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 $389 million to more than 8,542 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...

California

Project Highlight: Potter Valley Tribe’s Native Mushroom Cultivation from Waste Byproduct Substrate for Food Sovereignty

The Potter Valley Tribe in Ft. Bragg, California, began a small operation prior to their SARE project growing various mushrooms with the objectives of food sovereignty, sustainable agriculture, income, and education. Food sovereignty for Native Americans acts as a resurgence of culture, bolstering health, economic development, and native nationhood. The Tribe notes that mushrooms have long been an important feature in Northern Californian diets but are rarely cultivated on Tribal lands.

This Western SARE project experimented with growing on spent coffee grounds, hardwood sawdust from sawmills, and other less frequently utilized local ‘waste’ byproducts such as hemp production. The Tribe aimed to develop their own methodology for production rather than purchasing spawn from other growers. This would increase food sovereignty and diversify the Tribe’s revenue.

Their outreach and education brought in over 40 new participants in the project, including elders and youth, representing eight different tribes. They came together to continue educating tribal youth in mushroom cultivation, cooking, and gathering. The Potter Valley Tribe also created five instructional videos and Mushroom Manual with step-by-step instructions, as well as developed a mushroom cultivation lab.

Three additional tribes will begin their own mushroom operations after becoming inspired by the success of the Potter Valley Tribe project.

For more information on this project, see sare.org/projects, and search for project number RGR20-010.

SARE in California

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

$15,979,321 in total funding

249 grant projects

(since 1988)

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

Total awards: 249 grants
- 67 Research and Education
- 46 Professional Development Program
- 80 Farmer/Rancher
- 37 Graduate Student
- 16 On Farm Research/Partnership
- 3 Research to Grass Roots

Total funding: $15,979,321
- $9,651,474 Research and Education
- $3,277,482 Professional Development Program
- $1,220,042 Farmer/Rancher
- $801,983 Graduate Student
- $858,926 On Farm
- $169,413 Research/Partnership

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/california

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/california to learn more.

Sonja Brodt
University of California Sustainable Agriculture Research & Education Program
(530) 754-8547
sbbrodt@ucdavis.edu

Jeffery Stackhouse
UCCE Livestock Advisor
(707) 445-7351
jwstackhouse@ucanr.edu

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.

For detailed information on SARE projects, go to www.SARE.org
California has been awarded $15,979,321 grants to support 241 projects, including but not limited to, 59 research and/or education projects, 46 professional development projects and 80 producer-led projects. California 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>
</tr>
</thead>
<tbody>
<tr>
<td>SW23-949</td>
<td>Sustainability outcomes of integrated sheep vineyards systems</td>
<td>$347,696</td>
<td>Dr. Amelie Gaudin, Dr. Elisabeth Forrestel, Dr. Brittney K Goodrich,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cooperative Extension at the University of California, Davis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dr. Jonathan Lundgren, Ecdysis Foundation</td>
</tr>
<tr>
<td>SW22-933</td>
<td>Integrated field and satellite based decision support system for climate-</td>
<td>$348,561</td>
<td>Yufang Jin, University of California, Davis, Royce Larsen, Leslie Roche,</td>
</tr>
<tr>
<td></td>
<td>resilient and sustainable ranches and rangelands across California</td>
<td></td>
<td>Dr. Matthew Shapero, University of California, ANR, Matthew Shapero,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Steven Shapero, University of California Davis, ANR, Steven Ostoja, Dr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brian Oakley, USDA, Agricultural Research Service</td>
</tr>
<tr>
<td>SW22-932</td>
<td>Effects of colostrum storage and housing style on health and welfare of</td>
<td>$339,038</td>
<td>Dr. Jose Peralta, DVM PhD, College of Veterinary Medicine, Western University of</td>
</tr>
<tr>
<td></td>
<td>pre-weaning calves in conventional and organic dairy farms</td>
<td></td>
<td>Health Sciences, Betsy Karle, University of California, Agriculture and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Natural Resources, Dr. Manel Lopez-Bejar, DVM PhD, College of Veterinary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Medicine, Western University of Health Sciences, Dr. Brian Oakley, PhD, College</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of Veterinary Medicine, Western University of Health Sci, Dr. James Reynolds,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DVM, College of Veterinary Medicine, Western University of Health Sci</td>
</tr>
<tr>
<td>SW22-931</td>
<td>Quantifying the Indirect Costs of Gray Wolf - Cattle Interactions</td>
<td>$296,080</td>
<td>Tina Saitone, University of California, Davis, Dr. Kenneth Tate, University</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>of California Davis</td>
</tr>
<tr>
<td>SW20-912</td>
<td>Use of Almond Hull and Shell as Organic Matter Amendments in Advanced Orchard</td>
<td>$349,807</td>
<td>Dr. Sat Darshan Khalsa, University of California Davis, Dr. Amelie Gaudin,</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
<td>University of California, Davis</td>
</tr>
<tr>
<td>Project Code</td>
<td>Title</td>
<td>Budget</td>
<td>Principal Investigators</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| SW20-913    | Effective Management of Thousand Cankers Disease of Walnut through Disruption of Insect Vector Behavior | $349,770  | Dr. Richard Bostock  
Dr. Daniel Kluepfel  
USDA - ARS, Crops Pathology and Genetics Research Unit  
Dr. Steven Seybold  
USDA Forest Service |
| SW20-919    | Biointensive no-till farming in California: farmer-driven research and education on soil health, water efficiency and economic resiliency | $251,036  | Dr. Timothy Bowles  
University of California Berkeley  
Amanda Hodson  
University of California, Davis  
Sara Tiffany  
Community Alliance with Family Farmers |
| SW19-902    | Potential Economic and Nitrogen Benefits of Fababean as a Double Purpose Cash and Cover Crop in Northern California | $348,772  | Dr. Hossein Zakeri  
California State University- Chico |
| SW19-908    | Quantifying the effects of rangeland conversion on ecosystem functions: Linking land use systems to enhance farm profitability | $349,327  | Fadzayi Elizabeth Mashiri  
University of California |
| SW18-063    | Quantifying the frequency and effects of secondary exposure to rodenticides in barn owls | $249,546  | Dr. Joshua Hull  
UC Davis |
| SW17-060    | UAS (Unmanned Aerial System)-guided releases of predatory mites for management of spider mites in strawberry | $249,878  | Dr. Elvira de Lange  
University of California Davis |
| SW14-011    | Farming for Native Bees | $247,649  | Dr. Gordon Frankie  
UC Berkeley |
| SW12-110    | The interaction of rangeland management and environmental conditions in regulating forage quality - quantity and other ecosystem services | $265,414  | Valerie Eviner  
UC Davis |
| SW11-116    | Integrated rotation systems for soil borne disease, weed and fertility management in strawberry/vegetable production | $218,424  | Joji Muramoto  
University of California, Santa Cruz |
| SW10-013    | Control of Bacterial Wilt Disease of Ginger through an Integrated Pest Management Program | $289,245  | Dr. Susan Miyasaka  
University of Hawaii |
| SW10-801    | A San Joaquin Valley Quilt: Stitching Together a Region’s Prosperity, Nutrition and Sustainability | $14,935   | Daniel O’Connell  
Sequoia Riverlands Trust |
| SW10-803    | Sierra CRAFT | $30,653   | Bill Bennett  
High Sierra RC&D Council, Inc. |
| SW10-810    | Developing regional distribution networks to enhance farmer prosperity: Retail value chains | $24,906   | Dr. Gail Feenstra  
UC SAREP/ASI |
| SW08-060    | Triple-cropping Dairy Forage Production Systems Through Conservation Tillage in California's San Joaquin Valley | $118,100  | Dr. Jeff Mitchell  
University of California, Davis |
| SW07-022    | Using Nectar Cover Cropping in Vineyards for Sustainable Pest Management | $178,300  | Mark Hoddle  
University of California  
Dr. Nic Irvin  
University of California |
Toward a Broader Vision of Sustainability: Social Equity in Sustainable Agriculture

