What is SARE?

Since 1988, the Sustainable Agriculture Research & Education (SARE) program has been the go-to USDA grants and outreach program for farmers, ranchers, researchers and educators who want to develop innovations that improve farm profitability, protect water and land, and revitalize communities. To date, SARE has awarded over $327 million to more than 7,665 initiatives.

SARE is grassroots with far-reaching impact

Four regional councils of expert practitioners set priorities and make grants in every state and island protectorate.

SARE communicates results

SARE shares project results by requiring grantees to conduct outreach and grower engagement; and by maintaining an online library of practical publications, grantee-produced information products and other educational materials.

SARE: Advancing the Frontier of Sustainable Agriculture in...

Oregon

Project Highlight: Insect Pathogens Control Clover Pest

Red clover seed is produced commercially in western Oregon and Washington, and one of its major pests is the clover root borer. The clover root borer develops underground in the roots of red clover and controlling it has proven to be very difficult. Growers once used toxic organochlorine insecticides to battle the borer, but they have been banned from use. Since then, growers have seen a return of the root borer and typically manage it by rotating fields every two years.

With SARE funding, Oregon State University graduate student Anis Lestari studied whether insect pathogens, in particular naturally occurring fungi, have potential as biocontrol agents for controlling the root borer. Lestari collected clover root borers from four local Willamette Valley farms and isolated and identified pathogens associated with adults and larvae. She compared their virulence against the pest with commercially available microbial products and found that entomopathogenic fungi (a fungus that can act as a parasite) have the potential for use as a biological control of the clover root borer in western Oregon red clover fields.

More research and validation are needed before official recommendations can be made, but Lestari’s promising results show that a sustainable method for controlling the clover root borer is possible.

For more information on this project, see sare.org/projects, and search for project number GW15-018.

SARE in Oregon

western.sare.org/sare-in-your-state/oregon

$11,331,835 in total funding

176 grant projects

(since 1988)

For a complete list of grant projects state by state, go to www.sare.org/state-summaries

www.sare.org
SARE Grants in Oregon

Total awards: 176 grants

- 47 Research and Education
- 25 Professional Development Program
- 66 Farmer/Rancher
- 23 On Farm
- 13 Graduate Student
- 2 Research to Grass Roots

Total funding: $11,331,835

- $7,231,264 Research and Education
- $1,845,539 Professional Development Program
- $736,843 Farmer/Rancher
- $1,135,496 On Farm
- $283,321 Research/Partnership
- $99,372 Graduate Student
- $99,372 Research to Grass Roots

Find a complete list of projects on page 3.

SARE's Impact

- 53 percent of producers report using a new production technique after reading a SARE publication.
- 79 percent of producers said they improved soil quality through their SARE project.
- 64 percent of producers said their SARE project helped them achieve higher sales.

Learn about local impacts at: western.sare.org/sare-in-your-state/oregon

Contact Your SARE State Coordinator

SARE sustainable ag coordinators run state-level educational programs for Extension and other ag professionals, and many help grant applicants and recipients with planning and outreach. Visit western.sare.org/state-pages/oregon to learn more.

Maud Powell
Oregon State University Extension
(541) 772-5110
maud.powell@oregonstate.edu

Clare Sullivan
OSU Extension Deschutes County
(541) 602-2009
clare.sullivan@oregonstate.edu

For detailed information on SARE projects, go to www.SARE.org

SARE is funded by the USDA’s National Institute of Food and Agriculture (NIFA).

This report includes summaries of competitive grant programs only. Some competitive grant programs that are no longer offered may be included or excluded from the totals in this report depending on the grant program and SARE region.
Oregon has been awarded $11,331,835 grants to support 173 projects, including but not limited to, 44 research and/or education projects, 25 professional development projects and 66 producer-led projects. Oregon has also received additional SARE support through multi-state projects.

