



## The 50<sup>th</sup> Hermiston Farm Fair Seminars

**Location:** *Eastern Oregon Trade and Event Center, 1705 E Airport Rd, Hermiston, OR 97838*

**Dates:** *Nov 29 – 30, 2023*

### Wednesday, November 29 (8 am-12 pm)

#### **Potato** (Organizers: Vidyasagar Sathuvalli & Ruijun Qin)

- 8:00 a.m. Diagnostic Difference Races of Columbia Root-Knot Nematode, An Important Soil-Borne Pathogens in PNW Potato Production  
Shengwei Hu and Vidyasagar Sathuvalli, Hermiston Agricultural Research and Extension Center, Oregon State University
- 8:30 a.m. Powdery Scab, the Environment, and Implications for Disease Management  
Ken Frost, Hermiston Agricultural Research and Extension Center, Oregon State University
- 9:00 a.m. Updates on Nitrogen Fertilization for Potatoes  
Ruijun Qin and Tajamul Hussain, Hermiston Agricultural Research and Extension Center, Oregon State University
- 9:30 a.m. Introducing the new Entomology Program at OSU-HAREC  
Josephine Antwi, Hermiston Agricultural Research and Extension Center, Oregon State University
- 10:00 a.m. Break**
- 10:30 a.m. The Potato Decision Aid System  
Carrie Wohleb, Washington State University Extension-Grant/Adams Counties
- 11:00 a.m. Essential Oils: A Natural Alternative to Synthetic Chemicals for Potato Sprout Suppression  
Valtcho Jeliaskov, Dept. of Crop and Soil Science, Oregon State University
- 11:30 a.m. Potato Mop-top Virus Transmission and Screening  
Kylie Swisher Grimm, Temperate Tree Fruit and Vegetable Research Unit, USDA-ARS

**12:00 Adjourn**



**Wednesday, November 29 (1 pm-5 pm)**

**Potato** (Organizers: Vidyasagar Sathuvalli & Ruijun Qin)

- 1:00 p.m. Potato Fertilization for Maximum Economic Gain  
Mark Pavek, Dept. of Horticulture, Washington State University
- 1:30 p.m. Potato Soil Health and Soilborne Disease Management  
Ken Frost, Hermiston Agricultural Research and Extension Center,  
Oregon State University
- 2:00 p.m. Developing Resistance to Internal Disorders of Potato  
Roy Navarre, Temperate Tree Fruit and Vegetable Research Unit,  
USDA-ARS
- 2:30 p.m. Potato Soil Health as Affected by Soil Fumigation and Cover Crops  
Ruijun Qin and Haoyang Lyu, Hermiston Agricultural Research and  
Extension Center, Oregon State University
- 3:00 p.m. Break**
- 3:30 p.m. Unearthing the Genetic Shield: Bioinformatics Strategies for Enhancing  
Disease Resistance in Potatoes  
Senthilkumar Shanmugavel and Vidyasagar Sathuvalli, Hermiston  
Agricultural Research and Extension Center, Oregon State University
- 4:00 p.m. What Are the Factors That Contribute to A Perfect French Fry?  
Sastry Jayanty, Dept. of Horticulture and Landscape Architecture,  
Colorado State University
- 4:30 p.m. What Can We Learn from Images of Potato Tubers?  
Max Feldman, Temperate Tree Fruit and Vegetable Research Unit,  
USDA-ARS
- 5:00 p.m. Adjourn**



**Nov 29, 2023 (8 am-12 pm)**

**Vegetable (Organizer: Ruijun Qin)**

8:00 a.m. IPM Strategies for Vegetable Crops  
Surendra Dara, North Willamette Res & Ext Ctr, Oregon State University

8:30 a.m. Breeding Snap Beans for Wide Adaptation to the Pacific Northwest  
James Myers, Dept, of Horticulture, Oregon State University

9:00 a.m. Sweet Potato Production in the Pacific Northwest  
Laura Schulz, Dept, of Horticulture, Washington State University

9:30 a.m. Invasive Weeds to Be on the Watch for: Palmer Amaranth, Water Hemp, and Velvet Leaf  
Joel Felix, Malheur Experimental Station, Oregon State University

**10:00 a.m. Break**

10:30 a.m. Tomato Production, Disease Symptom Recognition, and Management  
Tom Turini, Cooperative Extension Fresno County, University of California-Agriculture and Natural Resources

11:00 a.m. Pest Management through the Season in Onions  
Stuart Reitz, Malheur Experimental Station, Oregon State University

11:30 a.m. Epidemiology and Management of Bacterial Blight in Carrot Seed Crops  
Jeremiah Dung, Central Oregon Agriculture Research and Extension Center, Oregon State University

**12:00 p.m. Adjourn**



**Nov 29, 2023 (1 pm-5 pm)**

**General Agriculture (Organizers: Ken Frost & Ruijun Qin)**

- 1:00 p.m. Management of Ergot in Grass Seed Crops  
Jeremiah Dung, Central Oregon Agriculture Research and Extension Center, Oregon State University
- 1:30 p.m. Cover Crops and Invertebrates: The Good, Bad, and Everything in Between  
Scott Mitchell, Dept. of Fisheries, Wildlife, and Conservation Sciences, Oregon State University
- 2:00 p.m. Supporting Pollinators in Agriculture Through the NRCS  
Sarah Gardner, Western Partner Biologist, Pollinator Partnership, USDA NRCS
- 2:30 p.m. Results from 2022 WSU and WSHGA Alfalfa Variety Trial  
Steve Norberg, Washington State University Extension-Franklin County
- 3:00 p.m. Break**
- 3:30 p.m. P and K Fertilization of Alfalfa  
Steve Norberg, Washington State University Extension-Franklin County
- 4:00 p.m. Compost  
Amanda Woodlee, Oregon State University Extension Service, Umatilla County Master Gardeners
- 4:30 p.m. Protect Your Crop During Heat Waves  
Carrie Wohleb, Washington State University Extension-Grant and Adams Counties
- 5:00 p.m. Adjourn**