Ron Strochlic
California Institute for Rural Studies

Grazing Strategies to Control Medusahead in California

Dr. Emilio Laca
UC Davis

Alternaria Control Using Biocontrol Yeast in Organic Pistachio Production Systems

Dr. Dan Parfitt
UC Davis

Smart Energy Management in Agriculture

Karyn Wolf Lynn
Ecological Farming Association

Fresh, From Our Family to Yours: Direct Marketing Education for Producers

Molly Johnson
PlacerGROWN

Farmland Tenure: A Tool Kit

Steve Schwartz
California FarmLink

Educational Workshops on Organic Dairy Management

Ken Andersen
University of California Cooperative Extension

Confirmation of Riparian Friendly Grazing Project Results and Development of Achievable, Site Specific Reference Conditions for Grazed Riparian Areas

Dr. Kenneth Tate
University of California Davis

Evaluation of the Effects of Vineyard Floor Management Practices on Soil Microbiology

Richard Smith
University of California Cooperative Extension

Management of Vine Mealybugs in California's San Joaquin Valley Through the Integration of Chemical and Biological Controls

Kent Daane
Division of Insect Biology, UC Berkeley
Walter Bentley
UC Statewide IPM Project

Development and Dissemination of a Cowpea Cultivar for Cover Crops

Dr. Milt McGiffen, Jr.
University of California

Control of Western Tarnished Plant Bug (WTPB) Lygus hesperus Knight in Organic Strawberry Production Systems Using Trap Crops and Tractor-mounted Vacuums

Dr. Sean Swezey
Center for Agroecology and Sustainable Food System

Riparian Friendly Grazing Project

Dr. Kenneth Tate
University of California Davis

Transition to Organic Vegetable Production by Large-Scale Conventional Farmers

Louise Jackson
UC Davis

The Transition from Conventional to Low-Input or Organic Farming Systems: Soil Biology, Soil Chemistry, Soil Physics, Energy Utilization, Economics, and Risk

Steven Temple
University of California

Rotations with Broccoli - A Sustainable Alternative to Soil Chemical Fumigants

Krishna Subbarao
University of California, Davis

Cropping Systems for Intensive Desert Vegetable Production

Charles Sanchez
University of Arizona
Dr. Milt McGiffen, Jr.
University of California
<table>
<thead>
<tr>
<th>Project ID</th>
<th>Title</th>
<th>Funding</th>
<th>Principal Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW97-021</td>
<td>Reducing Insecticide Use on Celery Through Low Input Pest Management Strategies</td>
<td>$100,000</td>
<td>John T. Trumble</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Department of Entomology</td>
</tr>
<tr>
<td>SW97-045</td>
<td>Decomposition and Nutrient Release Dynamics of Cover Crop Materials</td>
<td>$41,064</td>
<td>Dr. Jeff Mitchell</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Davis</td>
</tr>
<tr>
<td>SW97-049</td>
<td>Development and Implementation of Trap Cropping Strategies for Control of Hemipteran Pests in Pistachio Orchards</td>
<td>$79,858</td>
<td>Kent Daane</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Division of Insect Biology, UC Berkeley</td>
</tr>
<tr>
<td>SW96-012</td>
<td>The Transition from Conventional to Low-input or Organic Farming Systems: Soil Biology, Soil Chemistry, Soil Physics, Energy Utilization, Economics and Risk</td>
<td>$100,000</td>
<td>Steven Temple</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California</td>
</tr>
<tr>
<td>SW96-016</td>
<td>Tillage Practices for Improving Nitrogen Cycling and Soil Quality</td>
<td>$102,000</td>
<td>Louise Jackson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>UC Davis</td>
</tr>
<tr>
<td>SW96-021</td>
<td>Controlled Grazing on Foothill Rangelands</td>
<td>$40,750</td>
<td>Roger Ingram</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California Cooperative Extension</td>
</tr>
<tr>
<td>SW95-012</td>
<td>A Cover Crop System for Sustainable Grape Production in California - Beyond the Transition Phase</td>
<td>$122,559</td>
<td>Frank G. Zalom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California</td>
</tr>
<tr>
<td>SW95-019</td>
<td>Development of a Farm-Wide System for Control of Many of the Principal Lepidopterous Pests of Grapes and Tree Fruits Based on Disruption of Premating Pheromone Communication Between Male and Female Moths</td>
<td>$120,770</td>
<td>Harry H. Shorey</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California</td>
</tr>
<tr>
<td>SW95-024</td>
<td>Managing Soil Biota in Low-Input and Organic Farming Systems to Enhance Soil Fertility</td>
<td>$175,000</td>
<td>Kate Scow</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California, Dept. of Land, Air, and Water Resources</td>
</tr>
<tr>
<td>SW94-017</td>
<td>The Transition from Conventional to Low-input or Organic Farming Systems: Soil Biology, Soil Chemistry, Soil Physics, Energy Utilization, Economics and Risk</td>
<td>$186,666</td>
<td>Steven Temple</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California</td>
</tr>
<tr>
<td>SW94-022</td>
<td>Western Region Community Supported Agriculture (CSA) Conference</td>
<td>$23,991</td>
<td>Jered Lawson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CSA West</td>
</tr>
<tr>
<td>SW94-037</td>
<td>Sierra County Alternative Agriculture Project</td>
<td>$12,000</td>
<td>Kim Joos</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sierra County Economic Council</td>
</tr>
<tr>
<td>SW94-054</td>
<td>Farming in the 21st Century: A Documentary Photography Project</td>
<td>$27,000</td>
<td>Cynthia L. Vagnetti</td>
</tr>
<tr>
<td>LW91-026</td>
<td>Prune Refuges and Cover Crops to Facilitate Low-Input Production of California’s Raisin, Table, and Wine Grapes</td>
<td>$120,402</td>
<td>Frank G. Zalom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California</td>
</tr>
<tr>
<td>LW91-028</td>
<td>A Multidisciplinary Approach to Evaluate and Aid the Transition From Conventional to Low-Input Pest Management Systems in Stone Fruits</td>
<td>$299,814</td>
<td>Kent Daane</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Division of Insect Biology, UC Berkeley</td>
</tr>
</tbody>
</table>
### RESEARCH TO GRASS ROOTS GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRGR22-007</td>
<td>Extending compost-induced disease suppressive soils to small-scale Latinx farmers</td>
<td>$82,713</td>
<td>Aysha Peterson Resource Conservation District of Monterey County</td>
</tr>
<tr>
<td>RGR20-006</td>
<td>Building on Farmer Experience to Increase Cover Crops Adoption in Orchards and Vineyards</td>
<td>$74,594</td>
<td>Dr. Sonja Brodt UC SAREP Lucas Patzek Napa County Resource Conservation District</td>
</tr>
<tr>
<td>RGR20-010</td>
<td>Potter Valley Tribe’s Native Mushroom Cultivation from Waste Byproduct Substrate for Food Sovereignty</td>
<td>$12,106</td>
<td>Jade Frolic Metamimicry Salvador Rosales, Sr. Potter Valley Tribe Salvador Rosales, Jr. Potter Valley Tribe Gregg Young Potter Valley Tribe</td>
</tr>
</tbody>
</table>

### PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPDP23-009</td>
<td>Enhancing Farmer-to-Farmer Education for Farm Sustainability and Community Resilience</td>
<td>$99,957</td>
<td>Jeneba Kilgore Agroecology Commons Jeneba Kilgore Agroecology Commons Brooke Porter Agroecology Commons</td>
</tr>
<tr>
<td>WPDP23-001</td>
<td>Producing Online Courses with Farmers &amp; Researchers so Ag Professionals Can Access Sustainable Viticulture Education On-Demand</td>
<td>$99,695</td>
<td>Elizabeth Vukmanic Vineyard Team</td>
</tr>
</tbody>
</table>
WPDP23-010  "Getting Comfortable in the Weeds: How to Serve California Agriculture" - A Partnership with California FarmLink and CAMEO

WPDP23-013  A Workshop Series on Robotics, Automation, and Drone Technologies for Sustainable Agriculture

WPDP22-003  Scaling Regenerative Agriculture in California through NRCS and RCD Conservation Planner Training

WPDP22-023  Closing the Regenerative Agriculture Economy Loop on Small Farms: A Training program for Agricultural Professionals and Curriculum for Small Farmers

WPDP22-022  Advancing Knowledge of Soil Health Assessment and Management Through California’s North Coast Soil Hub

WPDP22-015  Water Resource Enhancement and Climate Change Mitigation Through Strategic Agricultural Land Protection, Land Access, and Land Transitions

WPDP21-005  Farming Through Wildfire Season: Preparation, Resilience & Recovery

WPDP21-022  Empowering Agricultural Professionals to Support Beneficial Birds and Discourage Pest Birds

WPDP21-009  Building Capacity to Reduce Human-Wildlife Conflict

PDP20-009  Filling the Gap – Exposing Agricultural Professionals to New and Innovative Small-Farm Tools
WPDP19-25  Growing Successful Agricultural Businesses  $74,984  Carolina Martinez  California Association for Micro Enterprise Opportunity  Carla Holland  San Diego Small Business Development Center

WPDP19-12  From Classroom to the Field: Soil Health Bottom Line: Expanding Adoption of Healthy Soils Practices by Quantifying the Economic and Environmental Benefits to Growers  $75,000  Kara Heckert  American Farmland Trust  Anelkis Royce  American Farmland Trust  Anelkis Royce  American Farmland Trust

EW18-024  Organic Soil Health Education Resources for Agricultural Professionals in the Western Region  $74,138  Brise Tencer  Organic Farming Research Foundation

EW17-012  Growing California Agritourism Communities  $73,010  Dr. Gail Feenstra  UC SAREP/ASI

EW17-014  Building Knowledge of Cover Cropping Techniques for Increased Adoption Rates  $52,172  Trina Walley  East Stanislaus Resource Conservation District

EW16-018  Facilitating Food Safety for Small, Sustainable Farms  $55,000  Nathan Harkleroad  ALBA  Kaley Grimland  ALBA

EW16-015  Harmonizing Organic Standards and Food Safety Metrics  $74,970  Dave Runsten  Community Alliance with Family Farmers

EW16-026  Assessment of Soil Biology and Plant Available Nitrogen for Soil Health and Water Quality  $49,690  Hunter Francis  CAFES Center for Sustainability

EW14-036  Supporting Farmer Training Programs in the Western States through Professional Development and Collaboration  $29,977  Nathan Harkleroad  ALBA

EW13-008  High Residue Farming in the Irrigated Far West  $26,400  Andrew McGuire  Washington State University Extension

EW13-022  Development and training of a national spray application work group  $57,862  Gwen-Alyn Hoheisel  Washington State University

EW13-025  Building Tools and Technical Capacity to Improve Irrigation and Nutrient Management on California’s Central Coast  $39,564  Pamela Krone-Davis  Monterey Bay Sanctuary Foundation

EW13-027  Application of Lessons Learned from NRCS Rangeland CEAP: A site-specific, Low Cost System for Medusahead Control  $68,469  Jeremy James  University of California

