**13th Washington - Oregon Potato Conference**

**General Session**

**Total credit time: 350 minutes**

***Wednesday Morning, January 26, 2022* Credit time: 50 minutes**

Carrie Wohleb, Moderator

7:55 **Welcome**

8:00 **Potato Cultural Management in Extreme Heat**, Mark Pavek, WSU Pullman

8:25 **Postharvest Responses to Heat Stress**, Jacob Blauer, WSU Pullman

8:50 **National Potato Council Update**, Kam Quarles, CEO

9:15 **All About Potato Dry Rot**, Gary Secor, North Dakota State University

The presentation covers details about Potato Dry Rot. The presentation provides brief overview of the pathogen, life cycle and management. The presentation shows representative color photos of all aspects of the disease, explains the cause and disease cycle, defines the factors leading to disease, and presents harvest and storage management practices that will reduce losses due to dry rot.

**9:40 Break**

9:55 **Meet the Enteros**, Gary Secor, North Dakota State University

 This presentation provides an overview of potato soft rot diseases that affect the potato industry how an integrated pest management is essential to control majority of potato diseases. The Presentation will cover details about Dickeya, life cycle and management.

10:20 **Oregon Potato Commission Update**, Gary Roth, Executive Director

10:40 **Washington State Potato Commission Update**, Chris Voigt, Executive Director

11:00 **Keynote cooking lecture and demonstration,** RJ Harvey, Potatoes USA, Denver

12:00 Adjourn

***Wednesday Afternoon, January 26, 2022* Credit time: 100 minutes**

Sagar Sathuvalli, Moderator

1:00 **Fusarium Dry Rot Pathogens in the Pacific Northwest and Their Aggressiveness to Selected Potato Varieties**, Christy Christian, University of Idaho, Idaho Falls

 The presentation will cover details about Fusarium Dry rot in the PNW. The presentation will briefly cover biology, epidemiology, pathotypes and also the control of fusarium dry rot and their level of response to various potato varieties. The presentation provides details about different Fusarium dry rot isolates and a discussion on management.

1:25 ***Potato leafroll virus* (PLRV): biology, management, and new research effort**, Gina Angelella, USDA-ARS, Wapato, WA

 This presentation will cover details about Potato Leafroll Virus, biology, management. The presentation will also cover the spread of the PLRV through aphids and management of aphids. The presentation will discuss importance of controlling this disease as a seed grower.

1:50 **Water Challenges and Opportunities in Agriculture**, Derek Sandison, Director, Washington State Department of Agriculture, Olympia

2:15 **Potato Markets and Potatoes USA Update**, John Toaspern, Chief Marketing Officer

2:40 Break

2:55 **The Future of Potato Nematode Control**, Alan Schreiber, Agriculture Development Group, Eltopia, WA

 Nematodes are major issue for potato production in the PNW. With uncertainty over use of fumigants and potential ban of nematicides, it is essential to understand integrated management of nematode control. The presentation will cover details of existing nematode control and discuss about new possibilities of integrated nematode management.

3:20 **Potato Sustainability Alliance Update**, John Mesko, Executive Director

3:45 **Fundamentals of RNA Interference (RNAi) in Potato Pest Management**, Russ Groves, University of Wisconsin, Madison

 RNAi is a new technology for integrated pest management. This presentation will cover overview of this new technology and how it can help growers controlling major disease. The presentation will cover some latest research on use of this technology in controlling Colorado Potato Beetle. There will be brief description about the field trials associated with this technology.

4:10 **The Effect of Polyphenol Additions on Microbial Performance and Potato Yield in Low Organic Matter Soils**, Isabel Christy, OSU Corvallis

4:35 Adjourn.