### RESEARCH AND EDUCATION GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
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<tbody>
<tr>
<td>SW21-928</td>
<td>Bridging the communication gap: toward a more informed public understanding of sustainable farming</td>
<td>$348,841</td>
<td>Clare Sullivan Oregon State University, Katie Murray Oregon State University, Michael Rozyne Red Tomato, Julie Sweetland FrameWorks Institute</td>
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<td>SW20-914</td>
<td>Model-Assisted Forest Stand Delineation to Make Forest Assessment, Valuation, and Management Planning More Accessible</td>
<td>$349,981</td>
<td>David Diaz Ecotrust, Nils Christoffersen Wallowa Resources, Dr.Gregory Ettl University of Washington, School of Environmental and Forest Sci, Kirk Hanson Northwest Natural Resource Group</td>
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<td>SW20-917</td>
<td>Production and marketing of dry-farmed tomatoes in Oregon</td>
<td>$349,875</td>
<td>Dr.ALEXANDRA STONE Oregon State University</td>
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<td>SW19-903</td>
<td>Bee Protection Protocols for Oregon Vegetable and Clover Seed.</td>
<td>$349,971</td>
<td>Dr.Andony Melathopoulos Oregon State University</td>
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<td>SW18-057</td>
<td>Evaluation of Best Production Practices for Olive (Olea europaea) in Oregon. Part I</td>
<td>$193,575</td>
<td>Dr.Javier Fernandez-Salvador Oregon State University</td>
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<td>SW18-041</td>
<td>Sustaining Oregon broccoli production</td>
<td>$229,804</td>
<td>James Myers Oregon State University</td>
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<td>SW16-010</td>
<td>Impacts of Chaff Collection or Chaff Plus Straw Collection at Harvest to Improve Weed Control</td>
<td>$250,000</td>
<td>Dr.Judit Barroso Oregon State University</td>
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<td>SW16-070</td>
<td>Soil solarization as a tool to control weeds and soilborne pathogens in tree seedling nurseries in the Pacific Northwest</td>
<td>$247,329</td>
<td>Dr.Jennifer Parke Oregon State University</td>
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<td>SW15-021</td>
<td>Diagnosis and Management of a New Disease of Cucurbits in Oregon</td>
<td>$145,291</td>
<td>Dr.ALEXANDRA STONE Oregon State University</td>
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<td>SW15-058</td>
<td>Understanding Pest and Disease Transmission Dynamics and Effects of Agrochemicals on Honey Bee Colonies Pollinating Crops in the Western States</td>
<td>$248,025</td>
<td>Dr.Ramesh Sagili Oregon State University</td>
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</table>
SW13-017 Integrating research and practice in systems management of organic vegetable farms $277,430 Dr. ALEXANDRA STONE Oregon State University

SW12-037 A Collaborative Phenology Modeling System to Enhance Crop Management on Vegetable Farms $203,610 Nick Andrews Oregon State University

SW10-103 Developing a Decision Support Tool for Ventenata IPM in the Inland Northwest $169,297 Dr. Timothy Prather University of Idaho

SW10-143 Growing a Sustainable Portland Metropolitan Foodshed $223,014 Dr. Sheila Martin Portland State University, IMS

SW09-031 Bean Mold Management Tools and Rotational Systems Management Planning $184,084 Dr. ALEXANDRA STONE Oregon State University

SW09-062 Integrating Beetle Habitat into Pacific Northwest Farming Systems $206,002 John Lambrinos Dept. of Horticulture, Oregon State University

SW09-073 Expanding Small-scale Grain Production in Southwestern Oregon $24,402 Maud Powell OSU Extension Shelley Elkovich OSU Extension Small Farms

SW08-056 Enhancement of pollination by native bees in blueberries and cranberries $183,271 Dr. Sujaya Rao Oregon State University

SW08-121 Sustainable Solutions to IYSV on Onion Via Grower-Research Partnerships $177,527 Clinton Shock Oregon State University

SW05-061 Alternative proteins for organic meat and milk production $63,565 Mike Gamroth Oregon State University

SW05-077 Farmers facilitating the adoption of new meadowfoam establishment practices $67,078 George Hoffman Oregon State University

