Flax Variety Trial

Summary:

Seven flax varieties were evaluated in Oyen to determine their performance in the brown soil zone, as part of the Alberta and Saskatchewan Regional Variety Testing Programs. The sites were planted in late May and harvested in mid-October. The flax varieties performed better during 2018 when compared to yields during 2017 and 2015, but the 2018 average was 13 bu/A below the 2016 average flax yield (46 bu/A). The increase in 2016 yield might be attributed to higher moisture received in the 2016 growing season.

More information on varieties is available in the variety guide in the seed.ab.ca seed guide or website or on the Alberta Agriculture and Rural Development website at www.agric.gov.ab.ca.

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Project Description: Please see "Variety Trials", page 1.

Table 1 Soil Analysis

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Soil Analysis		Oyen
Nitrogen*	(0-24")	66 lb/A (D)
Phosphorus*	(0-6")	28 lb/A (D)
Potassium*	(0-6")	645 lb/A (O)
Sulfate*	(0-24")	71 lb/A (O)
Soil Salinity*	(E.C.)	0.64 (G)
pН		7.7 (alkaline)
OM	(%)	2.5 (normal)
Soil Texture**		Loam

^{*} D = Deficient, M = Marginal, O = Optimum, E = Excess,

Table 2 **Precipitation 2018 (inches)**

Month	Oyen
May	.9
June	2.5
July	1.8
August	.4
Total	5.6

Table 3 Agronomic Information

	Oyen			
Previous crop	Fababeans			
Seeding Date	May 22			
Seeding Depth	1 inches			
Seedbed Condition	Excellent moisture conditions			
Seeding Rate	6 plants per square foot			
Fertilizer (26-18-5-3)	180 lb/A placed between the paired seed rows			
Seeder	Henderson 500 drill*			
Seedbed Preparation	Pre-seed glyphosate			
Herbicide	Roundup 1 L/A			
Fungicide	None applied			
Harvest Date:	October 15			

^{* 5} paired rows on 11" spacing,

Results:

Table 4. Flax - Oyen 2017

	Yield	Yield (bu/A	Height	Bushel Weight	TKW	
Variety	(lb/A)	at 60 lb/bu)	(cm)	(lb/bu)	(grams)	Stand*
AAC Bright	1897	32	68	55	5	1
AAC Marvelous	2028	34	66	56	6	1
AAC Prairie Sunshine	1940	32	65	56	6	1
CDC Bethune	1833	31	69	56	6	1
CDC Dorado	2020	34	59	57	7	1
CDC Glas	1942	32	67	55	6	1
FP2513	2060	34	67	56	6	1
Mean	1960	33	66	56	6	1
LSD	NS					
C.V. %						

^{*1 =} erect 9 = flat

Comments: Flax average yields at Oyen during 2018 performed better than previous year. They ranged from 31 to 34 bu/A, with an average yield of 33 bu/A. There was no statistically significant difference among the flax varieties tested. The average yield for the 2018 cropping season was very close to the average yield reported for dryland areas.