

Determining Optimum Target Plant Stands for Spring Wheat in Manitoba

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. 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

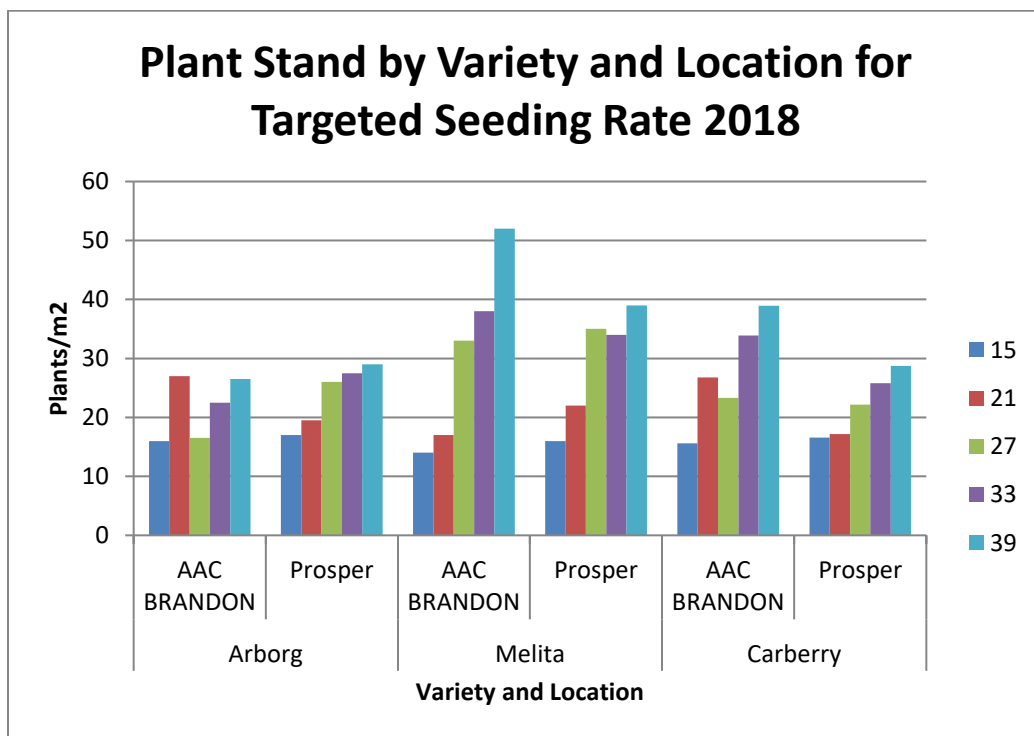


Figure 2: Yield demonstrated for variety AAC Brandon by seeding rate in 2018

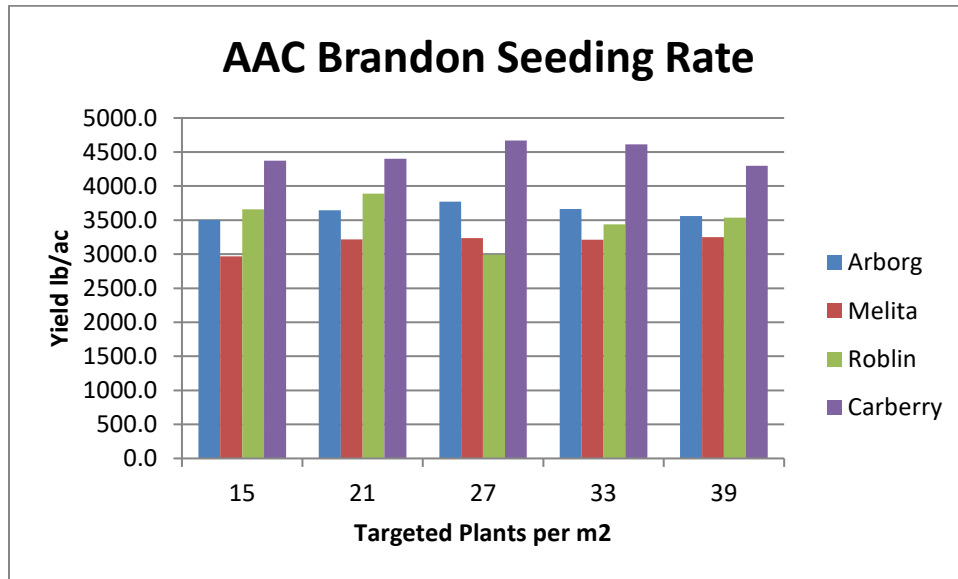
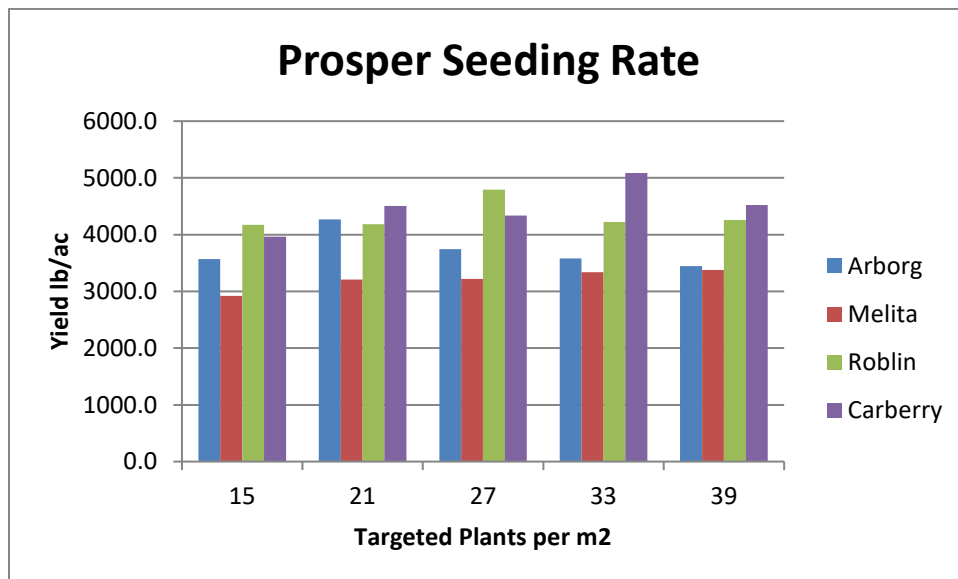


Figure 3: Yield demonstrated for variety Prosper by seeding rate in 2018



Background

This project was developed and implemented by Manitoba Agriculture.

Carberry Materials & Methods

Experimental Design	Random Complete Block Design
Entries	2 varieties x 5 seeding rates
Seeding	May 9
Harvest	Aug 21
Fertility	132 lb/ac actual N (46-0-0)

In Crop Weed Control

Tundra applied May 29, 2018
Achieve applied June 19, 2018
Reglone Applied August, 2018

Data collected

Emergence population
% Seed mortality
Head counts
Lodging
Yield and Moisture

Date collected

May 31
May 31
July 11
Aug 21
Aug 21

Table 1: Carberry Spring 2018 Soil Test

	Available
N	18 lb/ac
P	20 ppm
K	257 ppm
S	24 lb/ac