SW05-091 Integrated Soil and Crop Management for Organic Potato Production $196,067 Dr. Dan Sullivan Oregon State University Lane Selman Dept of Horticulture

SW04-072 Managing Cover Crop and Conservation Tillage Systems To Enhance Vegetable Crop Yields, Economic Returns and Environmental Quality $182,438 John Luna Oregon State University

SW03-033 Management of Garden Symphylans (Scutigerella immaculata Newport) with Crop Rotation Tactics and Improved Sampling Methods $160,132 Jon Umble Oregon State University

SW02-017 The Use of Straw Mulch to Enhance Predator Populations Along with Biopesticides to Control Onion Thrips in Dry Bulb Onions $73,800 Lynn Jensen Oregon State University

SW02-050 "MagNet": A Positive Pull Toward Integrated Pest Management in Root Crop Production. $134,829 Amy Dreves Oregon State University, Dept of Horticulture

SW02-052 Changing Meadowfoam Planting Dates and Planting Method to Reduce Input Costs, Pest Pressure, and Increase Yields. $100,726 Dr. Gary Jolliff Oregon State University
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<td>Farmer/Scientist Partnership for Integrated Cropping Systems</td>
<td>$184,662</td>
<td>Richard Dick</td>
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<td>SW00-00C</td>
<td>Sustainable Agriculture Learning Initiative</td>
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<td>Jon Bailey</td>
<td>Learning Initiative/CRA; Center for Rural Affairs</td>
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<td>SW00-016</td>
<td>Orchard floor management practices for improving soil quality and optimizing nitrogen uptake efficiency</td>
<td>$130,330</td>
<td>Anita Azarenko</td>
<td>OSU - Dept. of Horticulture</td>
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<td>SW00-024</td>
<td>Farmers Growing the Market with TFA-Approved</td>
<td>$100,000</td>
<td>Deborah J. Kane</td>
<td>The Food Alliance</td>
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<td>SW00-039</td>
<td>Control of Botrytis by Compost Tea Applications on Grapes in Oregon Vineyards</td>
<td>$141,572</td>
<td>Shepard Smith</td>
<td>Sunbow Farm/Soil Foodweb Inc</td>
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<td>Elaine Ingham</td>
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<td>SW00-047</td>
<td>Control of Eastern Filbert Blight</td>
<td>$81,477</td>
<td>Jay Pscheidt</td>
<td>Department of Botany and Plant Pathology</td>
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<td>SW99-061</td>
<td>Enhancing Biological Control With Insectary Plantings</td>
<td>$83,929</td>
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<td>SW99-063</td>
<td>Participatory Evaluation of Farmer Based Soil Quality Assessment Cards</td>
<td>$49,997</td>
<td>Daniel McGrath</td>
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<td>SW98-031</td>
<td>Advancing Sustainable Potato Production in the Northwest</td>
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<td>SW97-074</td>
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<td>SW96-013</td>
<td>Implementation and Assessment of Economic and Environmental Impact of a Weather Monitoring/Pest and Disease Risk Assessment Network in Commercial Pear Production in Oregon</td>
<td>$58,290</td>
<td>Franz Niederholzer</td>
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<td>SW95-025</td>
<td>Influences of Alternative Vegetable Systems on Arthropods/Soil Biological Dynamics and Soil Quality Trajectory</td>
<td>$180,000</td>
<td>Richard Dick</td>
<td>Oregon State University</td>
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<td>SW94-029</td>
<td>Development and Demonstration of Integrated Vegetable Production Systems for the Maritime Pacific Northwest</td>
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<td>LWD93-007</td>
<td>Development of Sustainable Crop and Livestock Production Systems for Land in the Conservation Reserve Program</td>
<td>$14,000</td>
<td>Rex E. Kirksey</td>
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<td>LW92-031</td>
<td>Grazing Strategies for Sustainable Ranching Systems in Western Semi-Arid Zones</td>
<td>$237,738</td>
<td>Ludwig M. Eisgruber</td>
<td>Oregon State University</td>
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<td>LWE92-001</td>
<td>On-Farm Demonstration of Integrated Vegetable Production Systems for the Maritime Pacific Northwest</td>
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<td>Project #</td>
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<td>LW88-001</td>
<td>Evaluation and Design of Low-Input Sustainable Vegetable/Small Grain and Small Fruit Systems of Western Oregon and Washington</td>
<td>$404,105</td>
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**RESEARCH TO GRASS ROOTS GRANTS**

