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 $341 million to more than 7,926 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...

Florida

Project Highlight: Grafted Specialty Tomatoes More Resilient

Demand for organic heirloom and specialty tomatoes grown in high tunnels is rising, making them high-value crops. Unfortunately, growers of such tomatoes in Florida face challenges in managing soil-borne diseases. Due to Fusarium wilt, one farm faced the complete crop failure of a tomato popular in the local market. University of Florida researcher Xin Zhao partnered with the farm, Frog Song Organics, to see if grafting with resistant rootstocks would control soil-borne diseases in organic high tunnel production systems.

Their experiment compared grafted and non-grafted specialty tomatoes for soil-borne disease resistance, yield and fruit quality. They found that grafting was an effective tool for managing Fusarium wilt and improving the overall health of tomato plants. Yields significantly improved in grafted tomato production compared with non-grafted controls. Even with higher production costs associated with the grafting, the grafted plants resulted in increased net profits.

One hundred professionals and 450 farmers learned of the rewarding research findings at workshops and presentations. Zhao views this on-farm research project as a successful demonstration of technology transfer through a collaborative and productive partnership with local growers to address production issues.

For more information on this project, see sare.org/projects, and search for project number OS13-083.

SARE in Florida

southern.sare.org/sare-in-your-state/florida

$8,121,936 in total funding

174 grant projects

(since 1988)

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

Total awards: 174 grants
- 37 Research and Education
- 7 Sustainable Community Innovation
- 10 Professional Development Program
- 27 Farmer/Rancher
- 63 Graduate Student
- 30 On Farm Research/Partnership

Total funding: $8,121,936
- $5,867,935 Research and Education
- $87,296 Sustainable Community Innovation
- $651,193 Professional Development Program
- $262,085 Farmer/Rancher
- $779,971 Graduate Student
- $473,456 On Farm 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: southern.sare.org/sare-in-your-state/florida

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 southern.sare.org/state-pages/florida to learn more.

Cassel Gardner
Florida A & M University
(850) 599-3594
cassel.gardner@famu.edu

Marilyn (Mickie) Swisher
University of Florida
(352) 273-3538
mesw@ufl.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.
Florida has been awarded $8,121,936 grants to support 172 projects, including but not limited to, 35 research and/or education projects, 10 professional development projects and 27 producer-led projects. Florida 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>
</table>
| LS22-370  | Using rootstocks to increase blueberry farming sustainability in the South East | $371,000     | Dr. Gerardo Nunez  
University of Florida  
Dr. John Diaz  
University of Florida  
Dr. Islam El-Sharkawy  
Florida A&M University  
Gabriel Maltais-Landry  
University of Florida  
Zilfina Ames  
University of Georgia  
Ariel Singerman  
University of Florida |
| LS22-378  | Community Apiary - Providing Experiential Education and Access for Novice Beekeepers in an Urban Setting | $49,957      | Ju'Coby Pittman  
Clara White Mission  
Octavious Carr  
The Herban Bee  
Mallory Schott  
Clara White Harvest Farms |
| LS21-353  | Evaluating the Dual-Purpose of Chickpea: A Cash and Cover Crop for Agricultural Production Systems in the Southeast | $397,648     | md ali babar  
University of Florida  
Dr. Oscar Liburd  
University of Florida  
Gabriel Maltais-Landry  
University of Florida  
Dr. Jorge Ruiz-Menjivar  
University of Florida  
Dr. Marilyn Swisher  
University of Florida  
Chris Wilson  
University of Florida  
Alejandro Bolques  
Florida A&M University |
| LS21-354  | The Use of Cyanobacteria Biofertilizers to Increase Crop Productivity, Improve Soil Health, and Agricultural Sustainability in Florida | $242,000     | Sanku Dattamudi  
Florida International University  
Dr. Mahadev Bhat  
Florida International University  
Dr. Saoli Chanda  
Florida International University  
Dr. Krishnaswamy Jayachandran  
Florida International University  
Dr. Leonard Scinto  
Florida International University |
Specialty Pumpkin: Laying the Groundwork for an Emerging Crop and Lucrative Products  

Dr. Geoffrey Meru  
University of Florida  
Dr. Carlene Chase  
University of Florida  
Dr. Andre da Silva  
University of Georgia  
Dr. Andrew MacIntosh  
University of Florida  
Dr. Angela Ramirez  
University of Puerto Rico  
Dr. Jorge Ruiz-Menjivar  
University of Florida  

Optimizing Nutrient and Water Management for Organic Mixed Vegetable Production Systems  