EW12-017  Training Manuals and Professional Development Activities for Teaching Organic Farming and Marketing  $98,782  Dr. Daniel Press  University of California Santa Cruz  Ann Lindsey  University of California Santa Cruz

EW12-033  FARMING STRATEGIES FOR COPING WITH CLIMATE CHANGE  $19,000  Renata Brillinger  California Climate & Agriculture Network

EW11-029  Cal Poly Professional Development Compost Training and Establishment of the Cal Poly Compost Project  $57,582  Hunter Francis  CAFES Center for Sustainability
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
<th>Budget</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
</table>
| EW10-004     | Capacity Building Workshops: Developing Regional Agritourism Networks for Agricultural Sustainability and Education | $59,558 | Penny Leff  
                UC Sustainable Agriculture Research and Education Program (UC SAREP) |
| EW10-005     | Understanding the Climate Benefits of Sustainable Agriculture                                                  | $11,905 | Jeanne Merrill  
                CA Climate & Agriculture Network (CalCAN)  
                Renata Brillinger  
                California Climate & Agriculture Network |
| EW09-004     | Ecology and Management of Grazing, An Online Course                                                             | $84,826 | Melvin George  
                University of California |
| EW04-012     | Adding Value to Grassfed Beef Niche Marketing Efforts                                                          | $60,000 | Cynthia Daley  
                California State University, Chico |
| EW03-004     | Field Course for Agricultural Professionals on the Common Goals and Strategies of USDA’s National organic Standards and Resource Conservation Programs | $60,000 | Rex Dufour  
                National Center for Appropriate Technology (NCAT) |
| EW03-007     | Extending Hedgerow Systems in California Agriculture                                                            | $60,000 | Mark Cady  
                Community Alliance with Family Farmers |
| EW02-005     | Organic Farming Principles, Practices, and Materials: Resources for Western Region Extension and USDA Professionals | $101,907| Dr. Sean Swezey  
                Center for Agroecology and Sustainable Food System  
                David Chaney  
                SAREP |
| EW01-010     | Training and Education Outreach to NRCS and University of California CES staff to Convey Animal Nutrition        | $81,950 | Thomas Wehri  
                CA Association Resource Conservation Districts |
| EW01-013     | Promotion of Intergenerational Farm Transfers for Agricultural Sustainability and Farmland Production            | $56,000 | Steve Schwartz  
                California FarmLink |
| EW00-012     | Sharing Resources to Help Connect Farmers to Direct Marketing Niches                                             | $96,578 | David Chaney  
                SAREP |
| EW98-001     | Broadening the Audience: Providing Sustainable Agriculture Education for Pest Control Advisers and Agricultural Consultants in California and Oregon | $80,100 | David Chaney  
                SAREP |
| EW97-002     | Sustainable Range - Pasture Livestock - Dairy Production Training For Resource Professionals                       | $29,000 | Roger Ingram  
                University of California Cooperative Extension |
| EW96-005     | Multidisciplinary On-Site Training in Sustainable Agriculture Education                                          | $97,432 | Steven Temple  
                University of California |
| EW96-009     | Sustainable Agriculture Curriculum Development Project for Extension Professionals in California’s San Joaquin Valley and Central Coast Regions | $98,773 | David Chaney  
                SAREP |
| EW96-010     | Sustainable Arid Land Grazing Systems: Training for Managers of Public Land and Reserves                          | $29,000 | William Olkowski  
                Bio-Integral Resource Center (South) |
| EW96-011     | Professional Training in Biologically Integrated Orchard Systems                                               | $155,940| Jill Klein  
                Com. Alliance w/ Family Farmers/BIOS  
                Training Prop. for SARE |
<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| EW95-015     | A Consortium-Based Sustainable Agriculture Training Program (SATP) Curriculum Plan | $20,000      | Dr. Sean Swezeey  
Center for Agroecology and Sustainable Food System  |
| EW94-003     | Multidisciplinary On-Site Training in Sustainable Agriculture Education         | $71,000      | Steven Temple  
University of California                               |

