

## SPRING TRITICALE

Triticale is a genetic cross (not a hybrid) developed by crossing wheat (*Triticum turgidum* or *Triticum aestivum*) with rye (*Secale cereal*). All varieties of spring triticale currently available are approximately 10 days later maturing than CWRS wheats, and as such they should not be grown in the B.C. Peace River region for grain production. All three varieties entered here in this trial are earlier than other traditional spring triticale varieties, and perhaps as breeding continues earlier lines may come along that we can grow for grain here. Their grain yields are "attention grabbers", and so it is worth watching their development. Drought tolerance is the primary advantage that spring triticales have over other spring cereal crops. Spring triticales are also a valuable alternative to barley & oats forage and feed. It is for these reasons that data is included.

Variety	Dawson Creek		Fort St. John			B.C. Peace	
	2001 Yield		2001 Yield			2001 Avr. Yield	
	bus / acre	% of Stn. check Yrs.	bus / acre	% of Stn. check Yrs.	bus / acre	% of Stn. check Yrs.	Avg. (%) Yrs.
AC ULTIMA	156 a	114 [1]	150 a	101 [1]	107	[2]	
<b>PRONGHORN</b>	137 b	100 [1]	149 a	100 [1]	100	[2]	
SANDRO	142 b	104 [1]	145 a	97 [1]	100	[2]	
LSD (P=.05) =	9.79		19.63				
CV value (%) =	3.90		7.68				

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

**PRONGHORN - check variety**

Variety	Variety Descriptions						
	Maturity (days to)	Height (cm)	Bushel Weight (lbs/bus)	TKW (g / 1000)	0 - 9 scale; 0=nil		Distributor
					Septoria complex	Ergot	
AC ULTIMA	140	125	58.5	53.7	3	0.6	Quality Assured
<b>PRONGHORN</b>	144	125	56.7	50.5	3.3	0.3	Progressive
SANDRO	148	117	58.5	49.6	1.5	3.1	Promark Seed

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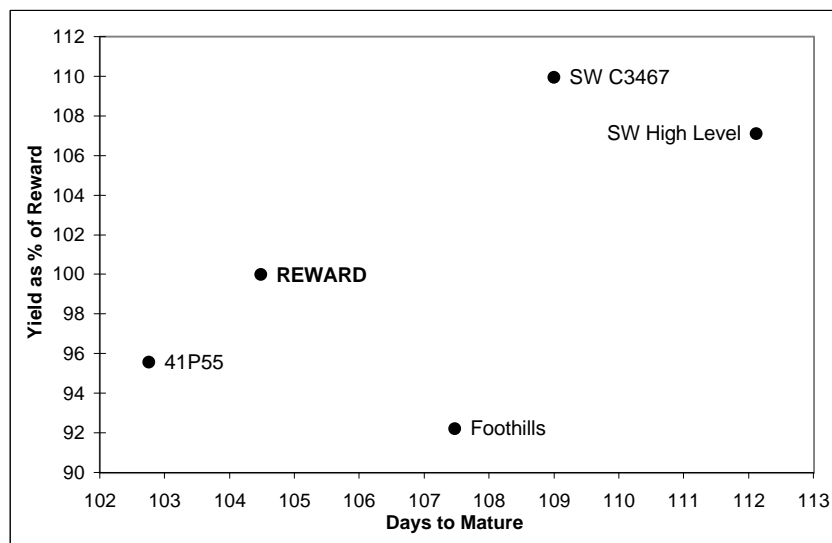
□ Protection under Plant Breeders' Rights applied for

## Polish Canola

Regional Variety

Performance

1996 - 2001



# 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.

Flax Variety	Yield as % of NORLIN									
	Dawson Creek			Fort St. John			B.C. Peace		Variety	
	2001 Yield			2001 Yield			2001 Avg. Yield		Descriptions	
	bus / acre	% of check	Stn. Yrs.	bus / acre	% of check	Stn. Yrs.	Avg. (%)	Stn. Yrs.	Maturity (days to)	Height (cm)
<input type="checkbox"/> AC CARNDUFF	47 bc	101	[1]	41 a	99	[1]	100	[2]	136	63
<input type="checkbox"/> AC LIGHTNING	46 cd	100	[1]	41 a	97	[1]	98	[2]	140	61
<input checked="" type="checkbox"/> CDC BETHUNE	51 a	110	[1]	41 a	98	[1]	104	[2]	138	61
<input type="checkbox"/> CDC NORMANDY	46 cd	99	[1]	42 a	100	[1]	99	[2]	138	65
<input checked="" type="checkbox"/> CDC VALOUR	45 cd	97	[1]	41 a	98	[1]	97	[2]	141	60
<input checked="" type="checkbox"/> LINOLA 1084	49 ab	106	[1]	41 a	98	[1]	102	[2]	143	64
<b>NORLIN</b>	<b>46 cd</b>	<b>100</b>	<b>[1]</b>	<b>42 a</b>	<b>100</b>	<b>[1]</b>	<b>100</b>	<b>[2]</b>	<b>138</b>	<b>66</b>
<input checked="" type="checkbox"/> TAURUS	44 d	95	[1]	40 a	95	[1]	95	[2]	143	64
LSD (P=.05) =	2.33			3.77						
CV value (%) =	3.39			6.22						

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

**NORLIN - check variety**

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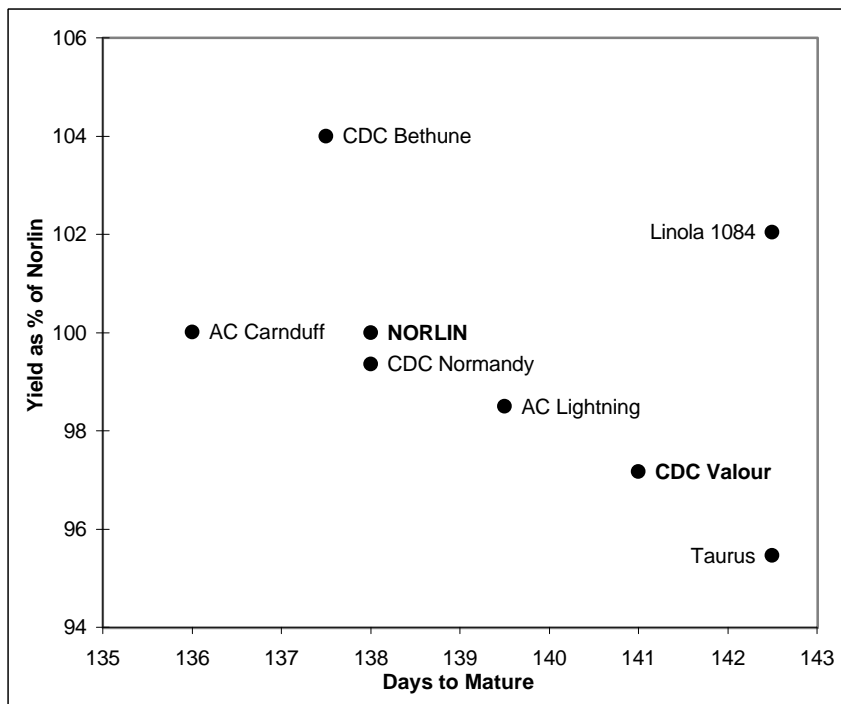
Protection under Plant Breeders' Rights applied for

# FLAX

Regional Variety

Performance

2001



# 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).