

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.

Cooperator: Barry Redel, Consort NE 11-35-7-W4

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	0.9
June	2.3
July	2.9
August	0.9
Total	7.0

Table 3 **Agronomic Information**

	Consort
Previous Crop	Field Peas
Seeding Date	May 10
Seeding Depth	1.5-2 inches
Seedbed Condition	Good moisture conditions
Seeding Rate	18 plants per square foot
Fertilizer**	140 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:	August 30

Results:

Table 5. Saskatchewan Oat Trial – Consort 2018

Variety	Yield (lb/A)	Yield (bu/A at 36 lb/bu)	Height (cm)	Bushel Weight (lb/bu)	TKW (grams)
AC Morgan	5508	153	89	40	44.0
Akina	5491	153	79	40	42.2
CDC Arborg	5158	143	83	40	43.7
CDC Dancer	5530	154	89	41	40.4
CDC Morrison	4789	133	78	39	36.7
CFA1502	5748	160	78	42	42.2
CS Camden	5413	150	83	40	44.1
Kara	5283	147	83	40	45.1
ORe3541M	5131	143	84	42	167.5
ORe3542M	5507	153	82	41	45.0
OT2122	5712	159	85	40	45.7
OT3087	5886	163	86	40	45.4
OT3097	5159	143	80	40	43.3
Mean	5409	150	83	41	53
LSD (0.05)					
C.V. %					

Comments: Oats varieties yielded an average of 150 bu/A, ranging from 133 to 163 bu/A. OT3087 was the variety which the highest yield while CDC Morrison and OT3097 had the lowest.