### FARMER/RANCHER GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
</table>
| FW23-435     | Evaluating feasibility of solarization for organic small-scale farmers in coastal California | $14,400      | Maria de los Angeles Carrillo  
La Buena Tierra                                      |
| FW23-417     | Farming while green and Brown: A case study of beginning farmers of color in California | $24,999      | Dilip Sharma  
Three Feathers Farm                                   |
| FW23-418     | Research and Sustainable Integrated Pest Management Implementation on an Organic Central Coast Cut Flower Farm to Reduce Losses From Key Pests. | $24,897      | Kelly Brown  
Do Right Flower Farm                                   |
| FW23-433     | Assessing the economic and social viability of transitioning to Winter CSA production as an adaptation strategy to climate change - Seasons 2 and 3 | $24,600      | Caitlin Hachmyer  
Red H Farm                                               |
| FW23-419     | Finding Goldilocks: a survey of the factors limiting natural oak recruitment. | $20,005      | Alex Palmerlee  
Far View Ranch Inc.                                    |
| FW23-421     | Testing virtual fence systems for fire fuel management                        | $23,309      | Jack Anderson  
Cuyama Lamb LLC                                         |
| FW23-423     | Examining the environmental, social, and economics of utilizing livestock and summer cover crops in annual cropping systems | $24,753      | Ted Kingsley  
Kingsley Farms                                           |
| FW22-408     | Improving cost-effective testing and actionable understanding of holistic soil and plant nutrition for agroecological farmers | $24,834      | benjamin Fahrer  
Deep Medicine Circle                                       |
| FW22-402     | Testing new perennial intermediate wheatgrass for sustainable agriculture in California | $25,000      | Charlie Chen  
Meristem LLC                                             |
| FW22-401     | Rehydrating Toro Creek with Sustainable Agriculture: Traceland Farm Demonstration Project | $24,997      | Jesse Trace  
Traceland                                                 |
| FW22-395     | Analyzing Crop Profitability And Financial Metrics On Flower Farms            | $27,462      | Helen Larkin  
Lennie Larkin Consulting                                  |
| FW22-392     | Assessing the economic and social viability of transitioning to Winter CSA production as an adaptation strategy to climate change impacts | $24,950      | Caitlin Hachmyer  
Red H Farm                                                 |
| FW22-388     | Implementing Whole Farm Cycling of Nutrients and Carbon with Orchard Waste in Walnut & Cherry Production in Central Valley CA | $24,961      | Franz Eilers  
John Eilers Farms                                         |
| FW21-376     | Evaluating Different Value-added Grains for Lassen County                     | $25,000      | Thomas Traphagan  
Sunset Ranch                                                |
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Title</th>
<th>Budget</th>
<th>Principal Investigator</th>
</tr>
</thead>
<tbody>
<tr>
<td>FW21-377</td>
<td>The effects of biochar soil amendments on industrial hemp yields</td>
<td>$25,000</td>
<td>Tony De Veyra Fifth World Llc</td>
</tr>
<tr>
<td>FW21-379</td>
<td>Increasing food yields from urban and peri-urban farms through deployment of small-scale agricultural technologies</td>
<td>$25,000</td>
<td>David Blume Whiskey Hill Farm/Blume Distillation</td>
</tr>
<tr>
<td>FW21-385</td>
<td>Increased Profitability for Small Farms in Silicon Valley Through Year-Round Production of Baby Greens</td>
<td>$23,204</td>
<td>Sam Thorp Spade and Plow Organics LLC</td>
</tr>
<tr>
<td>FW21-386</td>
<td>Improving Soil Health with biochar and compost application in North Coast Vineyards</td>
<td>$24,583</td>
<td>Dr. Michael Sipiora Treasury Wine Estates</td>
</tr>
<tr>
<td>FW21-387</td>
<td>Using Flavonoid and Polyphenol Testing of Honey to Improve Consumer Education</td>
<td>$25,000</td>
<td>Alisha Taff Rock Front Ranch</td>
</tr>
<tr>
<td>FW20-364</td>
<td>Adding value to grassfed cattle operations by restoring rangeland health with targeted grazing on California’s Central Coast</td>
<td>$19,673</td>
<td>Elizabeth Reikowski Willow Creek Land and Cattle, LLC</td>
</tr>
<tr>
<td>FW20-365</td>
<td>Mitigating on-farm toxins using fungi: a case study on two farms.</td>
<td>$19,881</td>
<td>Christopher Tchudi TurkeyTail Farm</td>
</tr>
<tr>
<td>FW19-346</td>
<td>Grazing of annual brassicas to extend grazing season in summer-dry pastures in Northern California</td>
<td>$19,109</td>
<td>Cody Wood Willamette Valley Lamb</td>
</tr>
<tr>
<td>FW19-355</td>
<td>Drill-seeding blue oak acorns: a new method for restoration in California’s rangelands.</td>
<td>$19,920</td>
<td>Alex Palmerlee Far View Ranch Inc.</td>
</tr>
<tr>
<td>FW18-027</td>
<td>Farm-to-Glass: Performance Testing Different Varieties of Malting Barley</td>
<td>$19,087</td>
<td>Bob Adams Bob Adams</td>
</tr>
<tr>
<td>FW18-042</td>
<td>Converting tree nut byproducts into gourmet mushrooms and mulches</td>
<td>$19,952</td>
<td>Charlie Chen Nature Prize LLC</td>
</tr>
<tr>
<td>FW18-044</td>
<td>Examining the practical on-ranch application and benefits of low-stress herding and stockmanship techniques</td>
<td>$19,980</td>
<td>Michael Williams Diamond W Cattle Company</td>
</tr>
<tr>
<td>FW17-054</td>
<td>Honeybee Regeneration Project</td>
<td>$19,851</td>
<td>Aidan Wing Aidan Wing</td>
</tr>
<tr>
<td>FW16-033</td>
<td>Sorrel Pesto: The Positive Implications of Sorrel as a Substitute for Basil in Pesto Production</td>
<td>$19,710</td>
<td>David Ceaser Green Skies Vertical Farm</td>
</tr>
<tr>
<td>FW16-034</td>
<td>Sustainable Irrigation Demonstration Project: Demonstrating Irrigation Efficiency in California Winegrapes through Advanced Practices and Technologies</td>
<td>$19,180</td>
<td>Jason Melvin Zabala Vineyards</td>
</tr>
<tr>
<td>FW16-036</td>
<td>Improving Water Use Efficiency in Conventional and Organic Almonds through Data Driven Irrigation</td>
<td>$19,878</td>
<td>Pat Ricchiuti P R Farms, Inc.</td>
</tr>
<tr>
<td>FW15-029</td>
<td>High Desert High Tunnels</td>
<td>$5,183</td>
<td>Laurie Wayne Locavore Farms</td>
</tr>
</tbody>
</table>
Vines And Ovines: Benefits of Target Grazing to Sheep and Vineyard Industries
$14,991
Jaime Irwin
Kaos Sheep Outfit

Use of Wood Ash as Soil Amendment on Annual Rangelands
$28,995
Mel Thompson
Sierra Farms
Glenn Nader
University of California Cooperative Extension

Woolgathering on the Farm
$7,165
Sophie Sheppard
Woolgathering

Creating and Marketing Value-Added Orchard Products
$15,000
Nicholas Salle
Salle Orchards
Billie Jean Salle
Salle Orchards

Sierra Nevada Small Farm Progress Days
$27,370
Dan Macon

Restoring Plant Diversity and Soil Health in Napa and Sonoma Vineyards: scaling up an agroecologically based pest management strategy
$30,000
Houston Wilson
UC Berkeley -- ESPM
Miguel Altieri
University of California, Berkeley

Effects of Aleutian Geese on Humboldt County Pastures
$28,540
Alan Bower
University of California Davis

Vines and Ovines: Using Trained Sheep for Vineyard Floor Grazing
$29,193
Morgan Doran
University of California

Placer Ag Futures Project
$25,670
Bill Bennett
High Sierra RC&D Council, Inc.
Kay Joy Barge
High Sierra Resource

Farm Direct Distribution
$25,444
Brigitte Moran
Marin Farmers Market Association

Building on Organic Knowledge: On-Farm Transfer of a Trap Cropping Method to Control Lygus Bug in Conventional Strawberry Production
$14,864
Dr. Sean Swezey
Center for Agroecology and Sustainable Food System

Management Challenges for Dairy Goat Sustainability
$15,360
Deborah Giraud
University of California

Using Molasses as an Attractant for Concentrating Grazing on Medusahead
$3,479
Morgan Doran
University of California

Conservation Tillage Forage Production in California’s San Joaquin Valley
$9,400
Dr. Jeff Mitchell
University of California, Davis

Goats in the Chaparral
$19,990
Bill Burrows

Sustaining an Agricultural Region: Capay Valley Grown
$14,980
Judith Redmond
Full Belly Farm

