



# Potato Progress

Research and Extension for Washington's Potato Industry

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## 2009 Commercial Seed Lot Trial Information

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Carrie Huffman Wohleb 509-754-2011 (Grant/Adams County WSU Extension)

Commercial potato seed samples are requested for the 2009 Washington Seed Lot Trial. Two to three hundred whole (single drop) seed is an acceptable sample size, or 50 lbs of 4 oz single drop seed. This seed should not be treated with insecticide or fungicide. Seed tubers need to be uniformly small (not larger than 4 oz) because no seed cutting is done and a cup-type planter is used. A sample that represents the entire seed lot received is most desirable. Sampling the first (or last) 300 seed from the truck is not likely to provide a representative sample of the lot. Sample tags may be obtained by calling the Potato Commission at 509-765-8845.

Your assistance with collection and drop off of seed samples is needed. Seed samples may be taken to the WSU Othello Research Unit (509-488-3191); located on Booker Road ¼ mile south from State Highway 26 and about five miles east of Othello. For sample pickup and any questions regarding the seed lot trials please call:

**South Basin:** Tim Waters (509-545-3511), Mark Pavek (509-335-6861), or Zach Holden (509-335-3452).

**North Basin:** Carrie Huffman Wohleb (509-754-2011), Mark Pavek (509-335-6861), or Zach Holden (509-335-3452).

In the North Basin, one seed "drop-off" has been established. It is located at Qualls Ag Labs (Mick Qualls, 509-787-4210 ext 16) on the corner of Dodson Road and Road 4; come to front office between 8 am and 5 pm. Please call the numbers below to arrange additional pickup sites. Samples will be picked up at **2:00 pm the day before each planting date** (below) to be included. Growers planting in early March should drop their samples off at the Othello Research Center or store the samples and call the numbers below for pickup. For all alternative pickup locations or questions please call Mark Pavek at 509-335-6861 or Zach Holden at 509-335-3452.

The remaining seed lot planting date for 2009 is:

4th (Late)      May 5

This year's virus reading of the seed lots will take place on June 9 and 23.

The 2009 Potato Field Day is scheduled for Friday June 26.

## Open House for Golden Nematode Survey

An open house has been arranged on **May 1, 2009** to update interested growers and allied industry members on the survey work to be completed by WSDA regarding soil tests for golden nematode. There will be an informal discussion by USDA-APHIS, updating growers on this program, and Dr. Ekaterini Riga will be available to answer any background questions about golden nematode (and other cyst nematodes). The group will then tour the laboratory and storage area where Linhai Zhang and Tom Wessels from WSDA will talk about report data, handling, safeguarding and processing soil samples, and disposing of waste. This survey program on golden nematode is part of trace-forward work that the U.S. agreed to do following the find of golden nematode in potato seed fields in Alberta, Canada.

The event will start at **10 a.m.** in the West Building on the IAREC/WSU campus, 24106 N. Bunn Rd., Prosser, WA 99350.

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## IPM Supplies Reminder

### *Insect Trapping Supplies*

The commission is once again offering free supplies to WA growers for trapping leafhoppers and tuberworm. The available supplies are pictured below.

To receive supplies for trapping these insects, simply call the commission office, or send an email to [ajensen@potatoes.com](mailto:ajensen@potatoes.com) specifying how many fields you need to monitor and/or how many traps you need. For help with insect identification or any other aspect of insect monitoring, call (509-765-8845) or email Andy Jensen at the commission office.



## Bacterial Diseases: Blackleg

See also: <http://www.potatoes.com/research.cfm>



Note the black color - rhizoctonia stem canker is similar but causes brown lesions.

Plants that grow from infected seed often die shortly after emergence. Symptoms include:  
 \*inky black stem below ground, sometimes extended far above ground;  
 \*wilting of leaves or entire stems.

### General Information

**Causal Agent:** *Pectobacterium atrosepticum*, *Dickeya* spp.

**Biology:** Blackleg begins with planting infected seed. Seed can be infected during seed production, handling, cutting, and planting. Infected seed pieces sometimes rot before emergence -- this is called seed piece decay. Not all infected plants produce symptoms, but can still pass the infection to progeny tubers and therefore into storage.

**Distribution:** Blackleg occurs everywhere potatoes are grown.

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### Management

1. Prevention is key.
2. Know your seed source -- healthy seed is critical.
3. Sanitize seed cutting equipment between lots by cleaning all soil and debris from cutting equipment and applying a disinfectant.
4. Plant well-suberized seed into well-drained soil of 50-58 degrees F.

Washington State Potato Commission (Phone: 509-765-8845)

## Bacterial Diseases: Aerial Stem Rot

See also: <http://www.potatoes.com/research.cfm>



Infected stems become slimy and are a paler green color.



Leaves on infected stems are often wilted and turn yellow.

### General Information

**Causal Agents:** *Pectobacterium atrosepticum*, *Pectobacterium carotovora* subsp. *carotovora*, *Dickeya* spp.

**Biology:** Bacteria that cause aerial stem rot are nearly everywhere in the environment. They are moved in irrigation water, in aerosols, and on insects. Crop debris and soil are often sources of these bacteria. Disease development is favored by dense canopies, warm weather, and long periods of leaf wetness. Bacterial reproduction can be **very rapid** under warm moist conditions.

**Distribution:** Bacterial aerial stem rot occurs everywhere potatoes are grown.

### Management

1. The critical issue: limit optimal growing conditions for the bacteria.
2. Minimize long periods of leaf wetness.
3. Avoid overly dense canopies.
4. Carefully manage irrigation, especially avoiding excess irrigation during hot weather; plants cannot use as much water in very hot weather and excess moisture encourages bacterial growth.

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