Situation in Canada & the US
Potato Day, February 15, 2017
Dickeya identified as *E. chrysanthemi* has worldwide distribution
  - sporadically in NA for several years;
  - 15 US states
Documented in potatoes from Florida and Ontario in 2014
By 2015 widespread distribution in potato crops in eastern US causing substantial losses
  - One large chip grower lost U$1.5 million due to stand losses caused by Dickeya
  - A small tablestock grower lost her crop two years in a row

Dr. Gary Secor: Tracking Dickeya in North America, WVPGA Grower Conference February 2017
Distribution of Dickeya in North America 2016
Diagnostic Research

- How accurate are the current conventional PCR ADE tests across sample types?
- How consistent are conventional PCR ADE results between diagnostic laboratories?
Six labs involved in survey
- Maine Seed Certification Lab
- University of Maine
- North Dakota State University
- ACS Inc. (New Brunswick)
- Wisconsin Plant Disease Diagnostic Clinic
- Wisconsin Seed Certification Lab

10 unknown DNA samples examined.

Testing accuracy varied based on sample type - Water samples were challenging to interpret.

Testing across labs was consistent.

Brooke Babler: Dickeya Diagnostics – Examining Conventional ADE PCR Tests, WPVGA Grower Conference, February 2017
What we need to know

- Is it spread during cutting, harvest and handling??
- Does Dickeya spread in the field?
- The source of Dickeya
  - Other hosts
    - *D. dianthicola* has a huge host range
      - Ornamentals and landscape plants
      - For instance in Scotland stinging nettles (*Uritica*) is a great host
- Water – need to document
  - Limited testing in US, but some positive samples from surface water
- Seed certification
  - another huge issue
  - Blackleg has not been a part of certification in the US
    - Just added to Maine’s certification program

Dr. Gary Secor: Tracking Dickeya in North America, WVPGA Grower Conference February 2017
In Canada

- *Dickeya dianthicola* is not a quarantine pest and its symptoms (blackleg) are recorded in seed certification inspections with no differentiation or confirmation of whether blackleg symptoms are caused by *Pectobacterium spp.* or *Dickeya spp.*

- Blackleg is recorded in the Canadian Seed Potato Certification system with a tolerance for blackleg and wilts that varies with class – 0% at PE, .1% at E1, .2% at E2 etc.
In PEI

- We have checked with CFIA inspection staff and they have not seen any increase in blackleg symptoms during field inspection in recent years.

- A project was initiated in the fall of 2016 for growers to voluntarily submit samples to the PQI to be tested for Dickeya using the sample size and testing protocol used by ACS Lab in NB.
2017

- Under the project we can still accept samples for testing for local seed or samples growers wish to submit of seed lots that they will be importing.

- Good sanitation practices help control the spread of blackleg similar to other bacterial diseases (like BRR). This will be detailed in following presentation.
THANK YOU