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<td>RGR20-011</td>
<td>Spring Season Extension Efficiency in Cool, Short Season Climates</td>
<td>$68,486</td>
<td>Nicole Sanchez</td>
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<td>WRGR19-03</td>
<td>Regenerative Agriculture: connecting soil health, native bee habitat, and climate resilience through on-farm management strategies</td>
<td>$30,886</td>
<td>Elise Higley</td>
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<td>Our Family Farms</td>
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**PROFESSIONAL DEVELOPMENT PROGRAM GRANTS**

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<td>PDP20-019</td>
<td>Planning and Programming the 2021 National Farm Viability Conference in Oregon</td>
<td>$73,119</td>
<td>Chris Schreiner</td>
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<tr>
<td>ENE19-158</td>
<td>The Soil Life Short Course: Empowering Ag Professionals to Recognize, Quantify, and Conserve Beneficial Soil Animals</td>
<td>$114,618</td>
<td>Eric Lee-Mader</td>
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<td>Eric Lee-Mader</td>
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<td>Stephanie Frischie</td>
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<td>EW18-015</td>
<td>OSU Land Steward Program Professional Development Project</td>
<td>$73,199</td>
<td>Rachel Werling</td>
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<td>EW17-019</td>
<td>Western Region Pesticide Risk Reduction through Professional Development for Western State IPM Programs</td>
<td>$69,299</td>
<td>Paul Jepson</td>
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<td>EW16-010</td>
<td>Redefining Learner-centered Education to Build High Impact IPM Partnerships</td>
<td>$67,802</td>
<td>Mary Halbleib</td>
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<td>EW16-027</td>
<td>Sustainable Grazing Management in Riparian and Wetland Pasture</td>
<td>$15,237</td>
<td>Caley Sowers</td>
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<td>Coos Soil and Water Conservation District</td>
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<td>ES16-128</td>
<td>The Conservation Biological Control Short Course</td>
<td>$74,651</td>
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<td>ENE15-137</td>
<td>The Conservation Biological Control Short Course</td>
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<td>EW15-014</td>
<td>Collaborative Approaches to Increase the Integration of Functional Agricultural Biodiversity in Western Farming Systems</td>
<td>$67,699</td>
<td>Gwendolyn Ellen</td>
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<td>Agricultural Biodiversity Consulting</td>
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<td>EW15-020</td>
<td>Growing the Field for Organic Conservation: Training on NRCS CAP 138 and NOP Conservation Standards</td>
<td>$73,447</td>
<td>Sarah Brown</td>
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<tr>
<td>EW14-031</td>
<td>Training IPM Professionals in Rural Areas: A Model to Achieve Sustainable Knowledge</td>
<td>$74,755</td>
<td>Dr. Silvia Rondon</td>
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<td>EW14-035</td>
<td>The Conservation Biological Control Short Course</td>
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### Organic Conservation Training for Western Region Conservation Professionals

**Project #:** EW12-031  
**Title:** Organic Conservation Training for Western Region Conservation Professionals  
**SARE Support:** $98,288  
**Project Leaders:** Sarah Brown  
Oregon Tilth

### Creating Sustainable Agriculture Farmer-to-Farmer Networks through Professional Trainings and an Agricultural Educator Toolkit

**Project #:** EW11-015  
**Title:** Creating Sustainable Agriculture Farmer-to-Farmer Networks through Professional Trainings and an Agricultural Educator Toolkit  
**SARE Support:** $99,590  
**Project Leaders:** Melissa Matthewson  
Oregon State University Extension

### The Soil Quality Network

**Project #:** EW11-021  
**Title:** The Soil Quality Network  
**SARE Support:** $56,992  
**Project Leaders:** Teresa Matteson  
Benton Soil and Water Conservation District

