

Manitoba Agriculture Barley Seeding Rate

Project duration: May 2017 – August 2018

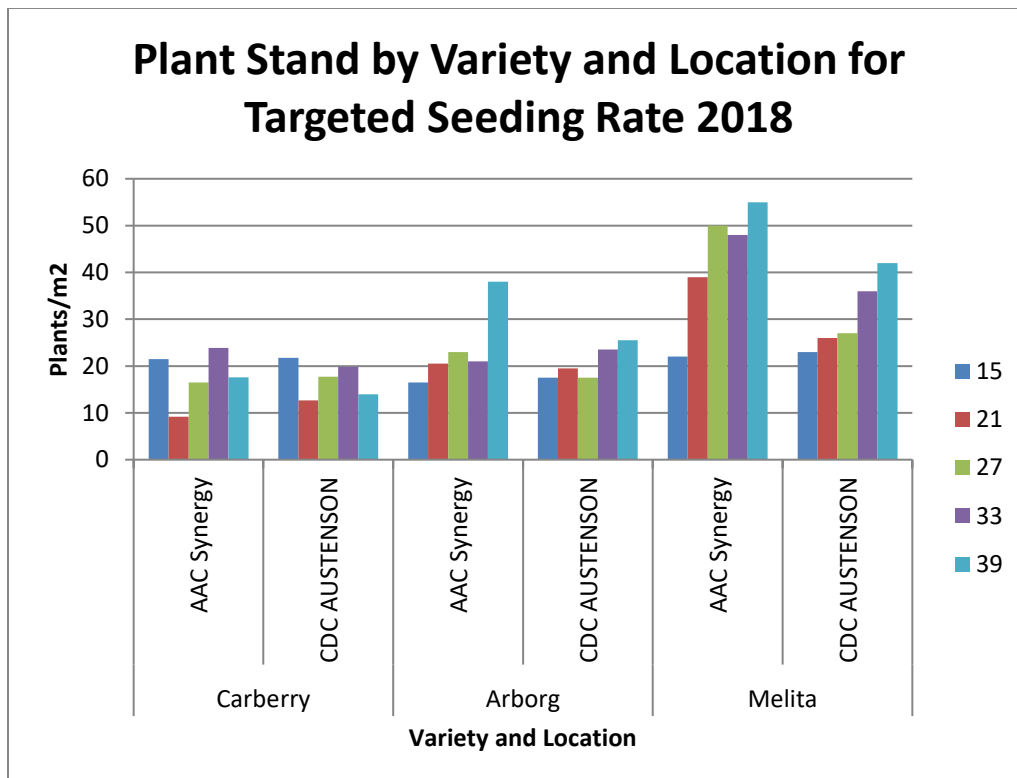
Objectives: To determine if optimum seeding rates differ by crop type and for individual varieties and to assist producers with the annual question of what target plant stands and seeding rates to aim for regarding newer spring cereal varieties. This project was conducted at four Manitoba Agriculture diversification centres in Manitoba including at Carberry, Arborg, Roblin and Melita.

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Results

The cumulative results of the two years for this project will be available at a later date. PCDF will post the link when it becomes available. This report concerns only the structure of the trial for 2018.

Figure 1: Diversification Centres comparative oats plant stand by variety and by seeding rate in 2018