***Thursday Morning, January 27, 2022* Credit time: 150 minutes**

Ken Frost, Moderator

8:15 a.m. **Welcome**

8:20 **Calibrating Soil Health Assessments for PNW Potato Soils and Systems**, Deirdre Griffin LaHue, WSU Mount Vernon

8:45 **Extended Diapause in Colorado Potato Beetle – A Continuing Management Challenge**, Russ Groves, University of Wisconsin, Madison

 This presentation will cover about biology, life cycle and management of Colorado potato beetle. The presentation will discuss about beetles extended diapause and how it can cause issues with current management strategies. The presentation will also cover about integrated pest management of beetle control.

9:10 **Demystifying Pesticide Label Instructions, and What to do When you Can’t**, Ethan Estalilla, WSDA Moses Lake

 This presentation will provide information to the audience related to pesticide labels and what we can do and we cannot do while applying pesticides. There will be information about how to read the pesticide labels and based on the information on labels how an applicator has to take care of precautions to avoid legal challenges.

9:35 **Does an Enhanced IPM Program Reduce Insecticides without Risking Yield and Quality?** Tim Waters, WSU Extension, Pasco, and Alan Schreiber, Agriculture Development Group, Eltopia, WA

 This presentation will cover basics of integrated pest management including rotation of certain pesticides with altering chemistry along with additional cultural practices that can aid in pest management. The presentation will also discuss about the effect of integrated pest management on the yield and quality of potatoes.

**10:00 Break**

10:15 **Evaluation of Potassium Requirement for Different Potato Varieties**, Ray Qin, OSU Hermiston

10:40 **Update on Tri State Cultivars and PVMI**, Jeanne Debons, PVMI, Bend, OR

 This presentation provides an overview of what Potato Variety management does and how it support the Tri-state potato breeding program. There will be a discussion on new potato varieties released by the Tri-state program that has pest and disease resistance.

11:05 **Induced Genetic Variation in Potatoes: Application of Mutation Breeding in the Genomics Era**, Sagar Sathuvalli, OSU Hermiston

 This presentation will provide a brief overview of induced mutation and gene editing technologies. The presentation will provide information about how different Gamma radiation effects can alter the genome of potatoes and how this alternation can help in identification of derived germplasm with resistance to pests and diseases. The presentation will end with potential application of Gamma radiation for developing potato varieties.

11:30 **Nutsedge Management. Only you can prevent nutsedge!** Tim Waters and Carrie Wohleb, WSU Extension

 Nutsedge is causing lot of production issues in potatoes. This presentation will provide overview of nutsedge biology and its effect on potato production. The presentation will also covers do and don’t of nutsedge management including chemical control and integrated weed control.

***Thursday Afternoon, January 27, 2022* Credit time: 50 minutes**

Tim Waters, Moderator

1:00 p.m. **Potato Surface Blemish Diseases**, Chakradhar Mattupalli, WSU Mount Vernon

 Blemish free potatoes are important for fresh pack potatoes. Silver scurf and Rhizoc are couple of pathogens that can cause issues to surface of the tuber. The presentation will provide an overview of major diseases that can cause surface blemishes in potatoes, their biology and integrated disease control of these pathogens.

1:25 **OSHA Temporary Wildfire Smoke and Heat Rules**, Dan Kermoyan, Assistant Director, Environmental Health and Safety, OSU Corvallis

1:50 **It's Significant to Me! Making Sense of Agricultural Variability, Statistics, and On-Farm Research**, Jeff Miller, Miller Research, Rupert, ID

2:15 **Break**

2:30 **Concepts Associated with Sensing Applications for Potato Crop Assessment and Management**, Sindhuja Sankaran, WSU Pullman

2:55 **Managing Field Stress in Storage**, Nora Olsen, University of Idaho, Kimberly

3:20 **Proper Potato Irrigation During Extreme Heat**, Francisco Gonzalez, WSU Pullman

3:45 **Overview of the New Online Potato Decision Aid System for the Northwest**, Dave Crowder, WSU Pullman

 Proper and on time decisions are essential to avoid crop losses and this presentation will provide overview about new online potato decision aid system developed by WSU. The presentation will provide details on how to use the system, track major pest movement and also based on GDD and weather parameters, the growers need to make decisions on potential disease pressure such as late blight.

4:10 Adjourn