Gabriel Maltais-Landry  
University of Florida  
Kevin Athearn  
University of Florida  
Eban Bean  
Agricultural and Biological Engineering, UF/IFAS  
Dr. Carlene Chase  
University of Florida  
Tatiana Sanchez  
UF/IFAS Extension Alachua County  

Enhancing Hedgerow Systems in Fruit Tree Production to Improve Beneficial Insect Diversity and Abundance  

Dr. Xavier Martini  
University of Florida  
Dr. Michael Andreu  
University of Florida  
Brett Blaauw  
University of Georgia  
Dr. Lauren Diepenbrock  
University of Florida  
Rachel Mallinger, Dr.  
University of Florida  

Harnessing Microbes for Sustainable Food Production  

Masanori Fujimoto  
University of Florida  

Enhancing Seed Production of Regionally Adapted Crops in the Southeastern Farmer Seed System  

Dr. Hector Perez  
University of Florida  

Managing Plant-parasitic Nematodes and Promoting Beneficial Soil Organisms Through Sod-based Crop Rotation  

Zane Grabau  
University of Florida  

Shade and Ground Cover Growing Systems for Tea Production in Florida  

Brantlee Richter  
University of Florida  

Educational Materials for Cover Crop Adoption and Use in the Subtropics and Tropics  

Dr. Danielle Treadwell  
University of Florida  

Cover Crop Diversity through Evaluation and Increase from Breeder Stocks and Germplasm Repositories  

Dr. Carlene Chase  
University of Florida  

Taking advantage of pest thrips ecology to increase sustainability of vegetable crop production  

Dr. Stuart Reitz  
USDA-ARS  
Dr. Stephen Hight  
USDA-ARS  

Educating and Training Future Farmers, Researchers and Extension Personnel in Sustainable Agriculture  

Rosalie Koenig  
University of Florida
Integrated Use of Grafting Technology to Improve Disease Resistance and Fruit Yield in Specialty Melon Production

Preparing Small Scale Limited Resource Vegetable Farmers for Organic Farming in North Florida

Improving the quality of life for Southern organic farmers and farm workers

Selecting a sunn hemp cover crop genotype for weed suppression and seed production

Integrating plant essential oils and kaolin for the sustainable management of thrips and tomato spotted wilt on tomato

Silicon soil amendments for enhancing disease resistance while improving overall crop health for cucurbits in organic farming systems

Biorational approaches for management of bacterial wilt and bacterial spot on tomato

Integrated Management of Purple and Yellow Nutsedge in Organic Vegetable Production

Development of Florida Native Plants as Farmscaping Cover Crops and Value-added Crops for Limited-Resource Farmers in Central Florida

Development of sustainable vegetable production systems for south Florida and Virginia based on use of cover crops and precision irrigation

Enhancing the Economic and Environmental Competitiveness of Small Farms Through Agroforestry

A System Approach for Improved Integration of Green Manure in Commercial Vegetable Production Systems

Management of Small Rural Holdings as Economic and Ecological Units

Developing Effective Methods to Assess the Impact of Community Food Security Programs on Purchases of Local Farm Produce in Three Southern Communities

An Integrated System of Organic Food Production and Urban Food Waste Recycling Using On-Farm Anaerobic Digestion and Fertigation

Biological Control Methods for Citrus Rust Mites and Spider Mites on Florida Citrus Utilizing Predaceous Arthropods as Part of IPM
### DEVELOPMENT OF CROPPING SYSTEMS FOR NEMATODE MANAGEMENT ON AGRONOMIC AND HORTICULTURAL CROPS

- **Project #:** LS92-046
- **Title:** Development of Cropping Systems for Nematode Management on Agronomic and Horticultural Crops
- **SARE Support:** $155,000
- **Project Leaders:**
  - D.W. Dickson, University of Florida
  - R. McSorley, Dept. of Entomology & Nematology, U of Florida
  - Rodrigo Rodriguez-Kabana, Auburn University, Plant Pathology

### BIOLOGICAL CONTROL AND ITS ECONOMICS IN THE SOUTHERN UNITED STATES

- **Project #:** LS91-031
- **Title:** Biological Control and its Economics in the Southern United States
- **SARE Support:** $49,970
- **Project Leader:** J. Howard Frank, University of Florida, Entomology and Nematology

### INTENSIVE SHORT COURSE ON GRANT PREPARATION FOR FUTURE APPLICANTS TO THE LISA COMPETITIVE GRANTS PROGRAM

- **Project #:** LS91-042
- **Title:** Intensive Short Course on Grant Preparation for Future Applicants to the LISA Competitive Grants Program
- **SARE Support:** $39,000
- **Project Leader:** Carl Barfield, University of Florida