### Western Pollinator Conservation Planning Short Course

**Project #:** EW10-018  
**Title:** Western Pollinator Conservation Planning Short Course  
**SARE Support:** $90,906  
**Project Leaders:** Eric Mader  
The Xerces Society

### Empowering Ag Professionals through a Beneficial and Pest Insect Train-the-Trainer Short Course Program for Oregon, Washington, & Idaho

**Project #:** EW09-001  
**Title:** Empowering Ag Professionals through a Beneficial and Pest Insect Train-the-Trainer Short Course Program for Oregon, Washington, & Idaho  
**SARE Support:** $95,635  
**Project Leaders:** Mary Corp  
Oregon State University  
Dr. Silvia Rondon  
Oregon State University

### Tri-State Organic Certification and Conservation Planning Cross-Training

**Project #:** EW08-001  
**Title:** Tri-State Organic Certification and Conservation Planning Cross-Training  
**SARE Support:** $86,137  
**Project Leaders:** Chris Schreiner  
Oregon Tilth

### Conserving the Three P’s: Habitat Conservation Practices for Beneficial Predators, Parasites, and Pollinators

**Project #:** EW07-018  
**Title:** Conserving the Three P’s: Habitat Conservation Practices for Beneficial Predators, Parasites, and Pollinators  
**SARE Support:** $51,165  
**Project Leaders:** Mace Vaughan  
The Xerces Society

### Organic Seed Production: Materials, Training, and a Seed Database.

**Project #:** EW06-010  
**Title:** Organic Seed Production: Materials, Training, and a Seed Database.  
**SARE Support:** $98,755  
**Project Leaders:** Brian Baker  
Organic Materials Review Institute

### Hands-On Workshops: Alternative Marketing Approaches and Distribution Channels

**Project #:** EW06-012  
**Title:** Hands-On Workshops: Alternative Marketing Approaches and Distribution Channels  
**SARE Support:** $60,000  
**Project Leaders:** Larry Lev  
Oregon State University

### Rhizosphere Ecology in Changing Cropping Systems

**Project #:** EW05-006  
**Title:** Rhizosphere Ecology in Changing Cropping Systems  
**SARE Support:** $7,348  
**Project Leaders:** Sandy Macnab  
Oregon State University Extension, Sherman County

### Western Integrated Nutrient Management Education Program

**Project #:** EW00-011  
**Title:** Western Integrated Nutrient Management Education Program  
**SARE Support:** $84,750  
**Project Leaders:** Mary Staben  
Oregon State University

### Developing an Educational Program for Teaching Science-based Concepts of Grass Regrowth for Improved Grazing Management

**Project #:** EW97-004  
**Title:** Developing an Educational Program for Teaching Science-based Concepts of Grass Regrowth for Improved Grazing Management  
**SARE Support:** $65,000  
**Project Leaders:** David B. Hannaway  
Oregon State University

### Pacific Northwest Sustainable Agriculture Systems Training Program

**Project #:** EW94-008  
**Title:** Pacific Northwest Sustainable Agriculture Systems Training Program  
**SARE Support:** $78,000  
**Project Leaders:** John Luna  
Oregon State University

