



**Plot2
Farm**

Comparing Feed Barley Seeding Rates

Figure 1: Large chlorotic area spanning across parts of replication 3 and 4. Photo taken July 8, 2020 at 5-6 leaf stage.

Introduction

Partnering with Devin Hartzler of Triple H Farms (Carstairs, AB), this trial investigated impacts of increasing seeding rates on yield of CDC Austenson. The trial was seeded with a 51' hoe drill with double shoot openers at 10" spacings. Target plant stands were 22 plants/sqft, 26 plants/sqft, and 30 plants/sqft with seeding rates of 120bu/ac, 142 bu/ac, and 164 bu/ac, respectively. Thousand kernel weight, germination and assumed mortality of 15% were used to determine seeding rates. At harvest, each treatment area was swathed. Two swaths, each swathed in opposite directions, were harvested using a pickup header. Yield measurements were taken using a weigh wagon. Unfortunately, hail from the previous year caused excess volunteers within the trial which potentially dampened results between treatments. As well, excess moisture led to large areas of drowned out and delayed crop.

Protocol #	Closest Town	Soil Type	Seeding Date	Harvest Date	Row Spacing (cm)	Varieties	Reps	Previous Crop	Tillage
B-0001	Carstairs, AB	Medium textured Orthic Black Chernozem	May 28, 2020	Sept. 17, 2020	25.4cm (10")	CDC Austenson	4	Barley	Fall disking and spring harrow

Herbicides	Seed Treatment	Foliar Fungicides	Fertilizer	Rainfall
Pre: Roundup WeatherMax	Vibrance Quattro	Trivapro	11-52-0 @ 48.89lbs/ac & 46-0-0 @ 123.15lbs/ac	241.38mm (9.5")
In-Crop: Axial Extreme + Infinity + AMS				

* No irrigation and no foliar insecticides.

Results

Seeding Rate	Plant Stand (plants/sqft)	Yield at 13.5% (bu/ac)	Protein %	Test Weight (kg/hL)	% Plump	% Thin
22 plants/sqft	62.6 a	72.6 a	9.30 a	65.5 a	72.3 a	8.9 a
26 plants/sqft	62.5 a	72.5 a	9.28 a	64.0 a	70.0 a	10.1 a
30 plants/sqft	59.6 a	69.4 a	9.45 a	63.0 a	63.4 a	11.6 a
ANOVA p-value	0.8293	0.3772	0.7505	0.1102	0.1161	0.4389
CV%	18.99%	6.12%	3.36%	2.93%	8.76%	24.37%

† Values with the same letter are not significantly different.

Summary

- No statistic difference was seen between treatments likely due to volunteer barley dampening seeding rate effects.