# Technical Bulletin

Genes that fit your farm.



# **CDC Copeland** 2-Row Malting Barley



### Strengths:

- "Recommended" status from the Canadian Malting Barley Technical Centre
- 16% higher yield than Harrington, 2% higher yield than Manley (1996 – 1998 Coop Trials)
- 3 days earlier maturing than Manley (1 day later than Harrington)
- Moderate resistance to net blotch (similar to Manley)
- Better stem rust resistance than Manley and Harrington
- Much stronger straw than Harrington, slightly stronger straw than Manley
- Higher test weight and plumper kernels than Manley, kernel plumpness similar to Harrington
- Much lower beta-glucan than Harrington and Manley
- Excellent malting quality

#### **Neutral Traits:**

- 7 cm taller than Harrington, 5 cm taller than Manley
- Susceptible to Scald and Septoria as are Manley and Harrington

#### Weaknesses:

- Susceptible to loose smut
- More susceptible to common root rot than Manley

#### **Breeder:**

Dr. Bryan Harvey Crop Development Centre University of Saskatchewan Saskatoon, Saskatchewan



## Recommended Malting Barley Varieties 2015-16

The following varieties of two-row and six-row malting barley are registered with the Canadian Food Inspection Agency based on good agronomic and industry malting quality evaluations. Since registration these varieties have been pilot scale tested by the CMBTC for their malting and brewing properties. All varieties listed below exhibit good malting and brewing properties. In addition to market opportunities, seeding decisions should be based on agronomic considerations and feedback from your grain company representative, local elevator operators and malting companies. The CMBTC and its members recommend that you talk with your local malting barley buyer about opportunities in your area to grow and market two-row and six-row malting barley varieties. Visit CMBTC's website for detailed pilot malting and brewing data - www.cmbtc.com/CMBTC Site/Variety Technical Data.html

#### Two-Row Varieties

VARIETY	MARKET COMMENTS
CDC Copeland₁	Established Demand
AC Metcalfe <sub>1</sub>	Established Demand
CDC Meredith <sub>1</sub>	Limited, Increasing Demand
Bentley <sub>2</sub>	Limited, Stable Demand
CDC Kindersley <sub>1</sub>	Undergoing Commercial Market Development
Cerveza <sub>6</sub>	Undergoing Commercial Market Development
AAC Synergy <sub>5</sub>	Undergoing Commercial Market Development

The following companies have pedigreed seed distribution rights for those varieties that are footnoted: 1-SeCan; 2 - CANTERRA SEEDS; 3 - Crop Production Services; 4 - FP Genetics; 5 - Syngenta; 6 - Mastin Seeds;

CMBTC and its' members strongly recommend use of certified seed to ensure varietal purity and increase opportunity for selection.

1996-98 Western Cooperative Two Row Barley Registration Trials

Entry	Yield (% Harrington)	Maturity (days)	Height (cm)	Lodging 1 = best 9 = flat	Kernel Weight (mg)		Scald Rating	Net Blotch rating	Loose Smut	Other Smuts
Harrington	100	87.3	80	4.2	41.0	86.7	Susceptible	Susceptible	Susceptible	Susceptible
Manley	113	91.4	82	3.1	44.4	83.1	Susceptible	Intermediate	Intermediate	Intermediate
CDC Copeland	116	88.5	87	2.8	45.1	86.7	Susceptible	Intermediate	Intermediate	Intermediate

**Seed Manitoba 2015 - Malting Barley Comparison** 

Variety	Site Years Tested	Yield bu/ac	Protein +/- check	Maturity +/- 88 days	Height +/- 35"	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	141	93	12.7	0	0	0	R	F	R	1	I	S	1	I	MR	I
CDC Kindersley	34	98	12.5	-1	-1	0	R	G	S	R		MS	MR	I	MR	I
CDC Meredith	42	98	12.3	+2	-1	-2.1	R	F	R	MR		MS	R	MS	MR	I
CDC Copeland	60	94	12.5	0	+2	-0.5	R	F	MS	I		_	1	S	MR	I

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

2015 Saskatchewan Varieties of Grain - Malting Barley Comparison

				s % of etcalfe	-	-	Resistance to:											
Variety	# Rows	Awn Type	Area 1 & 2	Area 2 & 3	Relative Maturity	Lodging	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	VP	F	F	Р	VG	F	F	G	F			
CDC Kindersley	2	R	105	107	Е	G	Р	G	F	VP	VP	VG	F	G	F			
CDC Meredith	2	R	114	112	L	G	Р	VG	Р	Р	VG	G	F	G	F			
CDC Copeland	2	R	107	108	М	G	F	F	VP	Р	Р	F	F	G	F			

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

2015 Alberta Seed Guide - Malting Barley Comparison

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								Very	Maturity					Disease Tolerance						
					Low	Medium	High	High	Days	Test	Kernel							Spot	Net	Tolerance
	2 or 6		All	Station	<60	60-90	90-120	>120	+/-	Weight	Weight	Height		Loose	Other	Root		Form	Form	to
Variety	Row	Awn	sites	Years	bu/ac	bu/ac	bu/ac	bu/ac	AC Metcalfe	lb/bu	g/1000k	(cm)	Lodging	Smut	Smuts	Rot	Scald	Net blotch	Net Blotch	FHB
AC Metc	alfe (bu	/ac)			46	79	103	133												
AC Metcalfe	2	R	100	510	100	100	100	100	M	52	46	79	F	R	ı	ı	S	I	S	I
CDC Kindersley	2	R	104+	47	XX	102	104	104+	E	53	43	78	G	S	R		S	MR	MS	I
CDC Meredith	2	R	107+	65	102	108+	108+	107+	L	51	46	75	F	R	MR	MR	S	R	S	I
CDC Copeland	2	R	103+	137	96	101	106+	104+	M	51	47	81	F	MS	I	I	S		ı	I

FI. & 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