### AN EDUCATIONAL PROGRAM IN LOW-INPUT SUSTAINABLE AGRICULTURE PRODUCTION TECHNOLOGY AND PHILOSOPHY

- **Project #:** LS90-021
- **Title:** An Educational Program in Low-input Sustainable Agriculture Production Technology and Philosophy
- **SARE Support:** $18,000
- **Project Leader:** Stephen A. Ford, University of Florida

### 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>SPDP21-03</td>
<td>Bridging the Food Supply and Sustainable Agriculture Systems with the Nonprofit Sector</td>
<td>$77,867</td>
<td>Dr. Kimberly Wiley, University of Florida, Dr. Jennifer Jones, University of Florida, Dr. Marilyn Swisher, University of Florida</td>
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<tr>
<td>ES09-097</td>
<td>Moving nursery producers toward sustainable production practices</td>
<td>$76,237</td>
<td>Gary Knox, University of Florida</td>
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<tr>
<td>ES03-067</td>
<td>What Service Providers Must Know About Organic Rules and Regulations</td>
<td>$133,762</td>
<td>Rosalie Koenig, University of Florida</td>
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<tr>
<td>ES01-054</td>
<td>Growing with the Community: A Hands-on Training Design for Agricultural Educators, Farmers and Community Leaders</td>
<td>$49,735</td>
<td>Ellen Huntley, Florida Organic Growers</td>
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<tr>
<td>ES01-055</td>
<td>Delivery of Biological Control Information and Technology in Florida</td>
<td>$49,919</td>
<td>James Cuda, University of Florida</td>
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<tr>
<td>ES01-056</td>
<td>Training in production and utilization of composted waste materials in warm, humid climates to improve soils for horticultural cropping systems</td>
<td>$47,896</td>
<td>Monica Ozores-Hampton, University of Florida/SWFREC</td>
</tr>
<tr>
<td>ES97-030</td>
<td>Integrated Production of Sustainable Crops for Small Farmers in North Florida</td>
<td>$8,375</td>
<td>Gary Knox, University of Florida</td>
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<tr>
<td>ES97-036</td>
<td>Sustainable Agriculture Training Initiative for Texas</td>
<td>$70,136</td>
<td>Nancy Roe</td>
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<tr>
<td>LST96-012</td>
<td>Facilitating Farmer to Farmer Networks: An Experimental Approach</td>
<td>$80,997</td>
<td>Dr. Marilyn Swisher, University of Florida</td>
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<tr>
<td>LST94-007</td>
<td>Evaluating Sustainability: Gaining Insights</td>
<td>$56,269</td>
<td>Dr. Marilyn Swisher, University of Florida</td>
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### FARMER/RANCHER GRANTS