### Farmer/Rancher Grants

<table>
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<tr>
<th>Project #</th>
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</table>
| FW21-380  | Mushroom Farming Research and Education to Bring Greater Equity and Diversity to the Food System | $25,000 | Bashira Muhammad  
Zoom Out Mycology |
| FW20-358  | Improving Irrigated Pasture Productivity and Soil Biodiversity in Oregon’s High Desert | $20,000 | John Shine  
Shine Brothers Ranch |
| FW20-369  | Effects of multi-species rotational grazing on soil microbial communities | $20,000 | Thomas Gillett  
Black Tansy Farm, LLC |
| FW19-351  | Effects of Subsurface Micro-irrigation on Water Use Efficiency and Hazelnut Tree Growth | $19,767 | Darrel Smith  
ZD Farms of Oregon |
<table>
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<td>FW19-356</td>
<td>Farmer/Rancher Sustainable Soil with Biochar</td>
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<td>Yellow Dog Farm</td>
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<td>FW18-048</td>
<td>Potential for Shake and Catch Harvesting of Hazelnuts</td>
<td>$19,532</td>
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<td>FW18-013</td>
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<td>FW16-031</td>
<td>Understanding On-Farm Costs of Production</td>
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<td>Diggin' Roots Farm</td>
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<td>FW15-018</td>
<td>Growing a Regional Seed Producers network in the Rogue Valley, Oregon</td>
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<td>FW15-054</td>
<td>Evaluating Market Opportunities of Conventional vs. GMO-free Broilers</td>
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<td>Innovative CSA Marketing Tools</td>
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<td>FW14-019</td>
<td>Improving Orchard Management through Multi-Species Cover Crop Mo</td>
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<td>Development of a Northwest Farm Stay Website</td>
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<td>Rodent Control in Orchards Using Raptors</td>
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<td>FW09-328</td>
<td>Increasing Grower Adoption of Adaptive Cover Cropping Systems: Effects on Vegetable Production and Nitrogen Cycling</td>
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<td>Butcher Waste as Biofuel</td>
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<td>Augmentation of Mite Predators on Apples and Grapes</td>
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<td>Lyla Lampson Lampson Research and Consulting</td>
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<td>Costs, Comparisons, and Effectiveness Using Chlorophyll Sensing Sprayers in a Chemical Fallow Operation</td>
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<td>Determine Whether Small Farm Poultry Production Can Be Boosted when Combined with Red Worm (Eisenia fetida) Vermiculture</td>
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<td>Environmentally Sound Irrigation and Fertility Systems for Sweet Cherry Crops in the Pacific Northwest</td>
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<td>Silvo-Pasture with Hybrid Poplar and Sheep</td>
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<td>Recycle Used Gestation Crates into Group-Housed Sow Feeding Stalls</td>
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<td>FW04-026</td>
<td>Effectiveness of Three Methods of Removing Stumps to Control Annosus Root Rot in Christmas Tree Plantations</td>
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<td>Virtual Focus Group to Measure Most Efficient Use of Marketing Resources</td>
<td>$6,863</td>
<td>Mehrten Homer Painted Hills Natural Beef</td>
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<td>FW03-023</td>
<td>Can a Summer Cover Crop of Sudan-sorghum Reduce the Detrimental Effects of Tillage in Fall-planted Garlic?</td>
<td>$9,629</td>
<td>Laura Masterson 47th Avenue Farm</td>
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<td>Poplar Cotton Fiber Production: A market Opportunity in Oregon</td>
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<td>Russian Honey Bee Queens Resistant to Varroa in Oregon</td>
<td>$9,125</td>
<td>Chuck Hunt</td>
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<td>FW00-051</td>
<td>Low Stress Stockmanship Clinic for Jackson County, Oregon</td>
<td>$5,075</td>
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<td>Veneta Cooperative Farm Stand</td>
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<td>Agritourism-Sustainable Agriculture with Cash and Information Flow</td>
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<td>Integrated Strip-Till Systems for Vegetable Production in Western Oregon</td>
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<td>Clover Creek Ranch Early Weaning Comparison</td>
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<td>Reducing Foxtail in Permanent Pastures</td>
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<td>Using Truffles to Enhance Douglas Fir Production On A Small Family Farm</td>
<td>$2,800</td>
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<td>FW97-020</td>
<td>The Use of Goats to Control Juniper, Sage &amp; Rabbit Brush</td>
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<td>Constructed Wetland for Waste Water Treatment</td>
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<td>FW97-041</td>
<td>Biological Control of Pear Pests</td>
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<td>FW96-003</td>
<td>Low Tillage Weed Control</td>
<td>$1,895</td>
<td>Jim Fullmer</td>
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Use of Aerated Compost Teas for Control of Foliar Diseases of Spinach, Lettuce and Broccoli and to Promote Plant Vigor and Quality