**Thursday, November 30 (8 am-12 pm)**

**General Agriculture (Organizer: Ken Frost)**

- 8:00 a.m. Hemp Disease Surveys in the Pacific Northwest.  
Hannah Rivedal, Forage Seed and Cereal Research Unit, USDA-ARS
- 8:30 a.m. Drone Remote Sensing and AI for Plant Breeding and Precision Management  
Liujun Li, Dept. of Soil and Water Systems, University of Idaho
- 9:00 a.m. Grass Seed Pathology Update  
Hannah Rivedal, Forage Seed and Cereal Research Unit, USDA-ARS
- 9:30 a.m. Optimizing Pheromone-Based Monitoring Systems to Improve Corn Earworm Pest Management.  
Govinda Shrestha, Southern Oregon Research and Extension Center, Oregon State University
- 10:00 a.m. Break**
- 10:30 a.m. Sifting Grain from Chaff in Soil Health and Regenerative Agriculture  
Andrew McGuire, Washington State University Extension-Grant County
- 11:30 a.m. The Carbon Sequestration Potential of Oregon Soils  
Markus Kleber, Dept. of Crop and Soil Science, Oregon State University
- 12:00 p.m. **Adjourn**



**Thursday, November 30 (1 pm-4:30 pm)**

**Best management practices** (Organizers: Josephine Antwi & Carlos Bonilla)

- 1:00 p.m. A Wireless Soil Moisture Sensing Network to Automate Site-Specific Irrigation Using an Overhead Irrigation System  
Udayakumar Sekaran, Malheur Experimental Station, Oregon State University
- 1:30 p.m. Developing Knowledge and Technologies to Enable Sustainable and Productive Symbiosis Between Dairy and Cropping Systems  
Shulin Chen, Dept. of Biological Systems Engineering, Washington State University
- 2:00 p.m. Are Crop Water Needs Increasing in Eastern Oregon?  
Carlos Bonilla, Hermiston Agricultural Research and Extension Center, Oregon State University
- 2:30 p.m. Break**
- 3:00 p.m. Best Management Practices to Reduce Nitrate Loading in Agricultural Areas  
Abigail Tomasek, Dept. of Crop and Soil Science, Oregon State University
- 3:30 p.m. Best Management Practices for Mitigation of Plant Diseases: A Focus on Soilborne Diseases in Vegetable Crops  
Cynthia Ocamb, Dept. of Botany and Plant Pathology, Oregon State University
- 4:00 p.m. Biology and Management of Insect Vectors of Potato Pathogens  
Rodney Cooper, Temperate Tree Fruit and Vegetable Research Unit, USDA-ARS
- 4:30 p.m. Adjourn**



**Thursday, November 30 (8 am-12 pm)**

**Cereal (Organizer: Ruijun Qin & Don Wysocki)**

8:00 a.m. Hemp Cover Cropping and Disease Suppression in Winter Wheat of The Dryland Pacific Northwest  
Christina Hagerty, Columbia Plateau Conservation Research Center,  
Oregon State University

8:30 a.m. Winter Wheat Varieties for Irrigated Production in North Center Oregon  
Ryan Graebner, Columbia Plateau Conservation Research Center,  
Oregon State University

9:00 a.m. Weed Control Options in Low Rainfall (Fallow-Based) Wheat Production Systems  
Larry Lutcher, Oregon State University Extension Service-Morrow  
County

9:30 a.m. Russian Thistle Biology and Management  
Judith Barroso, Columbia Plateau Conservation Research Center,  
Oregon State University

**10:00 a.m. Break**

10:30 a.m. Integrated Weed Control for Cereal Grain Systems  
Aaron Esser, Washington State University Extension-Lincoln/Adams  
Counties

11:00 a.m. Post-harvest Nutrient Management in Wheat  
Aaron Esser, Washington State University Extension-Lincoln/Adams  
Counties

11:30 a.m. Putting Drones to Work in Cereal Crops  
Christy Tanner, Oregon State University Extension Service-  
Benton/Lane/Linn Counties

**12:00 p.m. Adjourn**



**Thursday, November 30** (1 pm - 4:30 pm)

**Cereal (Organizers: Ruijun Qin & Don Wysocki)**

- 1:00 p.m. Companion Cropping of Spring Canola and Spring Peas in Eastern Oregon  
Don Wysocki, Oregon State University Extension Service, Umatilla County
- 1:30 p.m. Cover Crop Growth and Effects on Weeds and Water in Wheat Systems in Low Rainfall Zones of Oregon  
Curtis Adams, Columbia Plateau Conservation Research Center, USDA-ARS
- 2:00 p.m. Stripe Rust Management  
Xianming Chen, Wheat Health, Genetics, and Quality Research, USDA-ARS
- 2:30 p.m. **Break**
- 2:30 p.m. Nitrogen Leaching under Dryland Winter Wheat-Fallow and Winter Wheat-Winter Pea Cover Crop  
Dr. Hero Gollany, Columbia Plateau Conservation Research Center, USDA-ARS
- 3:30 p.m. Will No-till Increase Soil Carbon in Dryland Winter Wheat?  
Stewart Wuest, Columbia Plateau Conservation Research Center, USDA-ARS
- 4:00 p.m. Wild Oat Biology, Herbicide Resistance, and Management in Spring Wheat  
Darrin Walenta, Oregon State University Extension Service- Baker/ Union/Wallowa Counties

4:30 p.m. **Adjourn**