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<tr>
<td>ES01-054</td>
<td>Growing with the Community: A Hands-on Training Design for Agricultural Educators, Farmers and Community Leaders</td>
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<tr>
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<td>FS22-339</td>
<td>Methodology to enhance nutrition and economics of microalgae use as live feeds in marine aquaculture</td>
<td>$14,985</td>
<td>Nicole Kirchhoff, PhD</td>
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<tr>
<td>FS20-323</td>
<td>Evaluating Mobile Slaughter Access for Producers and Local Partners</td>
<td>$10,700</td>
<td>Sheila Austin</td>
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<td>FS19-314</td>
<td>Season Extension and Increased Economic Sustainability for South Florida Growers: Using high tunnels to extend tomato production</td>
<td>$9,665</td>
<td>Moses Kashem</td>
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<tr>
<td>FS19-319</td>
<td>Sweet Potatoes and Their Vines: A nutritional and sustainable alternative for food and livestock feed</td>
<td>$9,926</td>
<td>April Singleton</td>
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<td>FS10-248</td>
<td>Florida Meat Goat Study</td>
<td>$9,996</td>
<td>Rita Pruette</td>
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<td>FS06-209</td>
<td>Developing Model CSA Software for Multi-cropping and Harvesting</td>
<td>$9,800</td>
<td>Margaret Pikarsky</td>
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<tr>
<td>FS03-176</td>
<td>Developing Guidelines for Farmers to Market Directly to Consumers at Community Farmers’ Markets</td>
<td>$14,000</td>
<td>Sharon Yeago</td>
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<td>FS02-149</td>
<td>Ultraviolet Light absorbing films and nets for insect and disease control in an organic greenhouse</td>
<td>$8,010</td>
<td>Jim Gibbons</td>
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<td>FS01-129</td>
<td>Development of Multi-Herd Management software for small farmers</td>
<td>$9,949</td>
<td>Dee Blaha</td>
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<td>FS01-135</td>
<td>Soil Fertility improvement in Fruit Orchards by Windrowing Urban Plant Debris and Poultry Litter</td>
<td>$8,644</td>
<td>William Graves, IV</td>
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<td>FS01-138</td>
<td>Developing a model to increase support for organic farming research at Land Grant Institutions</td>
<td>$14,999</td>
<td>Marty Mesh</td>
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<td>FS01-139</td>
<td>Composted Yard Waste as a Replacement for Pine Bark Mulch in Blueberry Production</td>
<td>$9,800</td>
<td>Richard Nogaj</td>
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<td>FS01-140</td>
<td>Using companion plants to increase biological control for thrips in pepper crops</td>
<td>$9,300</td>
<td>Chuck Obern</td>
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<td>FS00-112</td>
<td>Practical Evaluation of Vermicompost on Horticultural Crops</td>
<td>$9,820</td>
<td>Cynthia L. Connolly</td>
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<td>FS00-121</td>
<td>Marketing to the Department of Defense Food Service</td>
<td>$15,000</td>
<td>Glyen Holmes</td>
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<td>FS00-125</td>
<td>Does Compost Use Affect Post-Harvest Quality of Vegetables?</td>
<td>$9,960</td>
<td>Nancy Roe</td>
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<tr>
<td>Project #</td>
<td>Project Title</td>
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<td>GS21-235</td>
<td>Examining Field Crop Farmers’ Climate Change Perceptions, Adaptation Strategies, and Resilience in Florida: A spatial econometric approach</td>
<td>$15,775</td>
<td>Dr. Jorge Ruiz-Menjivar University of Florida</td>
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<td>Yong Liu University of Florida</td>
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<td>GS21-237</td>
<td>Agricultural Water Resource Management in Puerto Rico and the U.S. Virgin Islands</td>
<td>$13,076</td>
<td>Dr. Marilyn Swisher University of Florida</td>
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<td>Megan Donovan, M.S. University of Florida</td>
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<td>GS21-238</td>
<td>Sustainable Management Practices for Vanilla Cultivation</td>
<td>$16,499</td>
<td>Dr. Alan Chambers University of Florida TREC</td>
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<td>Joshua Anderson University of Florida</td>
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<td>GS21-239</td>
<td>Quantifying and Understanding Factors Affecting Tissue Nitrate Accumulation in Organic Celery</td>
<td>$16,497</td>
<td>Dr. Xin Zhao University of Florida</td>
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<td>Zachary Ray University of Florida</td>
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<td>GS21-243</td>
<td>Arbuscular Mycorrhizal Fungal Associations in Tea Under Sustainable Production Systems in Florida</td>
<td>$16,444</td>
<td>Dr. Bala Rathinasabapathi University of Florida</td>
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<td>Caitlin Clarke University of Florida</td>
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<tr>
<td>GS21-244</td>
<td>What’s the Buzz? Assessing Efficacy, Synergisms, and Sustainability of Pollinators in Southern Highbush Blueberry (Vaccinium corymbosum L.)</td>
<td>$16,493</td>
<td>Rachel Mallinger, Dr. University of Florida</td>
</tr>
<tr>
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<td>John Ternest University of Florida Department of Entomology and Nematology</td>
</tr>
</tbody>
</table>
Small-scale Farmer Networks in Florida: Understanding and measuring their impacts and exploring the role of extension in their success

Paul Monaghan
University of Florida
Jose Perez
University of Florida

Forecasting Pasture Productivity from Satellite Imagery for Use in Adaptive Grazing Management

Chris Wilson
University of Florida
Hunter Smith
University of Florida

Translating Grazing: Calculating Nitrogen Credits from Cool-Season Integrated Crop Livestock Systems

Dr. Marcelo Wallau
University of Florida
Kacey Aukema
University of Florida

Assessing Anaerobic Soil Disinfestation for Improving Weed and Soilborne Disease Management in High-tunnel and Open-field Salad Green Production

Dr. Xin Zhao
University of Florida
Isaac Vincent
University of Florida

Agroecological Intensification of Warm-season Pastures for Improved Productivity and Quality and Ecosystem Services

