

Technical Bulletin

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SeCan

Canada's Seed Partner

CDC Rowland Flax



Progress Through Research
Le progrès grâce à la recherche

Description:

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

Adaptation:

- All flax growing areas of western Canada, with especially good performance in the long season areas of the black and brown soil zones.

Pedigree:

- CDC Sorrel/F03279//CDC Sorrel/F03279

Strengths:

- 112% grain yield of CDC Bethune across all zones in the registration trials
- Very large seed size – 6.8g for CDC Rowland vs 5.8g for CDC Bethune in registration trials
- Good resistance to lodging, better than CDC Bethune
- Resistant to flax rust and moderately resistant to fusarium wilt and powdery mildew

Neutral Traits:

- Meal protein similar to the checks
- Oil content similar to the checks
- Height similar to CDC Bethune

Weaknesses:

- 4 day later maturing than CDC Bethune

Breeder:

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Crop Development Centre
University of Saskatchewan
Saskatoon, SK

PBR 91 Protected

2015 and 2016 Western Cooperative Flax Registration Trials

Variety	Yield as % CDC Bethune	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	100	102	2.4	64.2	5.8	45.0	188.0	54.8	24.2	43.9
Flanders	93	103	3.5	63.6	5.3	45.1	192.0	57.9	23.9	43.5
Prairie Thunder	95	102	2.2	59.1	6.1	44.2	194.2	58.3	24.7	44.3
CDC Rowland	112	106	2.0	63.5	6.8	44.6	194.5	59.3	24.2	43.6

2022 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	6	34	+2	0	Yellow	5.6	48.8	192.1	56.2	G	MR
CDC Bethune	129	34	0	0	Brown	5.8	45.6	188.6	54.7	G	MR
CDC Glas	32	35	+1	+3	Brown	5.2	45.8	192.0	56.6	G	MR
CDC Kernen	8	35	+1	0	Brown	6.5	45.4	191.6	57.3	VG	MR
CDC Plava	21	34	-2	-3	Brown	5.7	46.5	195.5	57.2	G	MR
CDC Sorrel	56	34	+1	+3	Brown	6.4	45.1	192.7	57.8	F	MR
CDC Rowland	19	37	+4	0	Brown	6.8	45.2	195.1	59.2	G	MR

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

2022 Saskatchewan Varieties of Grain Flax Comparison

Variety	Yield as % of CDC Bethune					Maturity	Seed Size	Resistance to:		
	Years Tested	Area 1 & 2	Area 3 South	Area 3 North & 4	Irrigation			Lodging	Powdery Mildew	Fusarium Wilt
CDC Bethune	14	100	100	100	100	L	M	G	MR	MR
AAC Bright	4	98	96	98	---	L	M	G	MR	MR
CDC Buryu	5	97	104	100	89	L	M	G	MR	MR
CDC Glas	10	106	104	104	97	L	M	VG	MR	MR
CDC Kernen	4	103	106	105	100	L	L	G	MR	MR
CDC Plava	5	98	102	99	92	M	M	G	---	MR
CDC Sanctuary	5	101	92	94	96	L	M	F	MR	MR
CDC Sorrel	4	95	93	96	97	L	L	G	MR	MR
CDC Rowland	5	107	110	108	102	L	L	G	MR	MR

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

2022 Alberta Seed Guide Flax Comparison

Variety	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
CDC Bethune (bu/ac)		36	23	50										
CDC Bethune	103	100	100	100	107	Brown	M	61	G	MR	MR	46	55	189
AAC Bright	16	96	XX	94	+2	Yellow	S	66	VG	MR	NT	48	55	191
CDC Glas	36	105	105	105	+1	Brown	M	65	G	MR	MR	46	57	192
CDC Kernen	9	104	XX	200	+1	Brown	M	64	G	MR	MR	45	57	191
CDC Plava	26	101	106	91	-2	Brown	M	53	G	MR	MR	47	57	196
CDC Sorrel	14	109	115	104	+1	Brown	L	61	F	MR	MR	45	58	193
CDC Rowland	19	111	116	109	+3	Brown	L	61	G	MR	MR	45	59	195

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