

# Technical Bulletin

Genes that fit *your* farm.



## CDC Kernen Flax



### Description:

CDC Kernen is a large seeded, high yielding brown seeded flax variety with good lodging resistance and late maturity.

### Adaptation:

- All flax growing areas of western Canada.

### Pedigree:

- CDC Sorrel/F03279//CDC Sorrel/F03074

### Strengths:

- 106% grain yield of CDC Glas and 108% of CDC Bethune across all zones in the registration trials
- Larger seed size – 6.09g for CDC Kernen vs 5.38g for CDC Glas and 5.93g for CDC Bethune in registration trials
- Resistant to flax rust and moderately resistant to fusarium wilt and powdery mildew
- Significantly higher linolenic acid content compared to CDC Glas and CDC Bethune in registration trials

### Neutral Traits:

- +2cm taller than CDC Glas and +3 taller than CDC Bethune
- Good lodging resistance but slightly weaker straw than CDC Glas and CDC Bethune
- Oil content similar to the checks

### Weaknesses:

- 2 day later maturing than CDC Bethune

### Breeder:

Dr. Helen Booker  
Crop Development Centre  
University of Saskatchewan  
Saskatoon, SK

**PBR 91 Pending**

### 2018 and 2019 Linseed Co-op Trials

Variety	Yield as % CDC Glas	Maturity (days)	Lodging 1 = erect 9 = flat	Height (cm)	1000 Seed Weight (g)	Oil Content (%)	Iodine Number	Linolenic Acid Content (%)	Seed Protein Content (%)	Meal Protein Content (%)
CDC Bethune	98	105	1.2	59.8	5.93	44.7	186	53.2	22.2	40.1
CDC Glas	100	106	1.2	60.5	5.38	45.3	189	54.5	21.7	39.6
CDC Rowland	103	110	1.3	59.8	6.76	45.0	194	58.2	21.7	39.3
<b>CDC Kernen</b>	<b>106</b>	<b>108</b>	<b>1.6</b>	<b>62.5</b>	<b>6.09</b>	<b>45.1</b>	<b>192</b>	<b>57.1</b>	<b>21.4</b>	<b>38.9</b>

## 2023 Seed Manitoba Flax Comparison

Variety	Site Years	Yield bu/ac	Maturity +/- 102 days	Height +/- 68 cm	Seed Colour	Seed Size TKW	Oil Content (%)	Oil Quality		Resistance to:	
								Iodine Number	ALA Content	Lodging	Fusarium Wilt
AAC Bright	12	36	+2	0	Yellow	5.6	48.8	192.1	56.2	G	MR
CDC Bethune	135	35	0	0	Brown	5.8	45.6	188.6	54.7	G	MR
CDC Glas	38	36	+1	+3	Brown	5.2	45.8	192.0	56.6	G	MR
CDC Plava	22	35	-2	-3	Brown	5.7	46.5	195.5	57.2	G	MR
CDC Rowland	25	39	+4	0	Brown	6.8	45.2	195.1	59.2	G	MR
CDC Sorrel	57	35	+1	+3	Brown	6.4	45.1	192.7	57.8	F	MR
<b>CDC Kernan</b>	<b>14</b>	<b>37</b>	<b>+1</b>	<b>0</b>	<b>Brown</b>	<b>6.5</b>	<b>45.4</b>	<b>191.6</b>	<b>57.3</b>	<b>VG</b>	<b>MR</b>

M=Medium; ME=Medium Early; ML=Medium Late; MR=Moderately Resistant; VG=Very Good; FG=Fair to Good; P=Poor

## 2023 Saskatchewan Varieties of Grain Flax Comparison

Variety	Years Tested	Yield as % of CDC Glas				Relative Maturity +/- 101 days	Seed Size	Resistance to:		
		Area 1 & 2	Area 3 South	Area 3 North & 4	Irrigation			Lodging	Powdery Mildew	Fusarium Wilt
CDC Glas	11	100	100	100	100	0	M	VG	MR	MR
AAC Bright	5	92	93	97	95	+1	M	G	MR	MR
CDC Bethune	15	94	95	96	103	-1	M	G	MR	MR
CDC Buryu	5	93	100	95	93	0	M	G	MR	MR
CDC Plava	5	94	98	94	96	-3	M	G	---	MR
CDC Rowland	6	101	106	104	103	+3	L	G	MR	MR
CDC Sanctuary	5	98	88	91	101	+1	M	F	MR	MR
CDC Sorrel	4	91	89	93	101	0	L	G	MR	MR
<b>CDC Kernan</b>	<b>5</b>	<b>99</b>	<b>102</b>	<b>104</b>	<b>99</b>	<b>+1</b>	<b>L</b>	<b>G</b>	<b>MR</b>	<b>MR</b>

M=Medium; L=Late S=Small; M=Medium; L=Large G=Good; VG=Very Good; F=Fair; P=Poor

R=Resistant; MR=Moderately resistant, I=Intermediate; MS=Moderately susceptible; S=Susceptible

## 2023 Alberta Seed Guide Flax Comparison

Variety	Most Recent Year of Testing	Overall Station Years of Testing	Overall Yield	Yield Category (% CDC Bethune)		Agronomic Characteristics					Disease Tolerance		Quality		
				Low <36 (bu/ac)	High >36 (bu/ac)	Maturity Rating Days +/- CDC Bethune	Seed Colour	Seed Size	Height (cm)	Resistance to Lodging	Fusarium Wilt	Powdery Mildew	Oil Content (%)	ALA Content (%)	Iodine Value
<b>CDC Bethune (bu/ac)</b>			<b>36</b>	<b>24</b>	<b>49</b>										
CDC Bethune	2022	118	100	100	100	107	Brown	M	61	G	MR	MR	46	55	189
CDC Glas	2022	51	105	106	105	+1	Brown	M	62	G	MR	MR	46	57	192
CDC Plava	2016	26	101	106	91	-2	Brown	M	53	G	MR	--	47	57	196
CDC Rowland	2022	21	110	115	104	+3	Brown	L	61	G	MR	MR	45	59	195
CDC Sorrel	2008	14	109	115	104	+1	Brown	L	61	F	MR	MR	45	58	193
<b>CDC Kernan</b>	<b>2022</b>	<b>24</b>	<b>107</b>	<b>110</b>	<b>106</b>	<b>+1</b>	<b>Brown</b>	<b>M</b>	<b>62</b>	<b>G</b>	<b>MR</b>	<b>MR</b>	<b>45</b>	<b>57</b>	<b>191</b>

S=Small, M=Medium, L=Large:

VG=Very Good; G=Good; F=Fair; P=Poor; VP=Very

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](http://www.secan.com)