Chris Wilson
University of Florida
Hannah Rusch
University of Florida

Intercropping for Pest Control in Organic Kale in Northern Florida

Nora Underwood
Florida State University
Penelope Ales
Florida State University

Determining How the Ubiquitous Fungi Mortierella Regulates Belowground N Dynamics Under Different Crop Rotation Systems

Dr. Hui-Ling Liao
University of Florida
Kaile Zhang
University of Florida

Deploying Oak Mulch to Contain and Suppress HLB Disease in Citrus

Lorenzo Rossi, Ph.D.
University of Florida
Lukas Hallman
UF/IFAS

Evaluating Local Food Hubs as Alternative Food Systems to Preserve Specialty Crop Producers and Build Resilient Communities in North Central Florida

Dr. Jonathan Watson
University of Florida
BHAGATVEER SANGHA
University of Florida

Development of Push-pull System for Ambrosia Beetles, Vectors of Laurel Wilt Disease in Florida Avocado

Dr. Xavier Martini
University of Florida
Derrick Conover
University of Florida

Sustainable Strategies to Combat the Papaya Ringspot Virus

Dr. Alan Chambers
University of Florida TREC
Sarah Brewer
University of Florida

Developing Efficient Probiotics for Microbiota of Diarrhea-Resistant Livestock

Dr. Kwangcheol Jeong
University of Florida
Peixin Fan
University of Florida

Toward the Development of a Push-Pull Strategy to Control Whiteflies in Florida Vegetables

Dr. Xavier Martini
University of Florida
Nicholas Johnston
University of Florida, North Florida Research and Education Center

Evaluation of Cladosporium cladosporioides and Its Extracts for the Management of Pathogenic Bipolaris Species

Dr. Erica Goss
University of Florida
Ashish Adhikari
University of Florida, Plant Pathology
GS18-184 Evaluation of Biopesticides to Manage Silverleaf Whitefly (Hemiptera: Aleyrodidae) in Tomatoes in Florida $16,500 Muhammad Haseeb Center for Biological Control, College of Agriculture and Food Sciences, Florida A&M University
Jermaine Perier Florida A&M University

GS18-190 Innovations in Spotted Wing Drosophila (Drosophila suzukii Matsumura) Monitoring and Attract-and-Kill for Development of More Targeted IPM Programs $16,334 Dr.Oscar Liburd University of Florida Gabrielle LaTora University of Georgia

GS18-191 Developing Attract and Reward Strategy to Control Thrips and Whiteflies in Florida Tomato $10,316 Dr.Xavier Martini University of Florida Iris Strzyzewski University of Florida NFREC

GS18-195 Elucidating the Effects of Organic vs. Conventional Cropping Practice and Rhizobia Inoculation on Peanut Yield and Rhizosphere Microbial Diversity $16,496 Dr.Jianping Wang University of Florida Dev Paudel University of Florida

GS18-181 Integrated Weed Management for Long-Term Nutsedge Control and Its Economic Impact in Florida Vegetable Production $15,361 Peter Dittmar University of Florida Ranjeet Randhawa University of Florida

GS17-169 Identifying Marketing Opportunities Under the New Organic Transitional Certification Program $16,492 Zhifeng Gao University of Florida Xuqi Chen University of Florida

GS17-170 Companion Planting of Native Insectary Plants to Benefit Crop Plants: The promotion of beneficial insects in agricultural communities via trophic resource enhancement $10,332 Dr.Suzanne Koptur Florida International University Andrea Salas Florida International University

GS17-171 Development of an Integrated Pest and Disease Management Program Utilizing Companion Plants and Inundative Biological Control for Organic Squash Production $16,245 Dr.Oscar Liburd University of Florida Lorena Lopez Virginia Tech

GS17-172 Effects of Herbivore-Induced Plant Volatiles in Various Maturity Stages of Pepper on the Attractiveness of Orius insidiosus $9,787 Dr.Xavier Martini University of Florida Edward Traczyk University of Florida

GS17-173 Genetic Markers for Resistance to Gastrointestinal Nematode Infections for a Sustainable Florida Native Sheep Production $16,500 Raluca Mateescu University of Florida Zaira Magdalena Estrada Reyes University of Florida

GS17-178 Overcoming Microclimate Challenges to Improve Organic Spinach Production in Florida $16,495 Dr.Xin Zhao University of Florida Craig Frey University of Florida

GS15-141 Creating successful Farm to School Programs in Florida: A County-wide Feasibility Study of Direct, Local Procurement $11,000 Ray Bucklin University of Florida Dr.Jonathan Watson University of Florida

