



## NATIONAL POTATO COUNCIL

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EST. 1948

October 14, 2016

To: State Managers and Seed Certification Officials  
From: John Keeling, Executive VP and CEO, National Potato Council

Re: Dickeya Surveys and Testing Methodology

The National Potato Council has received a number of calls and other contacts regarding the presence of Dickeya in North America and particularly with regard to the role of laboratory testing in making determinations on the presence of Dickeya in seed potatoes. NPC working with Dr. Amy Charkowski and Dr. Gary Secor hosted a conference call to provide the most up to date information on Dickeya with a specific objective of understanding the scientific consensus on sampling and testing methodologies. The following are the key takeaways from the Conference Call:

- Dickeya is not a disease that we should panic over. It is a bacterial disease that can be effectively managed through sanitation, seed lot testing and certification inspections, just like other bacterial and viral potato diseases.
- Controlling the bacteria in the seed supply is the key to management and or elimination. Management practices include sanitation at harvest and planting and segregation of seed lots in storage.
- Survey work to understand the prevalence of Dickeya in all potato growing regions is a necessary first step in developing an action plan for management. Plants with Blackleg symptoms should be tested for Dickeya and for samples testing positive the particular strain should be identified thorough additional testing. Additional samples of asymptomatic plants are recommended since Dickeya may not express given unique environmental conditions.
- The potato scientific community has developed and validated laboratory protocols for detecting the presence of Dickeya and the strains of that bacteria. These test results can inform decisions related to on farm management and to commercial transactions for seed potatoes.
- Seed purchasers with concerns about Dickeya should ask for laboratory test results for Dickeya to be included on the North American Seed Health Certificate. Like other testing

for bacterial diseases a larger sample size is always desired. From the perspective of obtaining reliable results at the lowest cost the general recommendation in the potato industry is 400 tuber per lot. Obviously some adjustment will be necessary for small seed lots.

- The following labs are using the recommended testing protocol. We cannot verify if these labs will have the capacity to process samples at any point in time. We are also not aware of the specific costs of processing samples in individual labs. This is not a comprehensive list of labs that have the capabilities to do Dickeya testing. No recommendation for any of these labs is implied by their inclusion in this memo.
  - Agdia Inc.  
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  - Plant Diagnostic Lab  
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  - Maine Seed Certification Testing Laboratory  
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