Potato Progress

Research and Extension for Washington's Potato Industry
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36th Annual Hermiston Farm Fair & Trade Show

Hermiston Conference Center, 415 S. Hwy 395

WEDNESDAY, DECEMBER 2, 2009

POTATO PRODUCTION SEMINAR, AM – Main Stage

Moderator – Don Horneck, OSU Umatilla County

8:00 Potassium and Chloride in Potato Production - Don Horneck, OSU Umatilla County
8:30 MITC: what does this mean to me? - Sandy Halstead, EPA Prosser, WA
9:00 2008-2009 Update on Fumigant Air Monitoring, Reduced Emission Field Application Practices, and Efficacy Assessments Conducted in Franklin County WA - Vince Hebert, WSU, Tri-Cities
9:30 Managing Weeds in Organic Potato Production - Rick Boydston, USDA-ARS Prosser, WA
10:00 Break
10:30 USPB Grower to Grower Results – Bart Connors, United States Potato Board
11:00 Reducing the Effects of Black Dot on Potato in the Columbia Basin - Dennis Johnson, WSU Pullman, WA
11:30 Soil fumigation: Principles for Success - Russ Ingham, OSU Corvallis
12:00 Session Ends

POTATO PRODUCTION SEMINAR, PM – Main Stage

Moderator – Phil Hamm, OSU Hermiston

1:00 Early Blight Management with Respect to Fungicide Resistance - Jeff Miller, Miller Research Rupert, ID
1:30 The Latest on Potato Virus Y (PVY) - Phil Hamm, OSU Hermiston
2:00 Potato Purple Top Research Update - Jim Crosslin, USDA-ARS Prosser WA
2:30 Research Update on Zebra Chip Potato Disease and the Potato Psyllid, its Insect Vector - Joe Munyaneza, USDA-ARS Wapato WA
3:00 Break
3:30 Understanding the Role of Beet Leafhoppers and Other Potato Pests in the Lower Columbia Basin - Silvia Rondon, OSU Hermiston
4:00 Microbial Control of Potato Tuberworm - Lerry Lacey, USDA-ARS Wapato WA; adjunct OSU
4:30 Specialty Nitrogen Fertilizers Effect on Russet Burbank Potato Yield - Jess Holcomb, OSU Hermiston
5:00 Session Ends

The farm fair continues with other topics than potato on December 3 and 4. For the program, see:
http://oregonstate.edu/dept/hermiston/sites/default/files/09_Complete_Agenda.pdf

Baby Potato Workshop

When: 10am, Monday December 14th
Where: Irrigated Agricultural Research and Extension Center, Prosser

Researchers at Prosser will present some of their potato research. A focus will be on the "baby potato" work funded by the potato commission. Approximately 90 different potato cultivars and breeding lines from around the country were grown at the WSU research farm in Othello in 2009 to be evaluated for their suitability as sources of baby potatoes. This is a collaborative project involving Roy Navarre and Chuck Brown of the USDA-ARS, Mel Martin of J.R. Simplot, and Mark Pavek of WSU.

Baby potatoes may have several characteristics that can help them gain market share, including that they can have higher levels of phytonutrients and vitamins than mature tubers. Our goal is to identify and develop high-phytonutrient baby potato cultivars that can help re-establish the healthful image of potatoes and create new opportunities for growers. On Monday, Dec 14 we will display potatoes from these ~90 lines, along with phytonutrient and yield data. All interested are invited to attend. For more info please contact Roy at 509-786-9261.

Washington State Potato Commission

Final Research Review, February 16-17, 2010
Best Western Hotel, Pasco

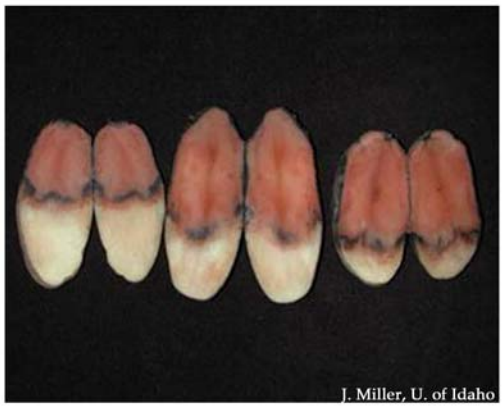
Purpose: Hear results from 2009 potato commission research projects and listen to proposals for 2010 research
Who's Welcome: All Washington potato growers and other potato industry members
Location: Best Western Hotel, Pasco, near the airport
Phone: 509-543-7722. Mention the WSPC when making your reservation and you will get the group rate
Time: February 16, 8:00 am - 5:30 pm; February 17, 8:00 am - 1:00 pm

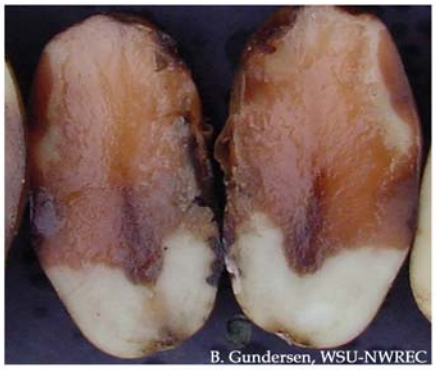
Pesticide Re-certification Credits: Will be available both days.

