

# **CDC Bethune**





# Strengths:

Consistently high yield

Canada's Seed Partner

- 110% higher yield than Norlin in Cooperative Registration Trials (1995 to 1997 Coop Trials)
- Very strong straw, similar to McDuff in lodging resistance
- 2 days earlier than McDuff.
- More resistant to fusarium wilt than Norlin or Flanders

## Neutral Traits:

- 3 cm taller than Norlin and Flanders
- Medium seed size, slightly larger than Norlin, McDuff and Flanders
- 1 day earlier than Flanders, 1 <sup>1</sup>/<sub>2</sub> days later than Norlin

### Weaknesses:

- Yield similar to Norlin, McDuff and Flanders under late seeding
- Matures 4 to 5 days later than Norlin under late seeding (but 2 days earlier maturing than McDuff under late seeding)

## **Breeder:**

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Entry	Yield (%) of Norlin	Maturity (days)	Lodging 1 = erect 9 = flat	Height (cm)	1000 Seed Wt (gm)	Oil Content (%)	lodine Number	Protein Content (%)
Flanders	100	102.1	4.0	61.8	5.4	45.4	191.3	35.3
McDuff	101	103.4	2.3	64.7	5.7	47.7	188.7	35.7
Norlin	96	99.8	3.8	62.4	5.8	43.4	188.9	35.2
CDC Normandy	102	99.4	3.8	61.8	5.7	43.4	189.5	35.1
CDC Bethune	106	101.3	2.5	65.1	5.9	45.6	187.6	35.7

#### 1995 to 1997 Western Cooperative Flax Registration Trials

#### 2011 Saskatchewan Varieties of Grain Flax Comparison

		Yield a			Resistance to:				
Variety	Years Tested	Areas 1&2	Areas 3&4	Irrigation	Maturity	Seed Size	Lodging	Powdery Mildew	Fusarium Wilt
Vimy	10	94	90	85	М	L	P	Р	F
CDC Sorrel	8	100	101	92	L	L	G	F	F
Hanley	4	90	90	93	М	М	G	F	G
AC <sup>®</sup> Prairie Blue	4	99	92	97	L	S	VG	F	F
AC Prairie Grande	7	92	94	92	М	М	VG	F	F
CDC Bethune	10	100	100	100	L	М	G	F	F

Maturity: M=Medium; L=Late; VL=Very Late

Seed Size: S=Small; M=Medium; L=Large

## Lodging: VG=Very Good; G=Good; F=Fair; P=Poor;

#### Seed Manitoba 2011 Flax Comparison

	Long Term						Resistance to:		
Site Years	Average Yield	Maturity	Height	Seed Size	% Oil	Oil Quality	Lodaina	Fusarium Wilt	Powdery Mildew
76	91	M	M	M	43.5	M	G	MR	S
18	86	М	М	М	43.3	М	FG	MR	S
14	91	ML	М	S	45.4	MH	FG	MR	MR
36	94	ME	М	М	45.6	Н	VG	MR	MR
45	101	ML	MT	L	45.1	MH	FG	MR	MR
70	95	ME	М	М	44.7	VH	VG	R	MR
66	98	ML	MT	S	46.3	Н	VG	MR	MR
121	100	ML	MT	М	45.6	L	VG	MR	MR
	Years 76 18 14 36 45 70 66	Years (% of CDC Bethune)   76 91   18 86   14 91   36 94   45 101   70 95   66 98	Site Years Average Yield (% of CDC Bethune) Maturity   76 91 M   18 86 M   14 91 ML   36 94 ME   45 101 ML   70 95 ME   66 98 ML	Site Years Average Yield (% of CDC Bethune) Maturity Height   76 91 M M   18 86 M M   14 91 ML M   36 94 ME M   45 101 ML MT   70 95 ME M   66 98 ML MT	Site Years Average Yield (% of CDC Bethune) Maturity Height Seed Size   76 91 M M M   18 86 M M M   14 91 ML M S   36 94 ME M M   45 101 ML MT L   70 95 ME M M   66 98 ML MT S	Site Years Average Yield (% of CDC Bethune) Maturity Height Seed Size % Oil   76 91 M M 43.5   18 86 M M 43.3   14 91 ML M S 45.4   36 94 ME M M 45.6   45 101 ML MT L 45.1   70 95 ME M M 44.7   66 98 ML MT S 46.3	Site Years Average Yield (% of CDC Bethune) Maturity Height Height Seed Size % Oil Quality   76 91 M M 43.5 M   18 86 M M 43.3 M   14 91 ML M S 45.4 MH   36 94 ME M M 45.6 H   45 101 ML MT L 45.1 MH   70 95 ME M M 44.7 VH   66 98 ML MT S 46.3 H	Site YearsAverage Yield (% of CDC Bethune)MaturityHeightSeed Size% OilOil QualityLodging7691MM43.5MG1886MMM43.3MFG1491MLMS45.4MHFG3694MEMM45.6HVG45101MLMTL45.1MHFG7095MEMM44.7VHVG6698MLMTS46.3HVG	Site YearsAverage Yield (% of CDC Bethune)MaturityHeightSeed Size% OilOil QualityFusarium Lodging7691MM43.5MGMR1886MM43.3MFGMR1491MLMS45.4MHFGMR3694MEMM45.6HVGMR45101MLMTL45.1MHFGMR7095MEMM44.7VHVGR6698MLMTS46.3HVGMR

Maturity: ME=Medium Early; M=Medium; ML=Medium Late

Lodging Resistance: VG=Very Good; G=Good; FG=Fair to Good; F=Fair Fusarium & Mildew: R=Resistant; MR=Moderately Resistant; S=Susceptible

Height: M=Medium; MT=Medium Tall

Seed Size: S=Small; M=Medium; ML=Medium Large; L=Large

#### Alberta Seed Guide 2010 Flax Comparison

		Maturity (days)	Height (cm)	Seed Size	Lodging				
Variety	Low <20 bu/ac	Medium <20 bu/ac	High 20-35 bu/ac	Very High >50 bu/ac	All sites				
CDC Sorrel	112	107	98	98	99	1	61	L	G
Hanley	98	101	94	97	97	0	53	М	G
CDC Normandy	104	94	93	91	95	-1	58	М	F
CDC Bethune	100	100	100	100	100	0	58	М	G

\*Limited data – 3 station years

XX=Insufficient data

Seed Size: M=Medium; L=Large Lodging: G=Good; F=Fair;