

Canadian Agri-Science Cluster for Horticulture 3



Update to Industry

2020-21 – Semi-Annual

Activity title:

End use focused variety development (British Columbia) - #16 Variety Evaluation

Name of Lead Researcher:

Heather Meberg – E.S. Cropconsult Ltd.

Names of Collaborators and Institutions:

BC Agriculture in the Classroom and University of the Fraser Valley

Activity Objectives (as per approved workplan):

- 1) Provide data to variety developers to assist in decision making;
- 2) Provide preliminary agronomic and culinary data to assist producers with the adoption of new cultivars;
- 3) Fill the gap between identifying promising new varieties from breeding programs and the adoption of varieties for use in the industry.

Research Progress to Date:

The 2020 Potato Variety Trials (BCPVT) was planted on May 13th, 2020 at Brent Kelly Farms in East Delta, BC. The grower 'false planted approximately 700 feet of eight rows with fertilizer but no potatoes. Potatoes for the trial were then hand planted into these rows. The demonstration plots were five feet in length by two rows and there were 27 varieties from AAFC plus the 43 varieties that were planted in the replicated trial. There were 70 varieties planted in the ten hill demo plots, which were harvested and displayed on August 19th, 2020. There were 43 varieties planted in the replicated trial. The replicated plots were 15 feet in length by two rows. Each row of each plot included five hills of warba seed as a buffer. They were planted May 13th, 2020 and top killed on September 12th, 2020 and harvested on October 7th, 2020. There were no irrigation events but the crop received some timely rains. The field and plots were fertilized with 550 lbs of 6.4-24-6.4 in furrow at planting plus received 500 lbs. of 14.2-0-35 as a pre plant broadcast. The plots were treated the same as the surrounding field of Orchestra with insecticide and fungicide sprays as required. Harvest conditions were wet, leading to a delayed harvest and some rot in the plots. Information on each variety was collected at harvest. A selection of each variety was saved for display at grower meetings. There are 14 varieties that will be delivered to the Ag in the classroom teaching kitchens and University of the Fraser Valley for further evaluation. The first round of samples has been delivered but data has not yet been received.

The field day was delivered on August 19th, 2020 with 70 varieties on display. Due to COVID-19 restrictions the plots were set up at one direction only for viewing and only ten participants in the plots at a time (one-hour time slots). There were over 50 attendees including buyers of BC product, event sponsors, industry, growers and potato grower visitors from AB and PEI. Growers were asked to complete a feedback form on the varieties displayed. Feedback forms were distributed, and 18 forms were returned. Varieties that had 44% or more of the respondents interested were CO99076-6R, Rickey Russet, Jennifer, Bonnata KWS, Agata, Oriana and FV16324-08. The following varieties had the interest of 28-39% of respondents – F150919-03, AR2018-10, F14119, Anivia, Merida, Carminelle and Rosi.

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

POTATO VARIETY TRIAL FIELD DAY: Organized by E.S.Cropconsult Ltd. and the BC Potato and Vegetable Growers Association. Held at Brent Kelly Farms, across from 4044 96th St Delta, BC on August 19th, 2020. There were approximately 50 attendees

COVID-19 Related Challenges:

Limited participants at the field day due to COVID-19 restrictions. There was no social event attached to the field day this year. Attendees booked one-hour time slots to view the potatoes with a maximum of ten people in the plot at a time. The teaching kitchens are still willing to assess our potatoes. All things considered the project went very well.

Key Message(s):

The 2020 BCPVT was an important project for industry. Approximately 50 people attended the field day and a hand-out has been prepared for those who could not attend in person (please see attached). There were 70 varieties on display at the field day. Complete harvest data was collected on all 43 varieties in the replicated trial. Fourteen varieties were selected for further assessment in teaching kitchens and post-harvest storage assessments at the University of the Fraser Valley.

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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