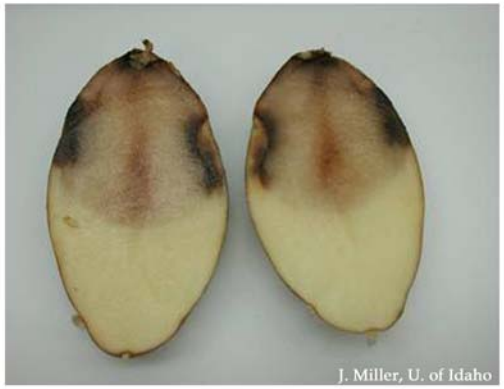
RSVP appreciated for meal planning purposes to Andy Jensen, ajensen@potatoes.com or 509-765-8845.

Potato Pink Rot

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







***Symptoms often begin at the stolon end of the tuber.**
***Damage is sometimes bordered by a dark line visible on outside of tuber.**
***Recently infected tissue turns pink, and then black, when exposed to air.**
***Infections in storage may cause an ammonia-like smell.**

Management

1. Plant in well-drained fields without a history of the disease.
2. Avoid excessive irrigation late in the growing season, and do not plant in areas of fields expected to become excessively wet.
3. Avoid wounding during harvest and transfer to storage.
4. Harvest storage crops in cool weather and with cooler pulp temperatures.
5. Sort infected tubers at harvest, and process or ship affected lots promptly.
6. Some fungicides are active against pink rot, but take care to avoid encouraging fungicide resistance.

General Information

Causal agent: *Phytophthora erythroseptica*
Biology: Pathogen of potato and many other plants; present in many soils worldwide; tuber infection and decay is worst in warm and excessively wet soils.
Dispersal: Infection can spread from tuber to tuber during harvest and handling. Infected seed can also spread the disease.
Fungicide resistance: *P. erythroseptica* has begun to demonstrate resistance to fungicides. Fungicides should be rotated frequently to prevent resistance. See: http://www.potatoes.com/pdfs/FungicidesPressReduced.pdf

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

Potato Varieties in the Northwest

Data for the following table were gathered by the National Agricultural Statistics Service (NASS), and summarized here by the editor. In some cases, NASS does not report numbers for certain varieties, and these cases are indicated by the –. Several minor varieties not listed here were reported by NASS on occasion.

State	Russet Burbank	Russet Norkotah	Shepody	Ranger Russet	Umatilla	Alturas	Other
Idaho							
1998	77.9%	4.8%	5.6%	6.6%	–	–	5.1%
1999	74.4%	8.3%	4.2%	9.1%	–	–	4.0%
2000	74.9%	8.0%	3.9%	7.7%	1.3%	–	4.2%
2001	70.8%	8.4%	3.8%	11.1%	–	–	5.9%
2002	71.0%	7.5%	3.4%	12.0%	–	–	6.1%
2003	69.2%	10.1%	1.3%	12.9%	–	1.2%	5.3%
2004	63.3%	14.2%	1.7%	12.5%	–	2.9%	5.4%
2005	63.1%	11.8%	1.3%	15.1%	–	2.8%	5.9%
2006	66.0%	10.2%	–	12.7%	–	2.2%	8.9%
2007	62.0%	9.8%	1.3%	14.4%	1.6%	1.7%	9.2%
2008	57.4%	13.1%	2.1%	15.0%	1.6%	1.6%	9.2%
2009	56.2%	14.6%	1.6%	15.0%	1.7%	1.2%	9.7%
Oregon							
1998	39.5%	24.8%	17.2%	10.3%	–	–	7.2%
1999	42.9%	21.4%	12.5%	12.5%	–	–	8.9%
2000	32.7%	27.8%	9.8%	11.2%	3.1%	–	13.3%
2001	38.9%	12.3%	10.8%	22.5%	1.9%	–	13.6%
2002	24.3%	16.8%	18.8%	19.2%	1.8%	–	19.1%
2003	22.3%	25.6%	13.3%	15.4%	–	5.0%	18.4%
2004	22.8%	16.3%	10.3%	31.3%	–	7.2%	12.1%
2005	15.2%	23.8%	17.1%	25.3%	2.1%	7.7%	8.8%
2006	25.9%	20.4%	13.5%	22.5%	2.2%	5.5%	10.0%
2007	24.9%	20.2%	14.0%	18.1%	6.2%	5.1%	11.5%
2008	22.1%	23.8%	12.0%	12.2%	7.5%	4.3%	18.1%
2009	20.1%	26.6%	5.9%	17.7%	5.0%	5.9%	18.8%
Washington							
1998	58.1%	13.2%	8.9%	11.4%	–	–	8.4%
1999	41.3%	15.4%	10.8%	17.6%	6.7%	–	8.2%
2000	33.7%	17.2%	10.8%	20.2%	12.3%	–	5.8%
2001	35.3%	19.3%	6.8%	19.9%	12.1%	–	6.6%
2002	34.8%	11.8%	10.3%	22.3%	8.1%	–	12.7%
2003	34.9%	11.1%	9.3%	22.1%	8.2%	1.5%	12.9%
2004	34.7%	12.9%	8.2%	18.5%	10.7%	3.5%	11.5%
2005	40.6%	14.4%	4.7%	16.0%	10.8%	3.3%	10.2%
2006	34.9%	14.0%	6.9%	15.9%	8.3%	3.7%	16.3%
2007	38.5%	9.6%	6.9%	16.9%	11.7%	3.6%	12.8%
2008	27.1%	9.6%	10.6%	19.1%	15.1%	5.7%	12.8%
2009	30.8%	14.5%	2.3%	13.9%	11.9%	7.9%	18.7%