Use of Aerated Compost Teas as a Preventative Foliar Fungicide on Grape Vines Vitus vinifera

The Effect of Aerated Compost Teas on Disease Control in Blueberries and Tomatoes

Grazing Sheep in New Forest Plantings

School Cafeteria Compost System for Soil Amendment Production

Organic Mulch for Weed Control in Rhubarb

Parasite and Nutrient Management of Composted Manure

Low Tillage Weed Control System

Demonstration and Implementation of Integrated Fruit Production on Anjou Pears

Evaluating Methods to Enhance Microbial Degradation of Residual Soil Contaminants

Enhancing Pollinator Habitat in Pacific Northwest Croplands Using DNA Metabarcoding Techniques

Potato Virus Y: Testing New Potential Resistance Genes to an Enduring Threat to Potato Production

Pacific Flatheaded Borer: An old pest is new again in Oregon’s rapidly expanding hazelnut industry

Determining the Impacts of Dormant Pruning Methods and Nitrogen Fertilization on Pinot Noir Bud Fruitfulness and Yield

Diagnosis and control of winter squash storage rots in western Oregon

Effects of Grassland Restoration on Native Bee and Spider Communities in a Pacific Northwestern Agroecosystem

GRADUATE STUDENT GRANTS

GW19-188 Enhancing Pollinator Habitat in Pacific Northwest Croplands Using DNA Metabarcoding Techniques $25,000 Dr. Sandy DeBano Oregon State University Katherine Arstingstall Oregon State University

GW19-189 Potato Virus Y: Testing New Potential Resistance Genes to an Enduring Threat to Potato Production $25,000 Dr. Aymeric Goyer Oregon State University Max Combest Oregon State University

GW19-195 Pacific Flatheaded Borer: An old pest is new again in Oregon’s rapidly expanding hazelnut industry $24,825 Dr. Nik Wiman Oregon State University Anthony Mugica Oregon State University

GW18-027 Determining the Impacts of Dormant Pruning Methods and Nitrogen Fertilization on Pinot Noir Bud Fruitfulness and Yield $22,786 Dr. Patricia Skinkis Oregon State University Miranda Ulmer Oregon State University (former, at the time of the project), currently Colorado State University

GW18-157 Diagnosis and control of winter squash storage rots in western Oregon $25,000 Dr. Kenneth Johnson Oregon State University Hannah Rivedal Oregon State University

GW16-016 Effects of Grassland Restoration on Native Bee and Spider Communities in a Pacific Northwestern Agroecosystem $24,999 Dr. Sandy DeBano Oregon State University Lauren Smith Oregon State University
GW15-018  Managing A Challenging Subterranean Clover Pest: Sustainable Control Using Insect Pathogens  $12,859  Dr. Sujaya Rao  Oregon State University  Anis Lestari  Oregon State University

GW15-034  Increasing the Marketability of Pacific Northwest Potatoes  $24,401  Dr. Aymeric Goyer  Oregon State University  Bruce Robinson  Oregon State University

GW13-014  Reducing Drosophila suzukii Management Challenges: An Alternative to Insecticide Cover Sprays  $24,750  Dr. Wei Yang  Oregon State University  Jimmy Klick  Oregon State University

GW12-022  Late season and overwintering management of the large raspberry aphid  $19,193  Danielle Lightle  Oregon State University  Jana Lee  USDA ARS

GW09-008  Enhancing the integration of mite biological control in western United States vineyard management programs  $25,000  Angela Gadino  Oregon State University

GW08-014  Pollination by Bumble Bees for Enhanced Clover Seed Production  $19,977  Dr. Sujaya Rao  Oregon State University  Kimberly Skyrm  Oregon State University

GW06-010  Assessment of Riparian Management Practices in Northeastern Oregon  $9,531  David Wooster  Oregon State University  Dr. Sujaya Rao  Oregon State University  Melissa Scherr  Oregon State University