Note: Roblin data excluded from plant stand due to error in plant counting

Figure 2: Yield demonstrated for variety AAC Synergy by seeding rate in 2018

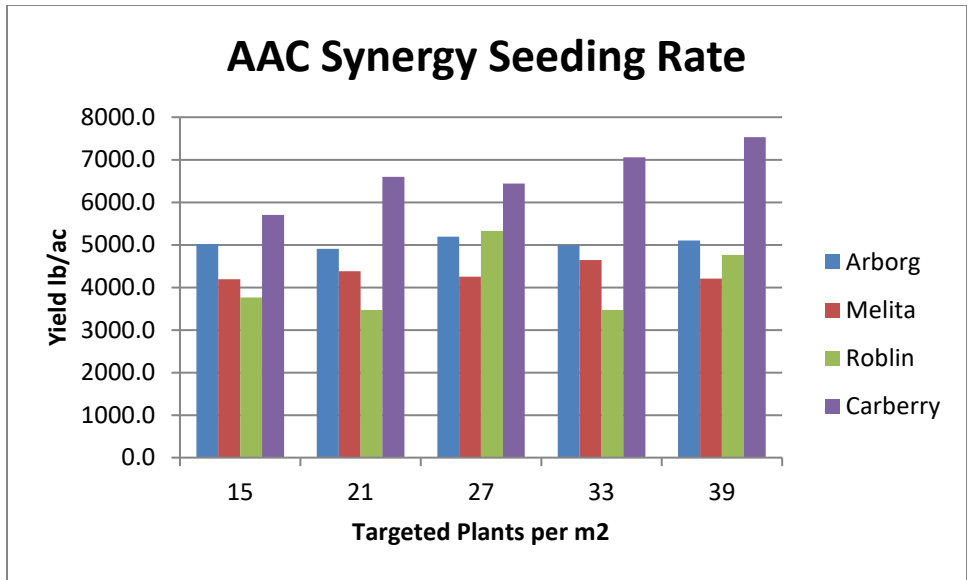
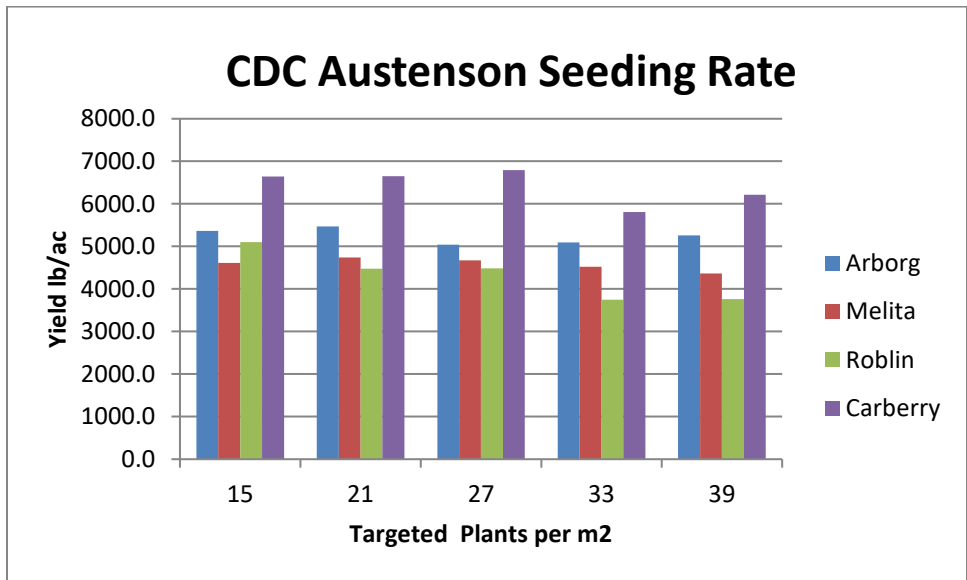


Figure 3: Yield demonstrated for variety CDC Austenson by Seeding Rate in 2018



Background

This project was developed and implemented by Manitoba Agriculture.

Roblin Materials & Methods

Experimental Design:	Random Complete Block Design
Entries:	5 seeding rates x 2 varieties
Seeding:	May 15
Harvest:	Aug 24

Table 1: Target Plant Populations

(Plants/m ²)	15	21	27	33	39
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Roblin Data collected and date collected

Emergence:	May 22
Emergence population:	June 9
% Seed mortality:	June 9
Heading (50%):	July 5
Head counts:	July 11
Lodging:	Aug 24
Yield and Moisture	Aug 24

Roblin Agronomic info

Previous year's crop:	Oat barley silage
Soil Type:	Erickson Loam Clay
Landscape:	Rolling with trees to the east
Seedbed preparation:	Heavy harrowed twice

Table 2: Roblin Spring 2018 Soil Test

Available	
N	54 lb/ac
P	13 ppm
K	228 ppm
S	118 lb/ac

Table 3: Roblin Added N and P

Blend	Blend (actual lbs/ac)	Actual lbs N	Actual lbs P
46-0-0	169.31	80	0
11-52-0-0	19.23	2.12	10
Total	-	82.12	10

N side-banded; P Banded with seed

Table 4: Roblin Pesticide Application

Crop stage	Date	Product	Rate
Pre-emerge	May 19	RoundUp	0.67 L/ac
		Heat	28.4g/ac
In-crop	July 13	Prestige XC	0.13 L/ac
		Axial	0.48L/ac
Desiccation	Aug 17	RoundUp	0.94 L/ac