

# AIM FIELD TOUR: WESTERN

Thursday, September 3rd, 2020

## Physiological Age Trial with Genesis Crop Systems/MacLennan Properties

### Trial Details:

- A: Investigating the impact of warming up seed for 2 weeks in January (before breaking dormancy) to increase physiological age on 7 processing varieties (Dakota, Clearwater, Prospect, Mountain Gem, Payette, Shepody, Russet Burbank)
- B: Investigating the impact of keeping seed refrigerated until planting for 2 varieties when compared with conventional warm up of seed in storage (Russet Burbank, Alverstone Russet)

Planting Date: May 21st

### Difference in Degree-Days above 4C:

between Winter Warm-up and Conventional:

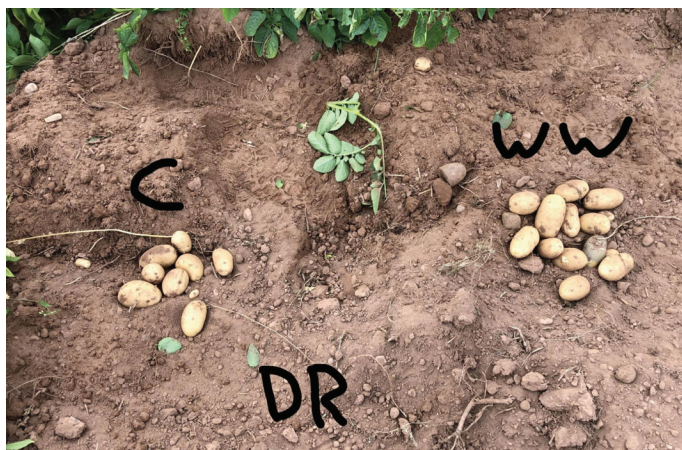
+145 DD (13 days at 15 C)

between Conventional and Refrigerated:

+236 DD to May 15th

**Demo Plots (Left to Right):** Dakota Conventional  
Clearwater Conventional  
Payette Conventional  
Prospect Conventional  
Mountain Gem Conventional  
Shepody Conventional

Dakota Warmed  
Clearwater Warmed  
Payette Warmed  
Prospect Warmed  
Mountain Gem Warmed  
Shepody Warmed



*Tuber samples from August 25th  
Dakota Russet on left, Prospect on right*

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## Biofumigation Trial with Genesis Crop Systems/ MacLennan Properties

### Trial Details:

A: Assessing the impact of Caliente Rojo biofumigant mustard on populations of Verticillium and root lesion nematodes and marketable potato yields the following year compared with brown mustard, sorghum sudangrass, and ryegrass check strip.

**Crops Planted:** Caliente Rojo biofumigant mustard  
Brown Mustard (Centennial variety)  
Sorghum Sudangrass  
Annual Ryegrass (check)

**Planting Date:** June 7th

**Mustard Incorporation Date:** July 22nd

**Incorporated with:** Flail chopper, immediately followed by Vaderstad land preparer

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## Evaluation of Different Legumes on Potato Early Dying (PED) with Dock Corner Farms

### Trial Details:

A: Assessing the effect of different legume species on Verticillium and root lesion nematode populations as well as marketable yield of potatoes in 2021. Established in the spring of 2019.  
One of two sites established in 2019. Both will be potatoes in 2021.  
Will also take soil organic matter/soil health tests this fall after two years of forage.  
Alfalfa/Timothy, Red Clover, White Clover/Festolium Mix, Festolium, Birdsfoot Trefoil/Festolium

**Spring 2019:** V. dahliae: 9395 cells/g RLN: 5855/kg Soil OM: 2.4%

	V. dahliae (Fall'19)	RLN (Fall'19)	RLN (Spring '20)	Soil OM	First Cut DM (t/ac)
Alfalfa/Timothy:	8593 cells/g	5816/kg	1740/kg	2.3%	0.235
Red Clover:	9748 cells/g	10494/kg	12669/kg	2.2%	0.234
White Clover:	6185 cells/g	5824/kg	1727/kg	2.1%	0.203
Festolium:	6582 cells/g	9614/kg	3444/kg	2.4%	0.189