

Oat Variety Trial

Summary:

Oat variety trials were conducted in 2018 to evaluate the performance of several varieties and their potential in the brown soil zone (Consort) as part of the Alberta and Saskatchewan Regional Variety Testing Programs. 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 potentiality of this crop when conditions are favorable.

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Site Information:

Table 1 **Soil Analysis**

Soil Analysis	Consort
Nitrogen* (0-24")	36 lb/A (D)
Phosphorus* (0-6")	27 lb/A (D)
Potassium* (0-6")	664 lb/A (O)
Sulfate* (0-24")	62 lb/A (O)
Soil Salinity* (E.C.)	0.38 (G)
pH	6.4 (Neutral)
OM (%)	2.4 (N)
Soil Texture	Loam

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

Table 2. **Precipitation (inches)**

Month	Consort
May	1.1
June	4.7
July	1.0
August	.9
Total	7.7

Table 3 **Agronomic Information**

	Consort
Previous Crop	Field Peas
Seeding Date	May 16
Seeding Depth	1.5-2 inches
Seedbed Condition	Good moisture conditions
Seeding Rate	18 plants per square foot
Fertilizer**	150 lb/A 26-18-5-3
Seeder***	Henderson 500 drill
Seedbed Preparation	Pre-seed glyphosate
Herbicide	Buctril M + Achieve Liquid Gold +Turbocharge
Fungicide	None applied
Harvest Dates:	September 6

Results:

Table 5. Saskatchewan Oat Trial – Consort 2018

Variety	Yield (lb/A)	Yield (bu/A at 60 lb/bu)	Height (cm)	Bushel Weight (lb/bu)	TKW (grams)
AC Morgan	4805	80	104	39	33
Akina	5660	94	93	37	34
CDC Arborg	4620	77	107	39	35
CDC Dancer	4583	76	105	39	30
CDC Morrison	4665	78	96	40	30
CDC Norseman	4595	77	103	38	34
CFA1502	5013	84	93	39	32
CS Camden	5394	90	95	39	35
Kara	4583	76	91	38	33
ORe3541M	5083	85	95	41	34
ORe3542M	4974	83	95	40	31
OT3087	5198	87	98	39	34
Mean	4931	82	98	39	33
LSD (0.05)	268	4			
C.V. %	14				

Comments: Oats varieties yielded an average of 82 bu/A, ranging from 76 to 94 bu/A. Akina was the variety which the highest yield while Kara and CDC Dancer had the lowest.