

## Manitoba Agriculture Wheat 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.

**Collaborators:** Anastasia Kubinec – Manager, Crop Industry Development, Manitoba Agriculture  
Anne Kirk – Crop Industry Development, Manitoba Agriculture  
Rejean Picard and Earl Bargaen – Farm Production Extension

### 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 barley plant stand by variety and by seeding rate in 2018

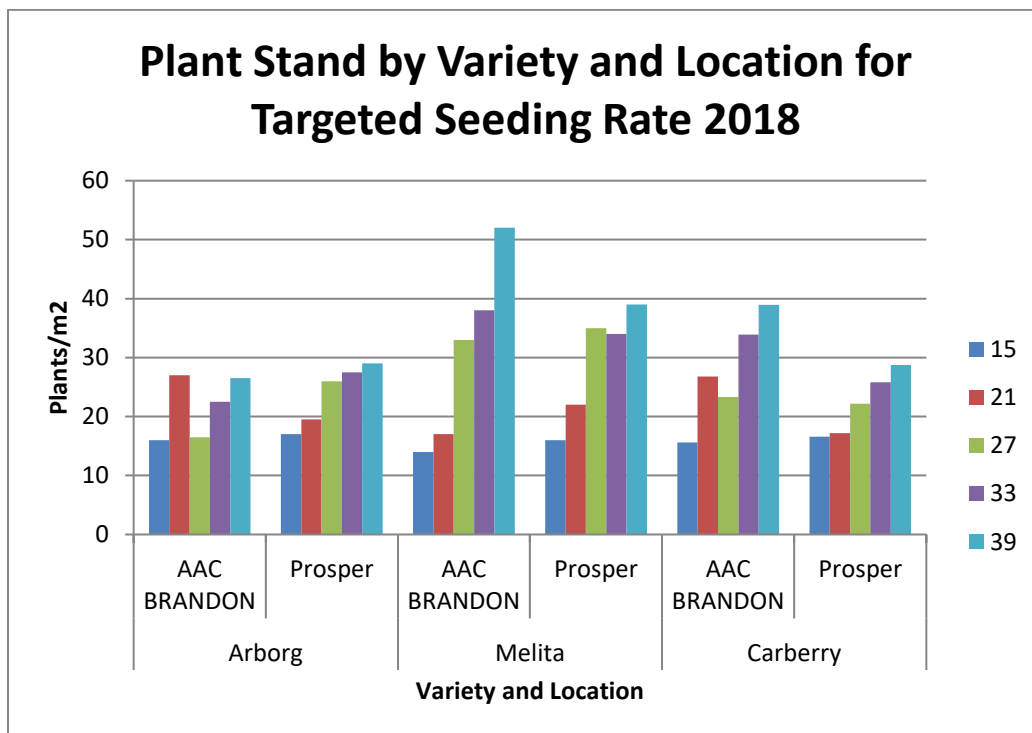


Figure 2: Yield demonstrated for variety AAC Brandon by seeding rate in 2018

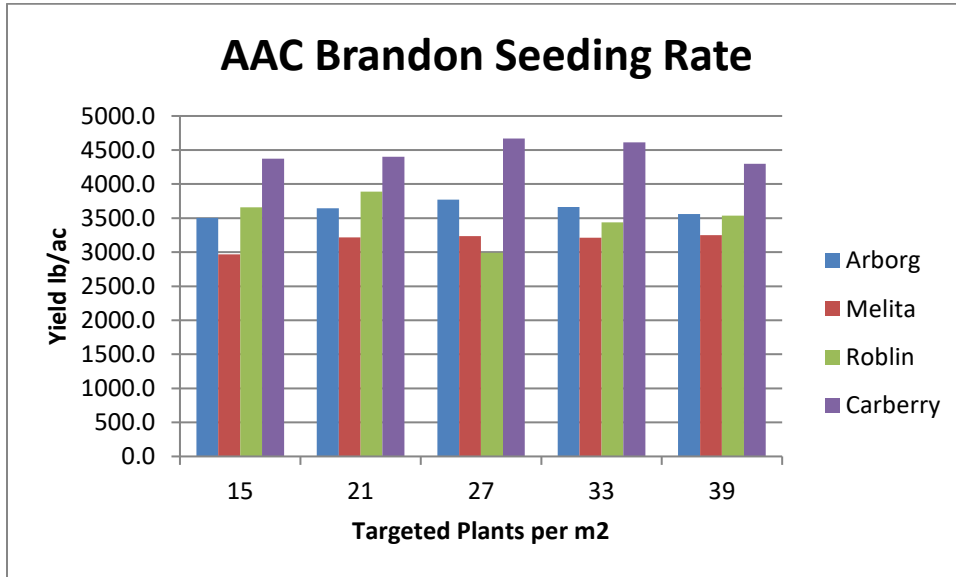
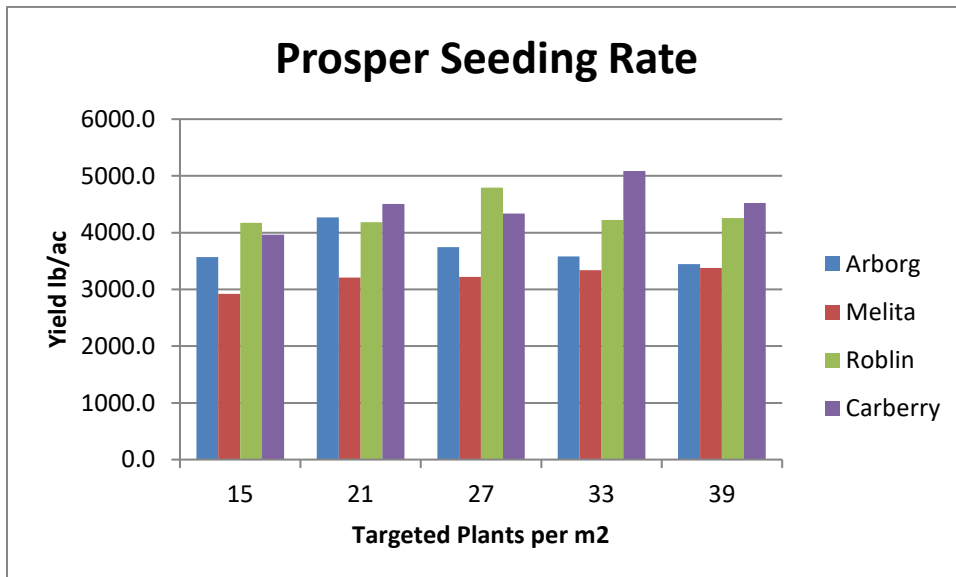


Figure 3: Yield demonstrated for variety Prosper by seeding rate in 2018



**Background**

This project was developed and implemented by Manitoba Agriculture.

**Roblin Materials & Methods**

Experimental Design: Random Complete Block Design  
 Entries: 2 varieties x 5 seeding rates  
 Seeding: May 15  
 Harvest: Aug 23

Table 1: Target Plant Populations

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

Emergence:	May 25
Emergence population:	June 9
% Seed mortality:	June 9
Heading (50%):	July 2
Head counts:	July 11
Lodging:	Aug 23
Yield and Moisture:	Aug 23

**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: Spring 2018 Soil Test

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

Table 3: Added N and P

Blend	Blend (actual lbs/ac)	Actual lbs N	Actual lbs P
46-0-0	204.1	96	0
11-52-0-0	19.23	2.12	10
Total	-	98.12	10

*N side-banded; P Banded with seed*

Table 4: 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	0.26 L/ac
		Axial	0.48L/ac
Desiccation	Aug 17	RoundUp	0.94 L/ac