2015 Washington State Commercial Seed Lot Profile and Potato Field Day Preview

Mark Pavek & Zachary Holden, Washington State University

Washington potato acreage has been between 160,000 and 165,000 over the past 4 years (Figure 1, dotted line). Acreage for 2015 is unknown at this time as it has yet to be tallied. There were 285 commercial seed lot samples submitted to WSU during 2015, compared with 314 in 2014 and 304 in 2013 (Figure 1, bars).

Montana and Idaho continue to provide WA growers with the majority of their seed lots, followed by Canada, WA, OR, ND and all “Other” locations (Figure 2). The composition of the 2015 Seed Lot Trial included 25% “Other” (newer and/or non-mainstream varieties) 20% Russet Burbank, 17% Russet Norkotah and RN strains, 13% Umatilla Russet, 9% Ranger Russet, 7% Alturas, 6% Shepody and 4% Clearwater Russet (Figure 3). The 2015 “Other” category was composed of 43 (compared with 29 in 2014) new, non-mainstream varieties, or specialty varieties, ranging from numbered, non-released varieties to Yukon Gold (Figure 3). Clearwater Russet seed lot numbers jumped
in 2013 when there was a hint that McDonalds® might accept this variety for its French fries. Clearwater accounted for 4% of the seed lots in 2015 and 6% in 2014 (Figure 3).

European potato variety seed lot entries have been steadily increasing over the past 5 years. Nineteen European potato varieties were entered into the 2015 seed lot trial, accounting for 19% of all seed lots entered in the trial (data not shown). Varieties developed by the Northwest Potato Variety Development Program/PVMI accounted for 30% (38% in 2014) of the seed lots entered into the 2015 trial and included: Alpine Russet, Alturas, Bannock Russet, Classic Russet, Clearwater Russet, Modoc, Ranger Russet, Teton Russet, and Umatilla Russet. The most significant change in the WA seed lot profile in the past 50 years has been the increase in the number varieties WA growers are planting. In 1962, 8 varieties were entered into the seed lot; in 2015, there were 52 (Figure 4).
The potato field day will begin at 8:30 am on THURSDAY, June 25 at the WSU Othello Research Farm (see program below). In addition to viewing the seed lots, you will be able to participate in one of two concurrent sessions. Sessions I and II will allow you to view a sample of this year’s in-field research. Both sessions will offer CCA recertification credits; however, only session II (pest management tour) will offer WA and ID pesticide recertification credits. A hosted-lunch, offered between 12:00 and 1:00 pm, will complete the field day. The agenda, seed lot information, and a map to the research center can be found on our website: www.potatoes.wsu.edu.

**Pesticide License Recertification Credits Applied For:**

**Commercial Seed Lot Trial Disease Results and Viewing**
WA: 1 credit  
ID: 1 credit  
CCA: 1 Integrated Pest Management credit

**Concurrent Session I: Potato Cultural Practices Field Tour**
WA: 1 credit  
ID: 1 credit  
CCA: 2.0 Crop Management credit

**Concurrent Session II: Potato Pest Management Field Tour**
WA: 2 credits  
ID: 2 credits  
CCA: 2.0 Integrated Pest Management credits
WSU Potato Field Day – Thursday June 25, 2015
Located at WSU Othello Research Unit – 1471 W Cox Rd, Othello
(6 miles East of Hwy. 26/17 Junction, On Booker Rd, ¼ Mile South of Hwy. 26)

8:30–8:55 am Coffee and donuts
8:55–9:00 Acknowledgements to WA State Potato Commission for On-Going Support and GPS Auto-Steer Tractor  
Mark Pavek and Rick Knowles – WSU, Pullman
9:00–10:00 Commercial Seed Lot Trial Disease Results and Viewing, Mark Pavek – WSU Pullman

Concurrent Session I:  

**Potato Cultural Practices Field Tour**

10:00 National Tuber Necrotic Virus Project: How the industry can help ensure appropriate outcomes  
Stewart Gray – USDA-ARS, Cornell University, Ithaca, NY
10:20 WSU Potato Pest Alerts – Regional Pest Information and IPM-based Recommendations to Aid Management Decisions  
Carrie Wohleb – WSU, Grant/Adams Counties
10:35 Resistance of POR06V12-3 to Diverse PVY Strains and Isolates  
Linhai Zhang, Chuck Brown, Rich Quick, Launa Hamlin – USDA-ARS Prosser
11:00 Altering Tuber Set, Size & Shape  
Rick Knowles, Mark Pavek, Lisa Knowles, Derek Herman, Cody Dean, Graham Ellis – WSU, Pullman
11:15 Searching for Heat, Water & Nitrogen Stress Tolerance  
Rick Knowles, Derek Herman, Mark Pavek, Lisa Knowles, Cody Dean, Graham Ellis – WSU, Pullman
11:30 Is Variable Rate Irrigation for you? Our In-sight after 3 Years.  
Mark Pavek, Zach Holden, Rick Knowles – WSU, Pullman
11:45 Phosphorus Research Updates  
Chandler Dolezal, Mark Pavek, Rick Knowles, Zach Holden, Lisa Knowles – WSU, Pullman

Concurrent Session II:  

**Potato Pest Management Field Tour**

10:00 National Tuber Necrotic Virus Project: How the industry can help ensure appropriate outcomes  
Stewart Gray – USDA-ARS, Cornell University, Ithaca, NY
10:20 WSU Potato Pest Alerts – Regional Pest Information and IPM-based Recommendations to Aid Management Decisions  
Carrie Wohleb – WSU, Grant/Adams Counties
10:35 The Potential Effect of Rotation Crop and Weeds on Verticillium Wilt of Potato  
David Wheeler, Zach Frederick, D. Johnson, and T. Cummings – WSU, Pullman
10:50 Late Blight Outlook 2015  
Dennis A. Johnson – WSU, Pullman
11:00 Insect Management Strategies in Potatoes  
Tim Waters – WSU, Benton/Franklin Counties

(field tour moves inside to potato research facility)

11:20 SPECIAL MINI-WORKSHOP PERSONAL PROTECTIVE EQUIPMENT (PPE): Demystifying PPE Selection, Respirator Use Requirements, and Decontamination Supplies  
Tom Hoffmann (WSDA, Moses Lake) and Bob Kenner (Norco, Moses Lake)

12:00 pm – 1:00 pm HOSTED LUNCH

CCA and pesticide recertification credits have been applied for (WA & ID)