



Potato Progress

Research and Extension for Washington's Potato Industry

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Volume III, Number 9

July 2, 2003

Special Educational Event: PAA Spokane August 12th

The Potato Association of America (PAA) is made up of scientists who study potatoes from across North America and beyond. The association holds an annual meeting each August. This year's meeting is in Spokane, August 10-14. The event is being coordinated by a committee of WSU, Potato Commission, and industry personnel. We have created a day of presentations on August 12 specifically for local growers and industry partners. See the complete program for the day below. To register for the day, which includes 3 meals and a day program for only \$50, see <http://www.paa2003.wsu.edu/registration.htm> or call the Andy Jensen at the Potato Commission.

Location: **Red Lion Hotel at the Park**, 201 W. North River Drive, Spokane, WA 99201 USA
Reservation Line: 1-800-325-4000

Program (Riverfront A Manito/Audubon Rooms):

- 8:15 a.m. Alaska's potato growing problems. Campbell, W.L.
- 8:30 a.m. Seed warming and ambient temperature effects on Umatilla Russet little-tuber syndrome. Salaiz, T. A.* and S.L. Love.
- 8:45 a.m. Seed storage temperature and performance. Olsen, Nora*, L.K. Woodell, G.E. Kleinkopf and A. Hornbacher.
- 9:00 a.m. Seed tuber storage conditions affect the tuber size in field production of two commercial potato cultivars. Pruski, Kris*.
- 9:15 a.m. Predicting the yield potentials of northern and southern seed lots in the Columbia Basin. Knowles, N. Richard*, L.O. Knowles and G.N.M. Kumar.
- 9:30 a.m. Effect of four seed piece spacings on economic return of Russet Burbank potatoes. Bohl, W. H.*, S. L. Love and P. E. Patterson.
- 9:45 a.m. Economic impact of missing and irregularly spaced potato plants. Pavek, M. J.* and R. E. Thornton.
- 10:00 a.m. Break.
- 10:15 a.m. Effects of tuber depth and soil moisture on infection of potato tubers in soil by *Phytophthora infestans*. Porter, L. D.* and D. A. Johnson.
- 10:30 a.m. Control of Columbia root-knot nematode (*Meloidogyne chitwoodi*) in potato cv Russet Norkotah with Vydate C-LV.® David, Nick*, R.E. Ingham, N. D. McKinley, and B. A. Charlton.
- 10:45 a.m. Understanding the influence of planting depth and post-planting tillage on potato production. Pavek, M. J.* and R. E. Thornton.
- 11:00 a.m. Evaluation of hill shape for improving nitrogen use efficiency. Kelling, K.*, M. Jordan, F. Arriaga, B. Lowery and P. Speth.

- 11:15 a.m. Efficacy and economics of tank mixtures for preemergence weed control in potato. Beutler, Brent R.*, P. J. S. Hutchinson and F. E. Fletcher.
- 11:30 a.m. The effect of Potato Virus A (PVA) on yield of Russet Burbank and Russet Norkotah potatoes. Bateman, Melinda*, P. Nolte, P.B. Hamm and B. Geary.
- 11:45 a.m. Site-specific water management for potatoes under center pivot irrigation. King, B. A.*, J. C. Stark and R. W. Wall.
- 12:00 noon Delegates Luncheon – Riverfront C/D.
- 1:30 p.m. Potato yield and tuber set as affected by phosphorus fertilization. Rosen, Carl* and M. McNearney.
- 1:45 p.m. Phosphorus-zinc interactions in potato production. Hopkins, B.G.*, J.W. Ellsworth and S. Funk.
- 2:00 p.m. Calcium improves skin health and color of 'Dark Red Norland' potato: Localization of color in intact cells. Reis, Anne H. and J.P. Palta*.
- 2:15 p.m. Potash fertilization affects fry color, internal defect incidence, blackspot bruise susceptibility, and tuber calcium concentration. Porter, G.A.*, A. Siver and P. Ocaya.
- 2:30 p.m. Vine kill effects on Ranger Russet quality. Woodell, Lynn K.*, N. Olsen and G. E. Kleinkopf.
- 2:45 p.m. Evaluation of an automated variable airflow ventilation system. Oberg, N.A.* and G.E. Kleinkopf.
- 3:00 p.m. Break
- 3:15 p.m. Hydrogen peroxide based products for potato tuber disinfestation. Klimes, John*, Gale Kleinkopf, Nora Olsen and Jeffrey Miller.
- 3:30 p.m. Evaluation of the sprout suppressant capacity of 1,4-Dimethylnaphthalene in common North American potato varieties. De Weerd, Jan W.*
- 3:45 p.m. Storage management of Gem Russet and Summit Russet potatoes. Brandt, Tina L.*, G. E. Kleinkopf, N. Olsen and S. Love.
- 4:00 p.m. Influence of post harvest tillage and rotation crop selection on volunteer potato survival. Newberry, G. D.* and R.E Thornton.
- 4:15 p.m. Back to the future? Models, maps, and global prospects for the potato. Scott*, Greg.
- 4:30 p.m. Private varieties in the US fresh potato market. Guenther, J. F.*
- 4:45 p.m. Adjourn.
- 6 - 9:00 pm BBQ - entertainment by "The Cellar Rats" Riverfront Park.