Evaluation of abalone effluent for reclamation
$7,685
Douglas Bush
The Cultured Abalone
<table>
<thead>
<tr>
<th>Project ID</th>
<th>Project Description</th>
<th>Funding</th>
<th>Principal Investigator</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>FW04-024</td>
<td>A pilot project for zero discharge farming</td>
<td>$3,250</td>
<td>Alan Haight</td>
<td>Riverhill Farm</td>
</tr>
<tr>
<td>FW04-028</td>
<td>Organic Vineyard/Orchard Weed and Grass Management Using Miniature Sheep</td>
<td>$7,472</td>
<td>Deborah Walton</td>
<td>Canvas Ranch</td>
</tr>
<tr>
<td>FW04-111</td>
<td>Marketing Locally Grown</td>
<td>$10,000</td>
<td>Mary Ann Vasconcellos</td>
<td></td>
</tr>
<tr>
<td>FW03-007</td>
<td>Integrated Pest Management and Sustainable Grape Production in Sonoma County</td>
<td>$13,000</td>
<td>Nick Frey</td>
<td>Sonoma County Grape Growers Assn.</td>
</tr>
<tr>
<td>FW03-009</td>
<td>Unconventional Conversion: Cultivating Sustainability in Citrus and Avocado Orchards</td>
<td>$7,500</td>
<td>Zachary Griffin</td>
<td></td>
</tr>
<tr>
<td>FW03-010</td>
<td>Increasing Adoption of Sustainable Practices in Central Coast Vineyards</td>
<td>$13,000</td>
<td>Kris Beal</td>
<td>Vineyard Team</td>
</tr>
<tr>
<td>FW03-013</td>
<td>Can Llamas Be an Effective Tool for Predator Control?</td>
<td>$6,500</td>
<td>Jil Hacket</td>
<td>Howe Creek Ranch</td>
</tr>
<tr>
<td>FW03-015</td>
<td>Pastured Pork: Economics of Intensive Grazing in the Western United States</td>
<td>$6,550</td>
<td>John Currey</td>
<td>CR Pigs</td>
</tr>
<tr>
<td>FW03-105</td>
<td>Bay Area Agricultural Cooperative</td>
<td>$13,000</td>
<td>John Lagier</td>
<td>Lagier Ranchans</td>
</tr>
<tr>
<td>FW03-107</td>
<td>Marin Organics Cooperative Marketing Program</td>
<td>$13,500</td>
<td>Warren Weber</td>
<td>Star Route Farms</td>
</tr>
<tr>
<td>FW03-318</td>
<td>Conservation of Groundwater Resources in the Mojave High Desert Region through Producer Education of Irrigation Management</td>
<td>$6,285</td>
<td>Grant Poole</td>
<td>University of California Cooperative Extension</td>
</tr>
<tr>
<td>FW02-211</td>
<td>Marin Organic's Cooperative Marketing Outreach</td>
<td>$9,191</td>
<td>Warren Weber</td>
<td>Star Route Farms</td>
</tr>
<tr>
<td>FW02-213</td>
<td>Establishing a Market for Sustainable Agricultural Products in Sierra Nevada Foothill Counties</td>
<td>$12,900</td>
<td>Ed Rich</td>
<td></td>
</tr>
<tr>
<td>FW01-089</td>
<td>Symphylans: A growing menace. A look into its detection, damage, and control in a small-scale Biointensive Community Supported Agriculture Project.</td>
<td>$6,270</td>
<td>Michelle Vesser</td>
<td>Small Farm / Specialty Crops</td>
</tr>
<tr>
<td>FW00-005</td>
<td>Production of Strawberry Plants using Sterile Soil Amendments</td>
<td>$5,000</td>
<td>Allen Albaugh</td>
<td></td>
</tr>
<tr>
<td>FW00-008</td>
<td>Tracking Costs and Returns in a Transition to Grass-Based Dairying</td>
<td>$1,139</td>
<td>Dean Martin</td>
<td></td>
</tr>
<tr>
<td>FW00-010</td>
<td>Soil Solarization for Weed and Disease Control in Specialty Crops</td>
<td>$4,975</td>
<td>Mike Smith</td>
<td></td>
</tr>
<tr>
<td>FW00-021</td>
<td>Water Use of Wine Grapes in the Granitic Soils of the Fair Play Wine Region in the Sierra Foothills</td>
<td>$10,000</td>
<td>Brian Fitzpatrick</td>
<td></td>
</tr>
</tbody>
</table>
Moving From Selling Through Intermediaries to Direct Marketing Using Cause Related Marketing Strategy

Test Marketing Pasture Produced Artisan Cheeses

Good Humus Produce Farm to School Project

Converting Dairy Waste into More Usable Products through Vermiculture

Central Coast Vineyard Team Positive Points System Evaluation and Education Program

Soil Solarization as a Methyl Bromide Alternative in Strawberries

Solarization for Small Farm "Specialty Crops"

Goats as a Source of Weed and Brush Control in Forest Plantations

Feasibility of Soil Solarization for Strawberry Production on the Central Coast of California

Individual Confinement Rearing vs. Pasture-Based Group Rearing of Dairy Calves

Vermicomposting Demonstration Project

Pheromone Foggers for Pesticide Replacement

Farming, Agriculture, and Resource Management for Sustainability (F.A.R.M.S.)

Monitoring Program for Biologically Integrated Orchard Systems (BIOS) in Walnuts

Optimizing crop rotations for soil health and plant disease management in California processing tomatoes

Integrating cover crops and organic matter amendments for whole orchard regenerative management

GW23-247

GW23-249

$29,999

$29,811

Dr. Cassandra Swett
UC Davis
Myles Collinson
UC Davis

Dr. Sat Darshan Khalsa
University of California Davis
Dr. Patrick Brown
University of California Davis
Sydney Cho
UC Davis

$4,447

$7,910

$5,300

$4,300

$10,000

$4,000

$4,000

$4,000

$5,000

$5,000

$3,248

$5,000

$5,000

$5,000

$5,000

$29,999

$29,811

Maria Ines Catalan
Tim Pedrozo
Annie Main
Charmaine Harris
Dana Merrill
Touix Thauxaochay
Mike Smith
Allen Albaugh
Larry Galper
Jim Wackerman
Dave Renner
Diamond Point Dairy
Willis Thompson
Craig McNamara
Sierra Orchards
Liza Lewis
Community Alliance with Family Farmers Foundation