ON FARM RESEARCH/PARTNERSHIP GRANTS

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<td>OW21-364</td>
<td>Optimizing vole trapping strategies in annual and perennial cropping systems</td>
<td>$74,364</td>
<td>Nick Andrews  Oregon State University  Dr. Dana Sanchez  Oregon State University</td>
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<td>OW21-365</td>
<td>Overseeding novel forages in Oregon as a model for enhancing perennial grass pastures in the Pacific Northwest</td>
<td>$75,000</td>
<td>Dr. Serkan Ates  Oregon State University  Fara Brummer  Oregon State University  Dr. David Hannaway  Oregon State University  Ian McGregor, M.S.  Oregon State University, Klamath Basin Research and Extension Center  Guojie Wang  Oregon State University - Eastern Oregon Agricultural Research Center</td>
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<td>OW21-366</td>
<td>Establishing a participatory research network for drought-tolerant corn production in the Pacific Northwest</td>
<td>$74,990</td>
<td>Lucas Nebert  Oregon State University  Amy Garrett  Oregon State University Small Farms Extension  James Myers  Oregon State University  Dr. Lucas Nebert  Oregon State University</td>
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<td>OW21-367</td>
<td>Analyzing Production Costs of Organic Hazelnuts in Oregon</td>
<td>$73,124</td>
<td>Tanya Murray  Oregon Tilth</td>
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<td>OW20-356</td>
<td>Investigating techniques for successful overwintering of honey bee queens in bulk</td>
<td>$49,796</td>
<td>Dr. Ramesh Sagili&lt;br&gt; Oregon State University&lt;br&gt; Ellen Topitzhofer&lt;br&gt; Oregon State University</td>
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<td>OW19-347</td>
<td>Sustaining winter wheat production using biochar amendments in northeast Oregon</td>
<td>$49,973</td>
<td>Stephen Machado&lt;br&gt; Oregon State University&lt;br&gt; Dr. Rakesh Awale&lt;br&gt; Oregon State University, Oregon State University</td>
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<td>OW19-348</td>
<td>Enhancing Vegetable Farm Resilience through Dryland Production</td>
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<td>OW18-019</td>
<td>Expanding the Adoption of Under-Trellis Cultivators in Vineyards to Reduce Herbicide Input</td>
<td>$49,991</td>
<td>Marcelo Moretti&lt;br&gt; Oregon State University</td>
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<td>OW18-020</td>
<td>Investigating the feasibility of berry production in Central Oregon under protected and unprotected culture</td>
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<td>Clare Sullivan&lt;br&gt; Oregon State University</td>
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<td>OW17-008</td>
<td>Training Seed Producers and Increasing Local Markets for Seed Production</td>
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<td>Maud Powell&lt;br&gt; OSU Extension</td>
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<td>OW17-024</td>
<td>Resistant, resilient and long storing garlic varieties for organic farming systems and markets</td>
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<td>OW16-338</td>
<td>Improving Water Saving Techniques and Fruit Quality in Oregon Vineyards</td>
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<td>Winter squash: extending the season and expanding the uses</td>
<td>$49,958</td>
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<td>OW16-028</td>
<td>Evaluating cover crops for mature hazelnut orchards in the Willamette Valley, Oregon</td>
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<td>Restoring Rangeland Quality with Soil Health Enhancement</td>
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<td>Integrated Clubroot Control Strategies for PNW Brassica Producers</td>
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<td>Interseeding to improve winter cover crop establishment and efficiency in processed vegetable production in the Willamette Valley</td>
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<td>Assessing the Impacts of Mob Grazing in Southern Oregon</td>
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<td>Management of Fusarium Wilt of Cucurbits with Vetch Cover Cropping and Grafted Transplants</td>
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<td>OW10-327</td>
<td>Establishing Economic Threshold and Epidemiology for Nosema Ceranae, A Relatively New Species of Microsporidian Parasite in the Honey Bee for PNW</td>
<td>$38,536</td>
<td>Dr. Ramesh Sagili&lt;br&gt; Oregon State University</td>
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Total funding from the USDA SARE program to Oregon
$11,331,835

For further information on projects, contact Western SARE at (435) 797-2257 or wsare@usu.edu.
Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).