GS15-145 Sustainable Management Strategies for Management of Key Insect and Nematode Pests in Squash Cropping Systems $10,121 Dr.Oscar Liburd University of Florida Lorena Lopez Virginia Tech

GS15-146 Investigating New Management Approaches for Picture-Winged Flies in Sweet Corn $7,432 Dr.Gregg Nuessly University of Florida/IFAS/EREC Dr.David Owens University of Delaware
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Project Title</th>
<th>Budget</th>
<th>Principal Investigator(s)</th>
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<tbody>
<tr>
<td>GS15-149</td>
<td>Natural essential oil compounds with heat treatment to control stem-end rot on grapefruit during postharvest handling and marketing</td>
<td>$10,948</td>
<td>Dr. Mark Ritenour, markritenour University of Florida Jiaqi Yan University of Florida</td>
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<tr>
<td>GS15-151</td>
<td>Legume Proportion of Grass-Legume Mixtures Affects Greenhouse Gas Emissions from Animals Grazing Pasture</td>
<td>$11,000</td>
<td>Dr. Lynn Sollenberger University of Florida Dr. Jose Dubeux, Jr. University of Florida - NFREC Marta Kohmann University of Florida</td>
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<td>GS14-129</td>
<td>Potential use of seeded peanuts as warm-season legumes in the U.S. southern Coastal Plains</td>
<td>$10,687</td>
<td>Dr. Jose Dubeux, Jr. University of Florida - NFREC Edwin Mozley University of Florida</td>
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<td>GS14-134</td>
<td>Effect of Nematode Suppression Using Cover Crops Resistant to Nematodes on Peanut Production</td>
<td>$10,429</td>
<td>Dr. Patricio Munoz University of Florida Lin Xing University of Florida</td>
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<td>GS14-137</td>
<td>Impacts of land use intensification on soil organic carbon stocks, soil carbon fractions and microbial activities in subtropical grazing land ecosystems</td>
<td>$10,982</td>
<td>Dr. Maria Silveira University of Florida Sutie Xu University of Florida</td>
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<td>GS13-119</td>
<td>Nitrogen dynamics of cover crops with sorghum for increased sustainability</td>
<td>$10,997</td>
<td>Dr. John Erickson University of Florida Jeffrey Fedenko University of Florida</td>
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<td>GS12-114</td>
<td>Developing an integrated pest management program for a newly introduced pest in Florida blueberries: the spotted wing drosophila, Drosophila suzukii</td>
<td>$10,837</td>
<td>Dr. Oscar Liburd University of Florida Lindsay Iglesias University of Florida</td>
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<td>GS12-117</td>
<td>Assessment of long-term management impact on soil C dynamics in subtropical grasslands</td>
<td>$10,879</td>
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<td>GS11-100</td>
<td>Efficacy of Entomopathogenic Fungi in Controlling the Small Hive Beetle; a Destructive and Invasive Pest of Honey Bee Colonies</td>
<td>$9,996</td>
<td>Lambert Kanga Florida A&amp;M University Saundra Wheeler Penn State University</td>
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<td>GS11-101</td>
<td>Understanding olfactory cues in host location and dispersal range of the filth fly parasitoid Spalangia cameroni (Hymenoptera:Pteromalidae) to improve the use as sustainable biological control agents for fly control on livestock operations</td>
<td>$9,828</td>
<td>Dr. Norman Leppla University of Florida Dr. Erika Machtinger Pennsylvania State University</td>
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<td>GS11-105</td>
<td>Strategies for Increasing Rhizoma Peanut Contribution to Productivity and Ecosystem Services of Low-Input Pasture Systems</td>
<td>$9,978</td>
<td>Dr. Kim Mullenix Auburn University/Alabama Cooperative Ex Dr. Lynn Sollenberger University of Florida</td>
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<td>GS10-092</td>
<td>Do Human-modified Landscapes Affect Solitary Bee Diversity, Foraging, and Reproduction in Northern Florida?</td>
<td>$10,000</td>
<td>Dr. Katie Sieving Wildlife Ecology / UF Rosalyn Johnson University of Florida</td>
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<td>GS10-093</td>
<td>Improving nutrient retention with biochar</td>
<td>$9,852</td>
<td>Dr. Danielle Treadwell University of Florida Seth Friedman Univ of Florida</td>
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<td>GS10-096</td>
<td>Integrated Use of Grafting Technology to Improve Disease Resistance, Yield and Fruit Quality in Organic Heirloom Tomato Production</td>
<td>$10,000</td>
<td>Dr. Danielle Treadwell University of Florida Charles Barrett University of Florida</td>
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</table>
Enhancing nitrogen and water use efficiency in tomato production by using grafting technique

The Smells and Sounds of a Subterranean Sessid: Mating disruption and acoustic detection of grape root borer

Bioenergy and Biofertilizer for Small-Farm Enterprises

Comprehensive evaluation of windbreaks of fast-growing trees

Optimizing buckwheat use as a weed suppressive cover crop for sustainable cropping systems in Florida

Reducing nutrient loss below the root zone of drip-irrigated vegetables using low-pressure, increased irrigation time

Are bluebirds good for farms, and are farms good for bluebirds?

