

Canadian Agri-Science Cluster for Horticulture 3



Update to Industry

2020-21 – Semi-Annual

Activity title:

Canadian Potato Variety Evaluation **16B** (Manitoba Fresh Market)

Name of Lead Researcher:

Dr. Tracy Shinnars-Carnelley, Peak of the Market

Names of Collaborators and Institutions:

Activity Objectives (as per approved workplan):

The objective of this research was to evaluate the yield and quality parameters of red-skinned/white flesh, yellow, white, russet, and creamer potato varieties and assess their potential as fresh market varieties for Manitoba.

Research Progress to Date:

In 2020, 42 potato varieties were evaluated at the Peak of the Market Research Site located in Winkler Manitoba. The trial included red-skinned/ white flesh, yellow, white, russet, and creamer types, as well as the industry standards. The varieties evaluated in this trial were provided by private breeders, breeder's Canadian agents, and variety developers. The trial was established and managed by type i.e. reds, yellows, creamers, and where possible agronomic practices were suited to the type of variety. Specifically, the in-row plant spacing, fertility, top-killing, and harvest dates were managed for each type.

During the growing season data was collected on stand count and stem number per plant. Observations and field notes were made on metribuzin sensitivity, foliar disease presence, and maturity. At harvest, data was collected on total yield and size profile, and sub- samples of tubers were retained for visual assessments of internal and external defects. This will be completed by the end of December.

Extension Activities (presentations to growers, articles, poster presentations, etc.):

A grower only field day was held at the Peak of the Market Research Site on August 13, 2020. Freshly dug samples of each variety were on display.

COVID-19 Related Challenges:

COVID-19 did not impact the field trial activities of this project. However, the knowledge transfer plan is impacted. The field day attendance was lower than hoped as we had to limit attendance in order to adhere to the local public health gathering size limits. The fall in-person grower meeting has also been cancelled so there will not be an opportunity for growers to see washed tuber samples from the 2020 field trial. Photographs of each variety have been taken and will be incorporated into a virtual report to be completed early in 2021.

Key Message(s):

Growers are very interested in evaluating and identifying new varieties that have improved yield, quality, or other agronomic or nutritional attributes compared to the current industry standard varieties. Trials like this allow for efficient evaluation and comparison of many varieties from different breeders or developers and help to increase the likelihood of identifying varieties with potential for production in Manitoba.

This project is generously funded through the Canadian Agri-Science Cluster for Horticulture 3, in cooperation with Agriculture and Agri-Food Canada's AgriScience Program, a Canadian Agricultural Partnership initiative, the Canadian Horticultural Council, and industry contributors.



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