# Canadian Potato Variety Evaluation Alberta (2018-2022)

## Chandra Singh<sup>1</sup> and Michele Konschuh<sup>2</sup>

1 Lethbridge College and 2 University of Lethbridge

### Purpose

- The project is part of a larger National study commissioned by Canadian Horticultural Council and extends our previous variety evaluation work.
- Using a collaborative approach, we evaluate potential potato varieties, regardless of breeding origin, that might be well suited to Alberta's climate and end-uses.
- Including some agronomy (fertility, spacing, time of harvest) in the evaluations allows us to provide sponsors with additional relevant information when making decisions about developing new varieties.



# **Objectives**

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



# 2019



# Agronomics

- Includes variety evaluations relative to check varieties
- Sponsors have the opportunity to select N fertility, plant spacing and time of harvest
- Entries in 2020 were grown in replicated plots under lateral irrigation at the Crop Diversification Centre South in Brooks, AB



#### **CDCS 2020**

- 16 French Fry clones for AAFC 9 Chipping clones
- 6 Fresh Market clones for AAFC
- 21 industry entries in replicated trials (7 chipping cultivars, 7 French fry cultivars, 12 table cultivars)
- 20 industry entries in alternate N plots



### **Outcomes**

- Relevant information about entries (emergence, stand, vigour, and maturity data; yield by size category, specific gravity, defects and deformities)
- A virtual field day was photographed at CDCS to allow stakeholders to visually evaluate the cultivars.
- Sponsors also had the opportunity to view the growing crop and check cultivars from the demo rows during the season.

# Co-operators

The National project is coordinated by the Canadian Horticultural Council and is supported financially by Agriculture and Agri-Food Canada's Growing Forward 3 Science Cluster, Lethbridge College, Alberta Agriculture and Forestry, the Potato Growers of Alberta and through cash and in-kind contributions in 2020 from potato industry partners:

- ASPI
- ConAgra Foods, Lamb Weston Division
- **Edmonton Potato Growers**
- Old Dutch Foods
- Parkland Seed Potatoes
- Rockyview Seed Potatoes
- Tuberosum Technologies Inc.







