

Fall Rye Variety Trial

Summary:

A Fall Rye variety trial was conducted in 2018 to evaluate the performance of several varieties and their potential in the brown soil zone (Oyen) as part of the Alberta Regional Variety Testing Program. The variety trial responses showed a huge variability in yield performance between same varieties and climatic conditions. These responses might be attributed to soil condition variabilities in the field. It also shows the potential of this crop when conditions are favorable.

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Site Information:

Table 1 **Soil Analysis**

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)
pH	7.7 (A)
OM (%)	2.5 (N)
Soil Texture	Loam

* D = Deficient, M = Marginal, O = Optimum, E = Excess,
A= Alkaline, N=Normal

Table 2. **Precipitation (inches)**

Month	Oyen
May	.9
June	2.5
July	1.8
Aug	0.4
Total	5.6

Table 3 **Agronomic Information**

	Oyen Site
Previous Crop	Canola
Seeding Date	September 26 2017
Seeding Depth	1.5-2 inches
Seedbed Condition	Good moisture conditions
Seeding Rate	18 plants per square foot
Fertilizer**	235 lb/A 19-12-0
Seeder***	Henderson 500 drill
Seedbed Preparation	Pre-seed glyphosate
Herbicide	Buctril M + Achieve Liquid Gold +Turbocharge
Fungicide	None applied
Harvest Dates	August 14

Results:Table 4. **Fall Rye – Oyen 2017-18**

Variety	Yield (lb/A)	Yield (bu/A at 60 lb/bu)	Height (cm)	Bushel Weight (lb/bu)	TKW (grams)
Daniello	4007	67	67	59	32
Danko	3461	58	76	60	31
Gatano	4053	68	69	59	30
Hazlet	3246	54	72	59	40
Prima	3418	57	76	59	30
Mean	3637	61	72	59	32
LSD (0.05)	361	6			
C.V. %	12				

Comments: The Fall Rye variety trial at Oyen averaged 61 bu/A, ranging from 54 to 68 bu/A. There was a statistically significant difference among the variety tested. Gatano has the highest yield while Hazlet showed the lower yield.