

FLAX

Fields of flax have been successfully grown in our region for many years, however growing flax in the B.C. Peace River region still at present a risky venture. Large acreage should be discouraged until further breeding programs have 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																
	Dawson Creek				Fort St. John				B.C. Peace			Variety Descriptions					
	2005 Yield		2002-2005		2005 Yield		2002-2005		2005	2002-2005		Maturity Height days +/- check (cm)	Distributor				
	bus / acre	% of Check	Avg. (%)	stn yrs	bus / acre	% of Check	Avg. (%)	stn yrs	Avg. (%)	Avg. (%)	stn yrs						
■ ^1084	40	a	102	103	[2]	41	cde	88	90	[2]	95	97	[4]	12	66	Agricore United	
■ ^2047	31	c	79	86	[3]	36	e	79	74	[3]	79	80	[6]	10	63	Agricore United	
■ ^2090	35	b	90	93	[2]	41	cde	89	83	[2]	89	88	[4]	7	63	Agricore United	
■ ^2149 *	40	ab	101	101	[1]	41	cde	89	89	[1]	95	95	[2]	9	70	Agricore United	
■ CDC Bethune	41	a	104	114	[3]	45	a-d	97	93	[3]	100	103	[6]	7	63	U of S	
CDC Normandy	38	ab	97	102	[3]	49	a	106	107	[3]	101	105	[6]	0	62	U of S	
CDC Sorrel *	43	a	109	109	[1]	43	bcd	94	94	[1]	101	101	[2]	6	72	SeCan	
Flanders *	41	a	106	106	[1]	47	ab	102	102	[1]	104	104	[2]	9	65	U of S	
■ Hanley	39	ab	101	106	[2]	42	cde	90	94	[2]	95	100	[4]	3	59	SeCan	
■ Macbeth	41	a	104	96	[3]	40	de	86	93	[3]	95	94	[6]	7	61	Agricore United	
NorLin	39	ab	100	100	[3]	46	abc	100	100	[3]	100	100	[6]	0	60	SeCan	
LSD (P=.05) =	3.32						3.71										
CV value (%) =	5.93						6.00										
													Average maturity for NorLin is 127 days.				
													<u>Varieties not tested in 2005 (2002-2003)</u>		<u>Last Year Tested</u>		
■ Taurus	101				88				(2003)		95		8		62		Performance

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

NorLin - check variety

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* first year tested, very limited data available

Note: No data included from 2004 due to adverse harvest

^ Solin type

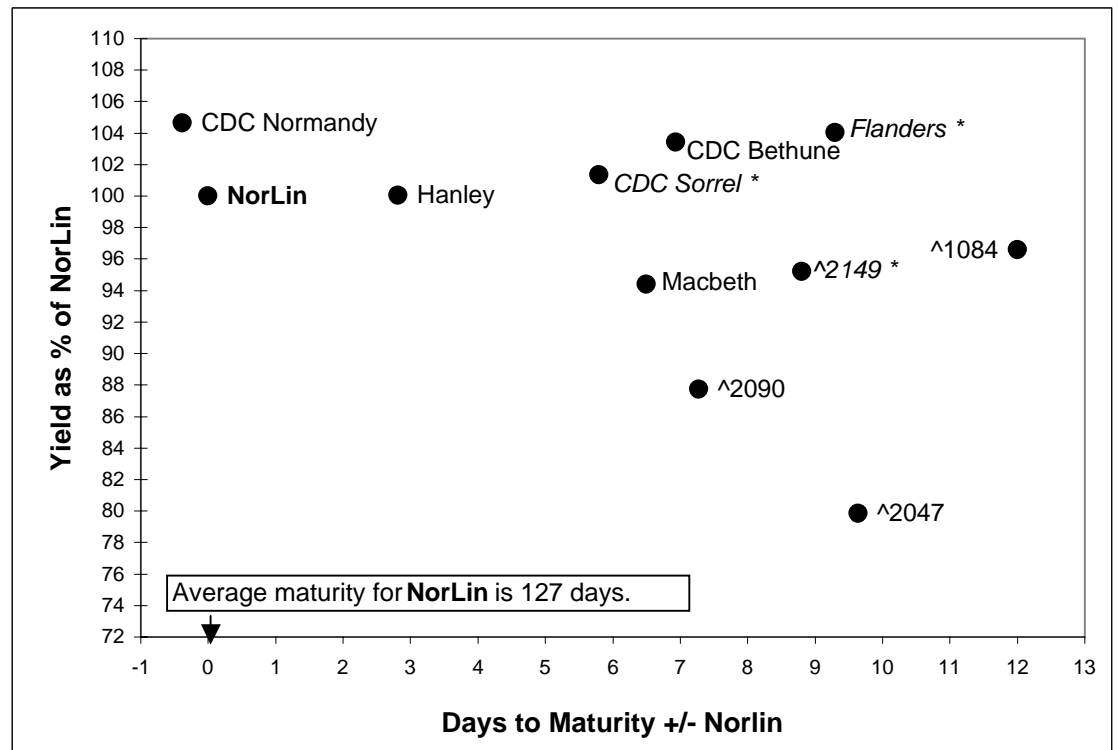
FLAX

Regional Variety

Performance

B.C. Peace Avr.

2002-2005



Flax

Where to Place Flax in Crop Rotations:

Flax is quickly becoming a stubble-sown crop. However, with better weed control options 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 affect 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 P₂O₅ - 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.

Adapted from *Growing Flax*, published in 2001 by the *Flax Council of Canada*, and *Alberta Agriculture Food and Rural Development "Ropin' The Web"* website. For most complete and up to date information on growing flax, visit the Flax Council of Canada's website at: www.flaxcouncil.ca.