

Canadian Agri-Science Cluster for Horticulture 3











Update to Industry

2018-2019

Activity title:

Potato Variety Evaluation

Name of Lead Researcher:

Virginia Dickison, Agriculture and Agri-Food Canada

Names of Collaborators and Institutions:

Michele Konschuh, Government of Alberta, Heather Meberg, BC Agriculture in the Classroom, University of the Fraser Valley Mary Kay Sonier, PEI Potato Board, David Main, AAFC Charlottetown, Parkland Seed Potatoes, Real Potatoes, Dr. J. A. Sullivan and Dr. K. S. Jordan, University of Guelph, Ontario Potato Board, Stuart Cairns Potato Research Committee, Dr. Tracy Shinners-Carnelley, Peak of the Market, André Gagnon, Progest Inc. 2001., Sophie Massie – Progest 2001 inc., Kristine Naess – CRLB

Activity Objectives (as per approved workplan):

To evaluate the adaptation, yield performance (total and marketable), external and internal quality, cook quality and visual reaction to pests and disease as compared to industry standards when grown under regional conditions at trial sites across Canada.

Research Progress to Date:

In 2018, approximately 60 new varieties were evaluated at 5 trial sites across Canada. The trials showed variable growing conditions at each location allowing for evaluation of varieties under various environmental extremes.

The transition to a collaborative framework for potato variety trials across Canada had a good initial year. We look forward to a progressive increases in standardization of evaluations and communication of trial data to allow for more knowledge transfer and better decision making capacity for the advancement of new varieties in the market.

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

Field days were held at each trial location to allow an opportunity for stake holders to evaluate the varieties in the field. Handouts were provided with data on each variety to increase the ability for stakeholders to evaluate each variety. Presentations were made at grower meetings in each region of Canada to inform stakeholders of the results of the trials. Highlights of varieties were given in presentations as well as presentations were shared through virtual means to increase knowledge transfer. In total, over 500 stakeholders were involved in various outreach activities. This is a large focus of the project and collaborators are working together to increase engagement in the National Potato Industry.

Early Outcomes (if any) or Challenges:

The project funding was not finalized until late in the year therefore, issues surrounding hiring and project details were difficult and rushed.

2018, was a hot and dry growing season and a cool and moist harvest season for most regions. The varieties were, therefore, evaluated under harsh conditions enabling observations of varieties exposed to many variables.

11 out 15 2017 Accelerated Release varieties from the National Potato Breeding Program at Agriculture and Agri-Food Canada were bid upon. Two successful AR 2018 were bid upon early in the program because of the potential they have shown in early trials.

Key Message(s):

The collaborative framework model of the CHC Cluster Project will allow for increased standardization to evaluate potato varieties across Canada. It will also assists in the communication and knowledge transfer from Private Breeders, contractors, government, industry and all stakeholders.

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