Determining Optimum Target Plant Stands for Oats 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.

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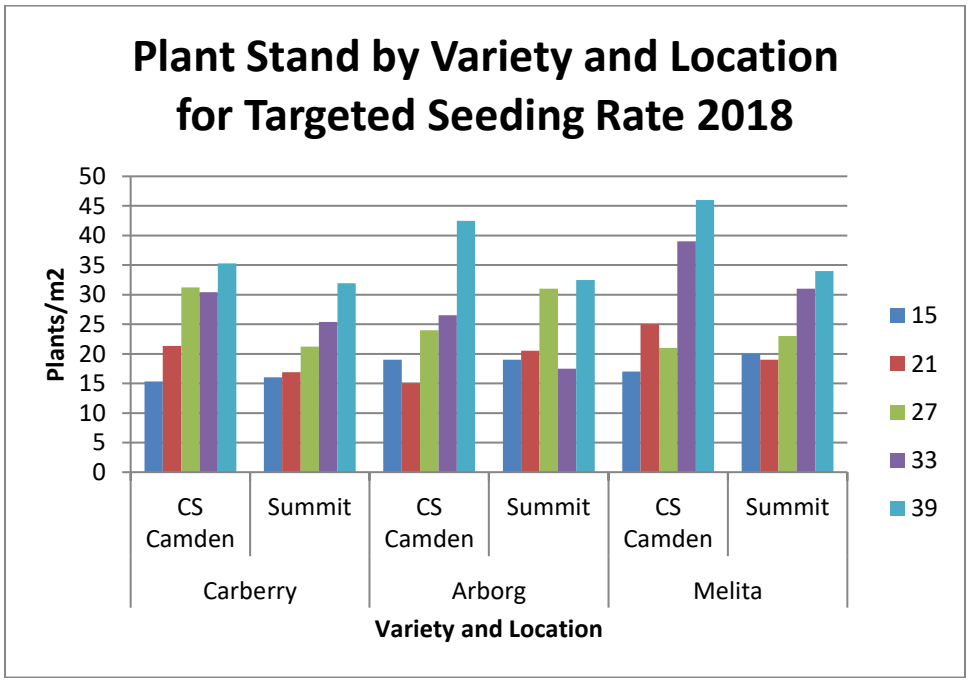
Results

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, but results are illustrated across the four Diversification Centres in Roblin, Carberry, Melita and Arborg.

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 CS Camden by seeding rate in 2018

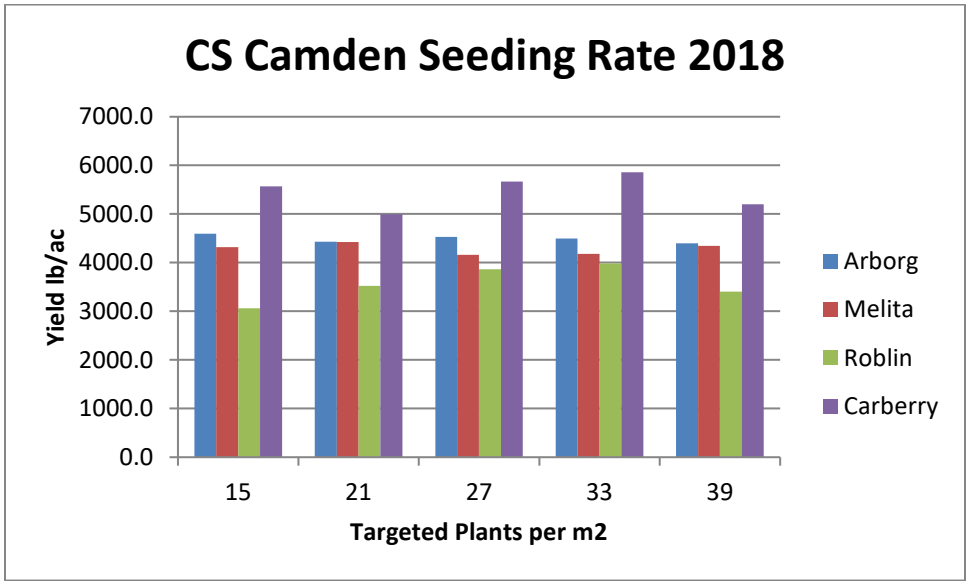
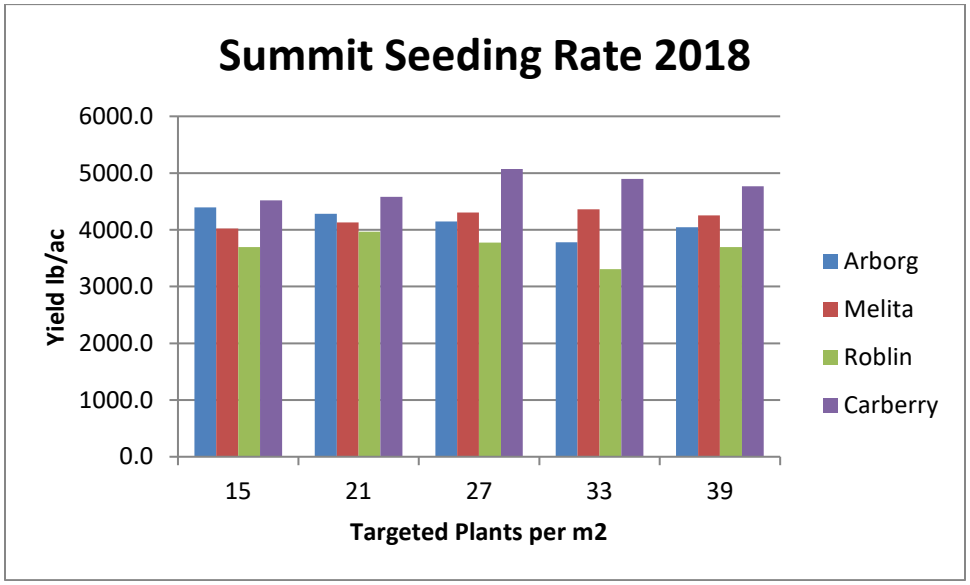


Figure 3: Yield demonstrated for variety Summit by Seeding Rate in 2018



Background

This project was developed and implemented by Manitoba Agriculture.

Carberry Materials & Methods

Fertility	91 lb/ac actual N (46-0-0); 10lb/ac actual Phos (11-52-0)
In Crop Weed Control	Buctril M applied May 29, 2018

	Reglone Applied August, 2018
Fungicide	No fungicide applied
Experimental Design	Random Complete Block Design
Entries	10 entries for each cereal
Seeding	May 9
Harvest	Aug 21

Data collected	**Date collected**
Emergence	May 9
% Seed mortality	May 31
Head counts	Jul 12
Lodging	Aug 21
Yield	Aug 21
Moisture	Aug 21

Table 1: Carberry Spring 2018 Soil Test

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