

# FLAX

Fields of flax have been successfully grown in our region for many years, however growing flax in the B.C. Peace River region is still at present a risky venture. Large acreage should be discouraged until further breeding programs has resulted in earlier maturing varieties. The B.C. Grain Producers Association is looking into the development of earlier varieties, and therefore this information is being provided here.

Variety	Yield as % of NORLIN														Variety Descriptions	
	Dawson Creek				Fort St. John				B.C. Peace							
	2002 Yield	2001-2002			2002 Yield	2001-2002			2002	2001-2002			Maturity	Height		
bus / acre	% of Check	Avg. (%)	stn yrs	bus / acre	% of Check	Avg. (%)	stn yrs	Avg. (%)	Avg. (%)	stn yrs	stn yrs	(days to)	(cm)	Distributor		
■ ^1084 (LINOLA 1084)	12 b	104	105	[2]	27 def	92	95	[2]	98	100	[4]	141	60	Agricore United		
■ ^2047 (LINOLA 2047)*	11 b	99	99	[1]	24 f	83	83	[1]	91	91	[2]	134	53	Agricore United		
■ AC HANLEY *	13 ab	112	112	[1]	28 cde	97	97	[1]	105	105	[2]	126	52	SeCan		
□ AC LIGHTNING	13 ab	115	107	[2]	30 b-e	102	100	[2]	109	104	[4]	137	59	Canterra		
■ CDC BETHUNE	15 a	130	120	[2]	31 abc	106	102	[2]	118	111	[4]	136	58	SeCan		
■ CDC MONS *	13 ab	112	112	[1]	29 cde	98	98	[1]	105	105	[2]	132	49	Quality Assured		
■ CDC NORMANDY	12 b	104	101	[2]	32 ab	111	105	[2]	108	103	[4]	132	60	Western Growers		
■ CDC VALOUR	11 b	99	98	[2]	34 a	116	107	[2]	108	102	[4]	134	54	SeCan		
■ FP 2024 *	13 ab	111	111	[1]	26 ef	90	90	[1]	100	100	[2]	139	53	Morden AAFC		
■ MACBETH (FP1096)*	11 b	99	99	[1]	30 a-d	104	104	[1]	102	102	[2]	132	56	Agricore United		
<b>NORLIN</b>	<b>12 b</b>	<b>100</b>	<b>100</b>	<b>[2]</b>	<b>29 b-e</b>	<b>100</b>	<b>100</b>	<b>[2]</b>	<b>100</b>	<b>100</b>	<b>[4]</b>	<b>133</b>	<b>57</b>	<b>SeCan</b>		
■ TAURUS	12 ab	108	102	[2]	28 cde	96	96	[2]	102	99	[4]	139	58	Performance		
LSD (P=.05) =		2.83				3.61										
CV value (%) =		13.45				8.66										
Varieties not tested in 2002 (1989 - 2001)				Last Year Tested												
□ AC CARNDUFF	101			[1]	99			[1] 2001)	100	[2]	136	63				

Means followed by the same letter do not significantly differ (P=.05, LSD)

