Technical Bulletin

Genes that fit *your* farm.

SeCan
Canada's Seed Partner

CDC Churchill

2-Row Malting Barley

91
Progress Through Research
Le progrès grâce à la recherche

CDC Churchill is a very high yielding strong strawed 2-row malting barley with lower grain protein than AC Metcalfe, CDC Copeland and AAC Synergy and overall excellent agronomic package. CDC Churchill will compete head-to-head with the best 2-row malt and feed barleys for yield and agronomics so will be an excellent choice as a feed or malting barley. CDC Churchill has low enzyme activity making it ideally suited to 100% malt brewing. CDC Churchill is widely adapted across the Canadian Prairies and is presently undergoing market development trials with maltsters and brewers.

Parentage: TR08116 x TR07299

Strengths:

- Yield 117% of AC Metcalfe and 103% of AAC Synergy (2015 & 2016 Registration Trials)
- Straw strength greater than the malt checks AC Metcalfe, AAC Synergy and CDC Copeland
- 4cm shorter than AC Metcalfe
- Low grain protein and malt β-glucan (similar to AAC Synergy)
- Moderately resistant to stem rust, netted net blotch and spotted net blotch

Neutral Traits:

- Test weight, kernel weight, plumps/thins similar to AC Metcalfe and CDC Copeland
- 1 day later maturing than AC Metcalfe, similar to CDC Copeland and AAC Synergy
- Intermediate resistance to spot blotch

Weaknesses:

- moderately susceptible FHB and loose smut
- susceptible to scald

Breeder:
Dr. Aaron Beattie and B.G. Rossnagel
Crop Development Centre
University of Saskatchewan
Saskatoon, Saskatchewan

PBR 91 Protected
PVP Granted

Currently undergoing malting barley market development

Averaged Characteristics from 2015 & 2016 Western Cooperative Two-Row Barley Registration Trials

Variety	Yield (% of CDC Copeland)	Maturity (days)	Grain Protein (%)	Height (cm)	Lodging 1 = best 9 = flat	Kernel Weight (g/1000k)	% Plump	Test Weight (kg hl)
CDC Copeland	100	93.4	11.7	84.6	3.8	46.8	92.7	63.2
AC Metcalfe	96	92.9	12.3	79.4	5.3	45.1	92.6	64.4
AAC Synergy	109	93.4	11.7	79.3	4.2	47.9	94.7	64.4
CDC Austenson	111	94.6	---	79.1	3.3	47.6	92.1	66.4
CDC Churchill	**112**	**93.8**	**11.3**	**74.8**	**3.4**	**46.0**	**92.2**	**64.5**

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

Seed Manitoba 2024 - 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	196	99	13.0	0	0	0	R	F	R	I	I	S	I	I	MR	I
AAC Synergy	79	114	12.3	0	-2	-0.4	R	G	S	I	I	MR	R	R	MR	I
CDC Austenson*	79	116	12.3	+1	0	+0.5	R	G	S	R	I	MS	R	MR	I	I
CDC Bow	55	107	12.2	+1	+3	+0.5	R	G	S	I	MS	S	MR	I	MR	I
CDC Copeland	36	102	12.4	0	+5	-0.5	R	G	MS	I	I	I	I	S	MR	I
CDC Fraser	43	110	12.2	+1	0	-0.7	R	G	R	MR	MS	MR	MR	R	MR	I
CDC Churchill	**41**	**114**	**12.3**	**+1**	**-5**	**-0.2**	**R**	**G**	**MS**	**MR**	**---**	**MR**	**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 * Feed barley comparison

2024 Saskatchewan Varieties of Grain - Barley Comparison

Variety	Years Tested	# Rows	Awn Type	Yield (% of AAC Synergy) Area 1&2	Yield (% of AAC 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	R	100	100	M	F	MR	R	R	S	S	I	I	MR	I
AC Metcalfe	7	2	R	87	86	M	F	S	I	I	MS	R	I	I	MR	I
CDC Austenson*	7	2	R	102	103	M	G	MS	R	MR	S	S	R	I	I	I
CDC Bow	7	2	R	94	93	M	VG	S	MR	I	MS	S	I	MS	MR	MS
CDC Copeland	7	2	R	92	93	M	F	I	I	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
CDC Churchill	**7**	**2**	**R**	**105**	**104**	**M**	**G**	**MR**	**MR**	**I**	**S**	**MS**	**MR**	**---**	**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
*Feed barley comparison

2024 Alberta Seed Guide - Malting Barley Comparison

Variety	2 or 6 Row	Awn Type	Most Recent Year of Testing	Station Years	Yield % AAC Synergy Overall Yield	Yield % AAC Synergy Low <113 (bu/ac)	Yield % AAC Synergy High >113 (bu/ac)	Maturity Days +/- AAC Synergy	Test Weight lb/bu	TKW (g)	Height (cm)	Resistance to Lodging	Disease Tolerance Loose Smut	Other Smuts	Scald	Spot Form Net blotch	Net Form Net Blotch	Spot Blotch	FHB
AAC Synergy (bu/ac)					**124**	**86**	**146**	93											
AAC Synergy	2	R	2023	131	100	100	100	0	53	49	81	F	S	I	S	R	MR	R	I
AC Metcalfe	2	R	2023	103	91	89	92	0	53	46	81	F	R	I	S	I	S	I	I
CDC Austenson*	2	R	2023	101	100	94	103	+2	54	49	81	G	S	R	S	R	MS	MR	I
CDC Bow	2	R	2016	38	97	98	96	+1	52	45	79	VG	S	I	MS	MR	S	I	I
CDC Copeland	2	R	2023	88	95	92	96	+1	52	47	86	F	MS	I	S	I	I	S	I
CDC Fraser	2	R	2017	37	102	103	101	+1	52	46	78	G	R	MR	MS	MR	MR	R	I
CDC Churchill	**2**	**R**	**2023**	**42**	**103**	**101**	**104**	**+2**	**53**	**46**	**77**	**G**	**MS**	**MR**	**S**	**MR**	**MR**	**I**	**MS**

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
*Feed barley comparison

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