Development of an IPM Program for Control of Flower-Thrips in Blueberries in Southeastern United States

Potential for nitrate-nitrogen leaching in a silvopastoral system compared with open pasture and loblolly pine plantation

Developing a System to Produce Organic Plug Transplants for Organic Strawberry Production

Analysis of a Biological Control Strategy and its Potential in a Pest Management Program in Florida Cabbage

Chemical Ecology of Microtheca ochroloma

Competition for Nitrogen and Groundwater Nitrate Levels in Temperate Alley Cropping Systems

Induction of Volatile Emissions from Peanut Plants in Response to Fungal and Insect Damage
<table>
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<td>OS22-153</td>
<td>Enhancing Stink Bug Biological Control for Increased Sustainability of Rice Production in Florida</td>
<td>$19,982</td>
<td>Dr. Julien Beuzelin, University of Florida, Institute of Food and Agricultural Sciences Everglades Research and Education Center</td>
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<td>OS21-142</td>
<td>Bridging the Fall Forage Gap with Stockpiled Limpograss Along the Southern Gulf Coast</td>
<td>$19,981</td>
<td>Dr. Jose Dubeux, Jr., University of Florida - NFREC</td>
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<td>OS21-146</td>
<td>Evaluating Sorrel (Hibiscus sabdariffa) Varieties for Production in Florida</td>
<td>$19,708</td>
<td>Dr. Norma Samuel, UF/IFAS Extension</td>
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<td>OS21-147</td>
<td>Development of a Push-Pull System in Avocado Groves in South Florida</td>
<td>$19,923</td>
<td>Dr. Xavier Martini, University of Florida</td>
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<td>OS21-148</td>
<td>Plant Sap Analysis as a Tool to Optimize Fertilizer Application for Sustainable Citrus Production</td>
<td>$20,000</td>
<td>Lorenzo Rossi, Ph.D., University of Florida</td>
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<td>OS20-132</td>
<td>Fertilizer Mismanagement Impacts on Pasture Health</td>
<td>$19,828</td>
<td>Cheryl Mackowiak, University of Florida</td>
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<td>OS20-135</td>
<td>On-farm Evaluation of an Innovative Anaerobic Soil Disinfection Practice for Improving Organic Carrot Production in North Florida</td>
<td>$19,995</td>
<td>Dr. Xin Zhao, University of Florida</td>
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<td>OS20-137</td>
<td>Combining Non-crop Habitat and Semiochemical Lures to Increase Natural Enemy Recruitment and Retention in Florida Vegetable Crops</td>
<td>$18,164</td>
<td>Dr. Xavier Martini, University of Florida</td>
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<td>OS18-113</td>
<td>Trap Assisted Scouting for Asian Cockroach Management in Florida</td>
<td>$14,782</td>
<td>Dr. Julien Beuzelin, University of Florida, Institute of Food and Agricultural Sciences Everglades Research and Education Center</td>
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<td>OS18-114</td>
<td>Assisting Vegetable Growers in Florida with Soil Health Evaluation Associated with Cover Cropping/Green Manure Practice During Summer</td>
<td>$15,000</td>
<td>Jehangir Bhadha, University of Florida, Institute of Food and Agricultural Sciences Everglades Research and Education Center</td>
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<td>OS17-104</td>
<td>Evaluating the Effect of Biological Control and Planting Mixed Varieties to Manage Whitefly and Aphid Pests in Organic Squash</td>
<td>$14,821</td>
<td>Dr. Oscar Liburd, University of Florida</td>
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<td>OS17-106</td>
<td>Developing Sustainable and New Alternative Non-chemical Weed Control Strategies for Container Nursery Growers</td>
<td>$15,000</td>
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<td>OS17-110</td>
<td>Farmers’ Evaluation of Cover Crop Effects on Sandy Soils in the Suwannee River Basin in North Florida</td>
<td>$14,744</td>
<td>Kevin Athearn, University of Florida</td>
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<td>OS16-098</td>
<td>Using Flowering Plants on Strawberry Field Edges to Enhance Natural Enemies and Pollinators and Improve Pest Control and Fruit Quality</td>
<td>$14,996</td>
<td>Justin Renkema, University of Florida</td>
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</table>
OS14-086  Use of non-native invasive tree logs for commercial mushroom production on small farms $14,984 Dr.Stephen Hight USDA-ARS

