18.0 Advanced yield tests for Malt barley [AA Barley, AB Barley, AC Barley, AFOO Barley]

Project duration: 2018 (AFOO), 2019 (AC, AB & AA) -
Collaborators: Agriculture and Agrifood Canada, Brandon

Objectives

- To evaluate grain yield potential, maturity and lodging characteristics of different barley varieties under Prairie weather conditions

Materials and Methods

The trials were established at Melita in 2019 except for AFOO Barley that was a continuation from 2018 season. The layout was serpentine arranged as randomized complete block design with 3 replicates. Seeding occurred early on the 2nd and 3rd May under no till system and on oat stubble. A seeding depth of 1" was achieved on Waskada soil moisture reaching 24" and this was adequate for barley emergence within 7 days. Fertilizer blend was side banded during seeding with a seed hawk dual knife air seeder at 108-35-20-7-2Zn (N-P-K-S) actual lb ac^{-1}. Weed control was done between 4 and 6 leaf stage by the application of 0.5 L ac^{-1} Mextrol and 0.15 L ac^{-1} Puma. Grain yield was the major data component collected, but other components included plant height at heading, heading and maturity dates and lodging. All data were analyzed by Agriculture and Agrifood Canada in Brandon.

Results and Discussion

The trials for advanced barley yield tests are still ongoing and combined results will be published at a later date. Collaboration of this trial is between Agriculture and Agrifood Canada and WADO.

19.0 Dry bean variety trial – Agriculture and Agri-food Canada

Project duration: 2019-
Collaborator: Anfu Hou Ph.D., Agriculture and Agrifood Canada, Morden MB

Objectives

- Evaluation of yield potential and agronomic characteristics of different dry bean varieties and lines in southwest Manitoba

Background

Dry bean is grown in regions of the world that typically experience soil moisture deficits such as the Canadian Prairies during the growing season (Nleya et al., 2001). Development and release of new varieties require extensive screening and testing at different locations over many years in order to find