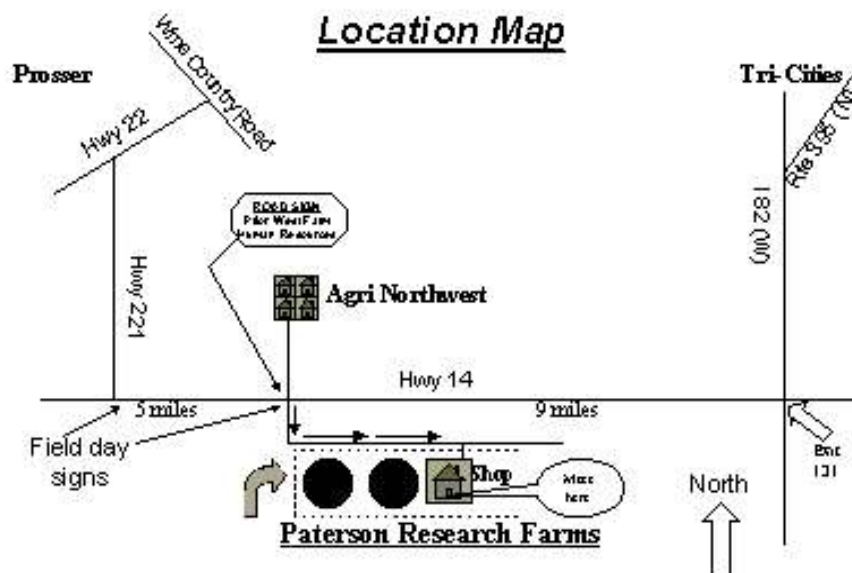
Upcoming Field Days

Mark your calendar and plan to attend these educational field days this season. For locations and other information, see later issues of *Potato Progress*, or contact Andy Jensen at the Commission.

Paterson USDA-ARS Field Day (see below)	July 16
Drip Irrigation Field Day, Royal Slope	August 5
Pest Management Field Day, Ag. Dev. Group, Eltopia	August 6
Mount Vernon Potato Field Day	August 21

USDA-ARS/WSU Cropping Systems Field Day - Paterson

The 2003 USDA-ARS/WSU IAREC Cropping Systems Field Day will be held Wednesday, July 16, 9:00 am at the ARS Paterson Research site. Research plot tours will be followed by a hosted luncheon. Contact Dr. Hal Collins, USDA-ARS at 509-786-9250 for details.



Potato Progress on the Web (Again)

Having regrouped from a web server hiccup, the research portion of the Potato Commission's web site is back in gear, with updated information on funded projects, relevant web links, and a complete collection of *Potato Progress*.

The link: <http://www.potatoes.com/display.cfm/164/?IDList=19>.

Phosphorus Efficiency

In the April issue of southern Idaho's newsletter, "the SPUDVINE," Bryan Hopkins and others discuss phosphorus availability as it relates to soil type, pH, time in the soil, and other factors. The authors also discuss P application methods and plant uptake. For a copy of the article, contact Andy Jensen at the Potato Commission office, or go to: <http://www.if.uidaho.edu/~bingham/spudvine.htm>.

Washington State Potato Commission

Final Project Funding List for 2003-2004

Contact Andy Jensen at the Potato Commission office for contact information on any of these scientists, who would welcome your comments, questions, or requests.

Project Leader	Title	Approved Funding
Brown, Chuck	Exploiting Phytonutrient Components in Potato for New Market Development	\$27,586
Hamm, Phil	Surveying Potato Seed Lots in Washington & Oregon for the Occurrence of PVY ⁿ	\$23,760
Hendrix, Bill	Research Support	\$41,580
Inglis, Debbie	Water Mold Diseases of Potato: Biology and Management	\$16,886
Johnson, Dennis	Development of New Tools to Manage Late Blight Tuber Rot, Powdery Scab and Black Dot	\$38,610
Johnson, Dennis	Integrated Disease Management of Potato White Mold (Sclerotinia Stem Rot)	\$16,335
Knowles, Rick	Postharvest Quality of New Clones and Cultivars	\$56,034
Knowles, Rick	Development of Natural Sprout Inhibitors and Cultivar-Specific Storage Regimes	\$45,045
McGuire, Andrew	Increasing Profits for Potato Growers with Mustard Green Manures	\$6,164
Pike, Keith	Green Peach Aphid and Aphid-Parasite Regional Assessment and Management	\$47,589
Riga, Ekaterini	Multifaceted Approach to Control Plant Parasitic Nematodes of Potatoes	\$22,266
Riga, Ekaterini	Development of Rapid Diagnostic Tests for detection of Viruliferous Stubby Root Nematodes	\$24,311
Schreiber, Alan	Development of Crop Protection Chemicals for Potatoes - 2002	\$38,630
Schreiber, Alan and others	Epidemiology and Management of Potato Yellowing Syndrome	\$31,646
Snyder, Bill	Conserving Predators in Washington Potato Fields	\$22,468
Thornton, Bob	In Field Testing of Potato Clones and Cultivars for Adaptability for Production in Washington State	\$59,400
Thornton, Bob and others	Correlation of Herbicide Exposure of Seed Potato Plants with Seed Tuber Residue, Tuber and Plant Symptoms and Productivity	\$8,415
Thornton, Bob	Washington Commercial Potato Seed Lot and Demonstration Trials	\$28,710