OS13-075  Large Scale Recycling of Used Potting Media with Solarization $3,161 Shawn Steed UF/IFAS Extension

OS13-078  Novel approaches to establish rhizome peanut (Arachis glabrata Benth) on bahiagrass (Paspalum notatum Flugge) pasture: from research to on-farm application $14,945 Dr.Jose Dubeux, Jr. University of Florida - NFREC

OS13-079  Establishing and Evaluating Selected Cover Crops on Small Farms to Increase the Impact of Beneficial Arthropods on Crop Pests $14,984 Robert Hochmuth University of Florida

OS13-082  Propagation of edible Pecan Truffle (Tuber lyonii) in pecan nurseries $14,978 Dr.Matthew Smith University of Florida

OS13-083  Grafting heirloom tomatoes for organic high tunnel production to improve season extension, disease control, and fruit yield: A partnership with local growers for technology transfer $14,999 Dr.Xin Zhao University of Florida

OS12-063  Offseason Management for Organic High Tunnels for Improved Pest Suppression and Soil Health $14,967 Dr.Carlene Chase University of Florida

OS11-060  Investigating various tactics of intercropping buckwheat with squash to increase natural enemy populations, reduce pest and disease pressure and increase yield $14,978 Dr.Oscar Liburd University of Florida

OS10-054  Evaluating compost and lime effects on soil organic matter, soil microbial communities and the control of Fusarium wilt in commercial tomato grown in Florida’s sandy soils $14,955 Amy Shober University of Florida

OS10-056  Improving Cover Crop Management in Florida Row, Vegetable and Organic Citrus Systems $14,940 Dr.Danielle Treadwell University of Florida

OS08-043  Monitoring Nutrient Availability and Leaching Below the Root Zone in Organic Vegetable Production $14,900 Dr.Danielle Treadwell University of Florida Bee Ling Poh University of Florida Eric Simonne University of Florida

OS06-029  Development and implementation of a trap cropping system to suppress stink bugs in the southern Coastal Plain $15,000 Dr.Russell Mizell, III NFREC-Quincy, University of Florida

OS05-026  Optimization of Irrigation Practices in Organic and Sustainable Vegetable Production with Soluble Dye as an Educational Tool $14,663 Eric Simonne University of Florida

OS04-022  A Low Cost Trapping System for Control of the Small Hive Beetle Aethina Tumida Murray, A Pest of Honey Bee Colonies $15,000 Peter Teal USDA-ARS/CMAVE

OS03-015  Performance of Various Forage Combinations Under Thinned Pine Canopies in North Florida $14,982 Ann Blount
Soil Water Movement in Vegetables Grown with Plasticulture

SUSTAINABLE COMMUNITY INNOVATION GRANTS

<table>
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<tr>
<th>Project #</th>
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<tr>
<td>CS15-094</td>
<td>Who’s Connected? Sustainable Producers in the North Central Florida Food System</td>
<td>$34,665</td>
<td>Dr. Kathryn Stofer</td>
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<td>CS09-072</td>
<td>Wildwood Growers’ Market - Starting a Local Food System</td>
<td>$7,910</td>
<td>Susan Kelly</td>
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<td>CS06-044</td>
<td>Florida Farm Link – Building the Foundation of a Sustainable Community Food System by Connecting Sustainable Agriculture to Economic Development Initiatives</td>
<td>$9,521</td>
<td>Laura Morton</td>
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<td>CS04-023</td>
<td>Youth as Community Organizers</td>
<td>$10,000</td>
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<td>CS04-028</td>
<td>Farming and Conservation Easements: A Win-Win Partnership</td>
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<td>CS03-010</td>
<td>“Santa Rosa Fresh” Marketing Assistance</td>
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<td>Paula Davis</td>
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<td>CS02-008</td>
<td>Test Marketing of New Label in Southwest Florida for USA Grown/Living Wage Produce</td>
<td>$5,200</td>
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<td>Harvest for Humanity</td>
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Total funding from the USDA SARE program to Florida
$8,121,936

For further information on projects, contact Candace Pollock, Southern SARE public relations coordinator, at (770) 412-4786 or cpollock@uga.edu.

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