2	Ř	100	100	М	F	MR	R	R	S	S	I	- 1	MR	I
AC Metcalfe	7	2	R	87	86	M	F	S		1	MS	R	I	- 1	MR	I
CDC Austenson*	7	2	R	102	103	M	G	MS	R	MR	S	S	R	- 1	I	I
CDC Bow	7	2	R	94	93	M	VG	S	MR	1	MS	S	I	MS	MR	MS
CDC Churchill	7	2	R	105	104	M	G	MR	MR	1	S	MS	MR		MR	MS
CDC Copeland	7	2	R	92	93	M	F	- 1		S	MS	MS	I	I	MR	I
CDC Fraser	7	2	R	100	98	M	G	MR	R	R	MS	R	R	MS	MR	I

M=Medium; L=Late; G=Good; VG=Very Good; F=Fair; P=Poor; VP=Very Poor *Feed barley comparison

2023 Alberta Seed Guide - Malting Barley Comparison

			Most		Yield %	6 CDC Co	peland	Maturity Days					Disease Tolerance							
Variety	2 or 6 Row	Awn Type	Recent Year of Testing	Station Years		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	Scald	Spot Form Net blotch	Net Form Net Blotch	Spot Blotch	FHB	
CDC	CDC Copeland (bu/ac)					83	135													
CDC Copeland	2	R	2022	182	100	100	100	98	51	50	84	F	MS	ı	S	I	I	S	ı	
AAC Synergy	2	R	2022	65	106	110	105	0	52	51	80	F	S	I	S	R	MR	R	ı	
AC Metcalfe	2	R	2021	159	99	100	96	0	52	48	79	F	R	I	S	I	S	I	I	
CDC Austenson*	2	R	2022	87	107	106	108	+2	52	51	80	G	S	R	S	R	MS	MR	I	
CDC Bow	2	R	2016	38	101	102	100	0	51	48	77	VG	S		MS	MR	S	I	-	
CDC Churchill	2	R	2020	32	110	107	111	0	52	49	74	G	MS	MR	S	MR	MR	I	MS	
CDC Fraser	2	R	2017	37	106	107	105	0	51	49	76	G	R	MR	MS	MR	MR	R		

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

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^{*}Feed barley comparison