GRADUATE STUDENT GRANTS

Project #

Project Title

SARE Support

Project Leaders

GW23-247

Optimizing crop rotations for soil health and plant disease management in California processing tomatoes

$29,999

Dr. Cassandra Swett
UC Davis
Myles Collinson
UC Davis

GW23-249

Integrating cover crops and organic matter amendments for whole orchard regenerative management

$29,811

Dr. Sat Darshan Khalsa
University of California Davis
Dr. Patrick Brown
University of California Davis
Sydney Cho
UC Davis
GW23-254  Assessing compost application and grazing management in California rangelands: Impacts on soil microbial ecology and drought resilience  $29,608  Dr.Leslie Roche  
UC Davis  
AVA-ROSE BEECH  
UC Davis

GW21-227  What is a Healthy Soil for Wine Grape Production? Assessing Soil Health Across California Vineyards  $30,000  Dr.Cristina Lazcano  
University of California Davis  
Dr.Mallika Nocco  
University of California, Davis  
Dr.Kerri Steenwerth  
USDA/University of California Davis  
Noelymar Gonzalez-Maldonado  
University of California Davis

GW21-224  Hopes of dry land: Managing soils to improve fruit yield and quality in dry farm tomatoes  $25,243  Dr.Timothy Bowles  
University of California Berkeley  
Yvonne Socolar  
UC Berkeley

GW20-203  Grazing for change: Connecting soil health and ranch viability using adaptive multi-paddock grazing  $24,867  Dr.Timothy Bowles  
University of California Berkeley  
Lynn Huntsinger, PhD  
University of California, Berkeley  
Paige Stanley  
University of California, Berkeley  
Paige Stanley  
University of California, Berkeley

GW20-207  Cover crops to enhance control of leaffooted bug, Leptoglossus zonatus, in California tree nut crops  $24,796  Dr.Houston Wilson  
University of California, Riverside  
Dr.Kent Daane  
University of California, Berkeley  
Rob Straser  
University of California, Riverside

GW20-216  Network analysis of organic seed systems: a systems-level analysis for resilience  $24,997  Mark Lubell  
University of California, Davis  
Liza Wood  
University of California, Davis  
Jared Zystro  
Organic Seed Alliance  
Liza Wood  
University of California, Davis

GW19-191  Systems approaches to co-manage disease, water and soil health for sustainable processing tomato production in the Western region  $25,000  Dr.Cassandra Swett  
UC Davis  
Justine Beaulieu  
UC Davis

GW19-193  Conventional vs. regenerative almond orchards, with regards to invertebrate biomass and biodiversity, soil health, food safety, and profitability  $25,000  Dr.Jonathan Lundgren, PhD  
Ecdysis Foundation  
Dr.Patty Oikawa  
California State University East Bay  
Dr.Erica Wildy  
California State University East Bay  
Thomas Fenster  
University of California, Davis

GW19-194  Sustainable orchard intensification: Cover crops and management intensity  $24,944  Bradley Hanson  
University of California, Davis  
Steven Haring  
University of California, Davis

GW19-200  Natural pest control in a working agricultural landscape: Investigating the impact of rodent control on beneficial hawks and owls  $24,997  Dr.Joshua Hull  
UC Davis  
Dr.Sara Kross  
Columbia University  
Breanna Martinico  
UC Davis

GW18-062  Development of New Selection Tools and Crop Varieties for Sustainable Agriculture  $24,443  Paul Gepts  
University of California - Davis  
Travis Parker  
University of California - Davis
GW18-020  New Ranchers, New Needs: Why are first-generational ranchers deciding against traditional climate adaptation strategies?  $24,982  Dr. Leslie Roche  
 UC Davis  
 Katherine Munden-Dixon  
 University of California - Davis

GW18-041  Insect Discovery and Breeding as Tools for Sustainable Solutions to Organic Waste Management  $24,942  Dr. Christian Nansen  
 University of California, Davis  
 Trevor Fowles  
 University of California - Davis

GW18-142  Cover Crop Systems for Almond Orchards: Exploring Benefits and Tradeoffs to Inform Management  $24,852  William Horwath  
 University of California, Davis  
 Cynthia Creze  
 University of California, Davis

GW18-126  Increasing the sustainability of dairy cattle by providing genetic tools to reduce lameness, improving welfare and production  $23,623  Dr. Anita Oberbauer  
 University of California, Davis  
 Ellen Lai  
 University of California, Davis

GW17-032  Management of Fusarium Wilt of Strawberry through Crop Rotation  $24,999  Dr. Thomas Gordon  
 UC Davis Dept. Plant Pathology  
 Peter Henry  
 University of California at Davis

GW16-044  A Collaborative Approach to Integrated Pest Management of Tadpole Shrimp in California Rice Fields.  $24,928  Larry Godfrey  
 University of California, Davis  
 Joanna Bloese  
 University of California, Davis

GW13-011  Compost-Induced Disease Suppressive Soils for Control of Verticillium Wilt of Strawberry  $24,992  Tom Gordon  
 UC Davis  
 Margaret Lloyd  
 UC Davis

GW13-018  Best management practices that promote sustainable crop pollination: the role of crop rotations and tillage depth  $24,954  Neal Williams  
 University of California, Davis  
 Katharina Ullmann  
 University of California, Davis

GW12-024  Ecosystem Services in Hedgerow Restorations: Pollination Function and Nesting Habitat  $17,882  Dr. Claire Kremen  
 University of California, Berkeley  
 Hillary Sardinas  
 UC Berkeley

GW11-001  Pastured Poultry/Crop Systems and Their Effect on Food Safety, Farm Economy, and Soil Quality  $24,807  Dr. Kathleen Hilimire  
 University of California, Santa Cruz  
 Stephen R. Gliessman  
 University of California

GW11-012  Facilitating Integrated Weed Management in California Rice: Predicting E. spp. and C. difformis emergence across heterogeneous growing environments  $17,120  Dr. Chris van Kessel  
 University of California, Davis  
 Dr. Mark Lundy  
 University of California Cooperative Extension

GW10-010  Irrigation Alternatives for Sustainable Water Use of Processing Tomatoes  $25,000  Louise Jackson  
 UC Davis  
 Felipe Barrios Masias  
 University of Nevada, Reno