**NORLIN - check variety**

■ Protected by Plant Breeders' Rights

\* first year tested, very limited data available

□ Protection under Plant Breeders' Rights applied for

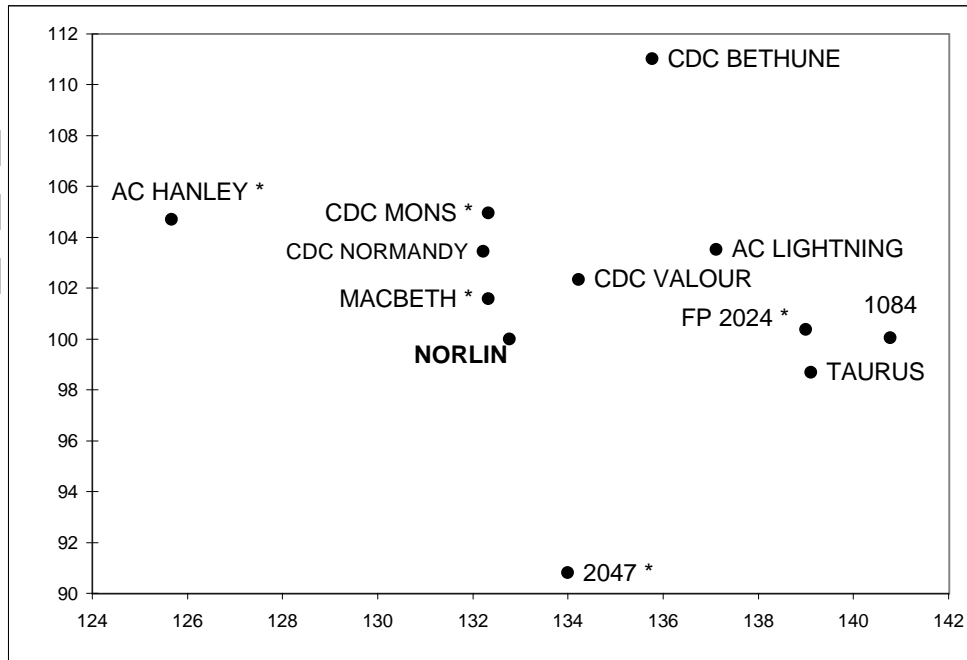
<sup>A</sup> Solin type

## FLAX

### Regional Variety

### Performance

2002



# Flax

## **Where to Place Flax in Crop Rotations:**

Flax is quickly becoming a stubble-sown crop. However, with better weed control options out there now, conventional planting will work too, as long as it is a fairly clean field to start with. In fact, flax has now often been referred to as a "clean-up crop" in rotations.

Flax does well after cereals, but research has shown that in many parts of the prairies flax can do poorly after canola or mustard crops. This is due to toxic compounds in mature canola and mustard plants and their seedling residues. The problem is most evident where straw and trash from the previous canola crop has not been adequately spread on the soil surface. Canola straw should, therefore, be spread uniformly, and spring volunteer seedlings should be controlled at an early stage in order to minimize possible toxic effects. Seeding into untilled canola stubble can also minimize the problem. Flax does do well after legume crops, but *Rhizoctonia* disease can become a problem. Wheat has shown to be the most acceptable crop to follow flax, but barley also performed well on flax stubble.

## **Environmental Stress and Disorders:**

There are some environmental disorders that can effect your flax crop, which are associated with an imbalance of nutrient elements in the plant during environmental stress. Such disorders are often found in soils under high moisture conditions where leaf chlorosis (yellowing) may occur. Terminal bud dieback and the development of basal branching may or may not accompany the yellowing. As well, cankers on the stems can form, which are caused by very high or freezing temperatures when the crop is in early stages of growth. This latter situation may commonly be inconspicuous, but stands may be reduced by as much as 50%. Canker damage is usually most severe in thin stands on light soils, while leaf chlorosis is usually on heavier saturated soils. Placing seed and fertilizer properly, as well as picking varieties more tolerant to our Peace River spring conditions, will help prevent the situation. If either situation does occur, delaying herbicide applications during the recovery period is also very important, as herbicides will only compound the problem and delay maturity possibly beyond recoverable limits here in the Peace River region.

## **Fertilizer Placement:**

Flax is very sensitive to seed-placed fertilizer with even low rates sometimes causing seedling injury. Some provinces recommend a low rate of phosphate - not more than 20 kg/ha (18 lb./ac.) of P<sub>2</sub>O<sub>5</sub> - may be seed-placed, while others recommend that no fertilizer be placed with the seed. Considerable research evidence has shown that placement of phosphate 25 mm (1 inch) to the side and 25 mm (1 inch) below the seed is an effective method to supply phosphorus requirements of the flax plant. Nitrogen (N) should not be placed directly with the seed. These practices are followed by BC Grain Producers Association.

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Adapted from *Growing Flax*, published in 2001 by the *Flax Council of Canada*, and *Alberta Agriculture Food and Rural Development "Roping the Net"* website. For most complete and up to date information on growing flax, visit the Flax Council of Canada's website at: [www.flaxcouncil.ca](http://www.flaxcouncil.ca).