Triticale Variety Trial

Summary

Triticale variety trials were conducted at two sites in 2019 to evaluate the performance of these varieties in east-central Alberta (Acadia Valley and Consort). Only two triticale varieties were tested this year. Brevis variety yielded a 92 bu/A in the Consort site when compared with Acadia Valley with an average of 67 bu/A. This increase in yield could be attributed to a higher moisture conditions (~4 inch of rain) during the growing season at the Consort site.

More information on varieties is available in the seed.ab.ca seed guide published by the Alberta Seed Industry Partnership, the <u>www.seed.ab.ca</u> website or the Varieties of Cereal and Oilseed Crops report on the Alberta Agriculture and Rural Development website at <u>www.agric.gov.ab.ca</u>. Feel free to call the CARA office with your questions.

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

Site Information:

Table 1 Soil Analysis

Soil Analysis		Acadia Valley	Consort			
Nitrogen*	(0-24")	24 lb/A (D)	36 lb/A (D)			
Phosphorus*	(0-6")	12 lb/A (D)	27 lb/A (D)			
Potassium*	(0-6")	1200 lb/A (E)	664 lb/A (O)			
Sulfate*	(0-24")	13 lb/A (M)	62 lb/A (O)			
Soil Salinity*	(E.C.)	0.43 (G)	0.38 (G)			
рН		8 (alkaline)	6.4 (neutral)			
ОМ	(%)	4.6 (normal)	2.4 (normal)			
Soil Texture		Clay	Loam			

* D = Deficient, M = Marginal, O = Optimum, E = Excess,

Table 2. Precipitation 2019 (inches)

Month	Acadia Valley	Consort	
May	0.1	0.9	
June	2.8	2.3	
July	1.2	2.9	
August	1.8	0.9	
Total	5.9	7.0	

	Acadia Valley	Consort	
Previous Crop	Field Peas	Field Peas	
Seeding Date	May 15 May 10		
Seeding Depth	1.5 – 2.0 inches		
Seedbed Condition	Adequate moisture conditions for germination		
Seeding Rate	18 plants per square foot		
Fertilizer (26-18-5-3)	266 lb/A 140 lb/A placed between the paired seed rows		
Seeder	Henderson 500 drill (5 paired rows on 11" spacing, fertilizer between rows)		
Seedbed Preparation	Pre-seed glyphosate		
Herbicide	Buctril M, Achieve, Turbocharge		
Fungicide	None		
Harvest Date	September 23	October 6	

Table 3 Agronomic Information

Results:

Table 4 Triticale – Acadia Valley 2019

Variety	Yield (Ib/A)	Yield (bu/A at 52 lb/bu)	Yield % of Brevis	Height (cm)	Bushel Weight (lb/bu)	TKW (grams)
Brevis	2376	46	100.0	88	58	39.4
T256	2543	49	107.0	80	53	34.6
T267	2226	43	93.7	79	51	36.4
T270	2483	48	104.5	90	54	39.9
Mean	2407	47		84		
LSD (0.05)	605			11		
C.V. %	12.58			6.7		

Comments: There were no statistically significant differences in yield between triticale varieties at the Acadia Valley site. Mean average for the trial was 47 bu/A.

	Yield	Yield (bu/A	Yield % of	Height	Bushel Weight	ткw
Variety	(Ib/A)	at 52 lb/bu)	Brevis	(cm)	(lb/bu)	(grams)
Brevis	4191	81	100.0	93	60	49.5
T256	3784	73	90.3	79	57	49.0
T267	3781	73	90.2	86	53	50.9
T270	4140	80	98.8	87	58	52.3
Mean	3972	77		86		50.4
LSD (0.05)	998			16		4.1
C.V. %	12.58			9.17		4.08

Table 5 Triticale – Consort 2019

Comments: There were no statistically significant differences in yield among the two varieties tested in Consort. Mean average for the trial was 77 bu/A. The Consort site yielded 30 bu/A higher than Acadia Valley site.