GW09-018  Promoting Native Bumblebees in Agricultural systems for conservation and ecosystem service  $20,074  Dr. Claire Kremen  
 University of California, Berkeley  
 Dr. Alexandra Harmon-Threatt  
 University of Illinois, Urbana-Champaign

GW08-015  Screening for non-host rotation crops of Colletotrichum acutatum for strawberry nurseries in California  $19,535  W. Douglas Gubler  
 University of California, Davis  
 Joseph Jerberg  
 UC Davis Plant Pathology Department

GW08-018  Solarization and steam heat combined to control weeds in strawberry  $19,974  Steve Fennimore  
 University of California, Davis  
 Celeste Gilbert  
 University of California, Davis
GW07-003 Sustainable Landscapes: Investigating the Landscape Scale Effects of Riparian Habitat on Natural Pest Control $17,950 Suzanne Langridge University of California

GW07-006 Risk, Rate, and Impact of Medusahead Invasion of California Savannas $19,971 Dr.Emilio Laca UC Davis Corey Cherr University of California, Davis

GW07-012 Managing Soil Food Webs for Enriched and Suppressive Soils: Effects of Cover Crop Diversity and Quality $19,235 Tianna Dupont University of California at Davis

GW06-004 Linking C and N Cycling to Microbial Community Function in Cover Crop Systems $9,995 Angela Yin Yee Kong University of California, Davis

GW06-007 Pest Control Services from Natural Habitat $9,650 Rebecca Chaplin University of California, Berkeley

GW06-016 Investigating the Effect of Hedgerows to Enhance Natural Biological Control $10,000 Tara Pisani Gareau University of California, Santa Cruz

GW06-017 Understanding N Fixation by Legume Cover Crops in Organic Vegetable Systems $10,000 Carol Shennan University of California, Santa Cruz Katie Monsen University of California Santa Cruz

GW06-029 Sheep Grazing as a Tool for Vernal Pool Stewardship $8,813 J. Hall Cushman Sonoma State University Joan Schwan Sonoma State University

GW06-030 Developing a Management Plan for Reducing Thrips-induced Damage on Timothy Hay $10,000 Larry Godfrey University of California, Davis Daniel Marcum University of California Domic Reisig University of California, Davis

ON FARM RESEARCH/PARTNERSHIP GRANTS

Project # Project Title SARE Support Project Leaders

OW23-384 Adaptation of Warm Season Perennial Grasses for Forage Quality, and Resilience High Temperatures in California Irrigated Pastures $74,975 Theresa Becchetti University of California Ag and Natural Resources

OW23-376 INTEGRATING COVER CROPS AND SHEEP GRAZING IN ALMOND ORCHARDS $75,000 Julie Finzel The Regents of the University of California, Agriculture and Natural Resoruces

OW22-373 Targeted Grazing for Fuel Load Reduction $74,811 Dr.Stephanie Larson University of California Cooperative Extension

OW20-360 Solarization and Biosolarization: Harnessing the Sun and Organic Matter to Control Weeds $49,956 Martin Guerena National Center for Appropriate Technology

OW19-339 Collaboration to demonstrate the potential use and value of electronic identification and DNA testing in the sheep industry $50,000 Julie Finzel The Regents of the University of California, Agriculture and Natural Resources Dr.Alison Van Eenennaam UCANR

OW19-345 Effects of Occultation on Weed Pressure, Labor Costs, Product Quality, and Yield in Sustainable Vegetable Production in Northern California $49,994 Dave Runsten Community Alliance with Family Farmers Kali Feiereisel Community Alliance With Family Farmers
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
<th>Funding Amount</th>
<th>Principal Investigator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OW19-349</td>
<td>Amador Rangeland Soil Health Research and Education Project</td>
<td>$49,139</td>
<td>Amanda Watson</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Amador Resource Conservation District</td>
</tr>
<tr>
<td>OW19-351</td>
<td>A Collaborative Beneficial Insect and Pheromone Mating Disruption Demonstration</td>
<td>$50,000</td>
<td>Dr. Stephanie Bolton</td>
</tr>
<tr>
<td></td>
<td>Project</td>
<td></td>
<td>Lodi Winegrape Commission</td>
</tr>
<tr>
<td>OW18-013</td>
<td>Early Weaning of Beef Calves: A Drought Management Strategy on Annual Rangelands</td>
<td>$41,184</td>
<td>Dan Macon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>University of California Cooperative Extension</td>
</tr>
<tr>
<td>OW17-043</td>
<td>Beginning-farmer Research and Instruction on Growing in High Tunnels</td>
<td>$49,999</td>
<td>Nathan Harkleroad</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ALBA</td>
</tr>
<tr>
<td>OW17-054</td>
<td>Advancing sustainable nitrogen management in strawberries through participatory</td>
<td>$49,937</td>
<td>Sacha Lozano</td>
</tr>
<tr>
<td></td>
<td>research and education</td>
<td></td>
<td>Resource Conservation District of Santa Cruz County</td>
</tr>
<tr>
<td>OW16-013</td>
<td>Irrigated Pastureland Enhancement Program</td>
<td>$49,774</td>
<td>Dr. Leslie Roche</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>UC Davis</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dan Macon</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>UC Cooperative Extension</td>
</tr>
<tr>
<td>OW14-032</td>
<td>Selecting and Managing Vineyard Cover Crops to Reduce Consumption of Net Basin Water</td>
<td>$49,467</td>
<td>Fritz Westover</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vineyard Team</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kris Beal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Vineyard Team</td>
</tr>
<tr>
<td>OW13-062</td>
<td>Empowering Socially-Disadvantaged Farmers to Investigate Nitrogen Management in</td>
<td>$45,527</td>
<td>Nathan Harkleroad</td>
</tr>
<tr>
<td></td>
<td>High-Value Vegetable Crops</td>
<td></td>
<td>ALBA</td>
</tr>
<tr>
<td>OW12-008</td>
<td>Water Management in Sonoma County Grape Production</td>
<td>$49,200</td>
<td>Karen Thomas</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sonoma County Winegrape Commission</td>
</tr>
<tr>
<td>OW11-318</td>
<td>Pomo Tribal Supported Agriculture Program</td>
<td>$49,963</td>
<td>Rachel Whetstone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Hopland Band of Pomo Indians</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Terri McCartney</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Coordinator</td>
</tr>
</tbody>
</table>

Total funding from the USDA SARE program to California
$15,979,321

For further information on projects, contact Western SARE at (406) 994-4789 or wsare@montana.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).