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 $333 million to more than 7,792 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 in Texas
southern.sare.org/sare-in-your-state/texas

$8,776,053 in total funding
119 grant projects
(since 1988)

For more information on this project, see sare.org/projects, and search for project number ES13-120.

Project Highlight: Training for a Sustainable Agriculture Future

Thousands of Texas ranchers hurt by drought are seeking new ways to make their land profitable. Large Texas farms are being subdivided. Farms of all sizes are now in closer contact with non-agricultural communities due to urban growth. Agriculture in Texas is changing, and the technical professionals who support producers must keep up by learning innovative, research-based production and marketing strategies relevant to their clientele’s interests. This need prompted Texas A&M Extension educators to organize a SARE-funded training program on the sustainable and organic practices that are of emerging interest to Texas’ farmers and ranchers. The program reached 45 employees of Texas A&M and Prairie View A&M Extension, and the USDA Natural Resources Conservation Service. It included hands-on farm training conducted at six locations, with classroom presentations and discussions over four days. Eleven farmers and ranchers served as trainers during the on-site visits. Participants reported back on what they did in their communities as a result of their involvement in the program. Five months after conclusion of the training, they brought information about sustainable and organic practices to 1,000 farmers in 37 different counties through a combination of events and one-on-one outreach.

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

Total awards: **119 grants**

- 37 Research and Education
- 4 Sustainable Community Innovation
- 9 Professional Development Program
- 25 Farmer/Rancher
- 26 Graduate Student
- 18 On Farm Research/Partnership

Total funding: **$8,776,053**

- $7,196,602 Research and Education
- $40,000 Sustainable Community Innovation
- $703,658 Professional Development Program
- $241,676 Farmer/Rancher
- $315,704 Graduate Student
- $278,413 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/texas

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/texas to learn more.

Nelson Daniels  
Prairie View A&M University  
(936) 261-5112  
ndaniels@ag.tamu.edu

Larry Redmon  
Texas A&M University  
(979) 845-4008  
l-redmon@tamu.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.
Texas has been awarded $8,776,053 grants to support 118 projects, including but not limited to, 36 research and/or education projects, 9 professional development projects and 25 producer-led projects. Texas 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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</thead>
<tbody>
<tr>
<td>LS21-345</td>
<td>Soil for Water</td>
<td>$1,000,000</td>
<td>Mike Morris&lt;br&gt;National Center for Appropriate Technology&lt;br&gt;Eric Bendfeldt&lt;br&gt;Virginia Cooperative Extension&lt;br&gt;Dr.Dirk Philipp&lt;br&gt;University of Arkansas&lt;br&gt;Dr.Rocky Lemus&lt;br&gt;Mississippi State University, Department of Plant and Soil Sciences</td>
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<tr>
<td>LS20-341</td>
<td>Assessing Water Use Efficiency, Soil Health, and Pollinators within a Transition from Irrigation to Dryland Management in the Texas High Plains</td>
<td>$299,208</td>
<td>Dr.Scott Longing&lt;br&gt;Texas Tech University&lt;br&gt;Dr.Veronica Acosta-Martinez&lt;br&gt;USDA-ARS</td>
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<tr>
<td>LS20-343</td>
<td>Toward Culturally Responsive Disaster Management for Limited Resource Producers: The Role of Person, Place and Professional Agencies</td>
<td>$300,000</td>
<td>Dr.Noel Estwick&lt;br&gt;Prairie View A&amp;M University&lt;br&gt;Dr.Nelson Daniels&lt;br&gt;Prairie View A&amp;M University&lt;br&gt;Dr.Marco Robinson&lt;br&gt;Prairie View A&amp;M University</td>
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<tr>
<td>LS19-313</td>
<td>Organic and Conventional Agriculture: Learning from Each Other to Promote Soil Health and Economic Viability in West Texas</td>
<td>$299,667</td>
<td>Dr.Katie Lewis&lt;br&gt;Texas A&amp;M AgriLife Research</td>
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<tr>
<td>LS19-312</td>
<td>Regional Food Transportation for Texas Farmers</td>
<td>$299,311</td>
<td>Caroline Krejci&lt;br&gt;The University of Texas at Arlington</td>
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<tr>
<td>LS18-288</td>
<td>A Southern Regional Water Conference to Improve Producer Adoption of Sustainable Water Management Practices</td>
<td>$48,000</td>
<td>Dr.Diane Boellstorff&lt;br&gt;Texas A&amp;M AgriLife Extension Service</td>
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<tr>
<td>LS17-277</td>
<td>Indicators and Soil Conservation Practices for Soil Health and Carbon Sequestration</td>
<td>$312,000</td>
<td>Dr.Barbara Bellows&lt;br&gt;Tarleton State University/ TIAER</td>
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<tr>
<td>LS17-283</td>
<td>Developing Organic Cropping Systems for Grain Production in Texas</td>
<td>$276,000</td>
<td>Ronnie Schnell&lt;br&gt;Texas A&amp;M University, Soil &amp; Crop Sciences</td>
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<tr>
<td>LS17-286</td>
<td>Long-term Agroecosystems Research and Adoption in the Texas Southern High Plains - Phase III</td>
<td>$300,000</td>
<td>Dr.Charles West&lt;br&gt;Texas Tech University</td>
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<tr>
<td>LS16-275</td>
<td>Evaluating Organic Pest Control Products for Strawberries in Combination with High and Low Tunnels for Limited Resource Farmers in the Mid-South</td>
<td>$246,413</td>
<td>Dr.Russell Wallace&lt;br&gt;Texas A&amp;M University AgriLife Extension Service</td>
</tr>
</tbody>
</table>
LS16-271  Intensifying Cropping Systems in Semi-Arid Environments to Enhance Soil Health and Profitability  $232,827  Dr. Paul DeLaune  Texan A&M AgriLife Research / Soil and Crop Sciences

LS14-261  Long-term AgroEcosystems Research and Adoption in the Texas Southern High Plains – Phase II  $300,000  Dr. Charles West  Texas Tech University

LS14-264  Beyond Fresh: Expanding Markets for Sustainable Value-added Food Products in Texas  $220,000  Mike Morris  National Center for Appropriate Technology

LS12-249  Improving Soil Quality to Increase Yield and Reduce Diseases in Organic Rice Production  $225,000  Fugen Dou  Texas A&M AgriLife Research

LS11-238  Long-term AgroEcosystems Research and Adoption in the Texas Southern High Plains – Phase I  $329,999  Dr. Charles West  Texas Tech University

LS10-229  Integrated Crop and Livestock Systems for Enhanced Soil Carbon Sequestration and Microbial Diversity in the Semiarid Texas High Plains  $160,000  Dr. Jennifer Moore-Kucera  Texas Tech University

LS10-236  Traceability in Specialty Crop Production and Supply Chains: Distilling a Research and Extension Agenda  $33,000  Kathryn Boys  Virginia Tech

LS08-202  Crop-livestock Systems for Sustainable High Plains Agriculture  $200,000  Dr. Vivien Allen  Texas Tech University

LS08-208  Marketing of locally produced sustainable animal fiber products  $140,000  John Bernard  University of Delaware

LS07-201  Pigeon pea: a multipurpose, drought resistant forage, grain and vegetable crop for sustainable southern farms  $200,000  Dr. John Sloan  Texas AgriLife Research

LS05-175  Sustainable and profitable control of invasive plant species by small ruminants  $178,000  Dr. James Muir  Texas A&M AgriLife Research

LS05-214  SARE Research and Education Program Impacts and Diffusion  $31,526  Marari Suvedi  CARRS Center for Evaluative Studies

LS03-144  Expanding the Marketing Opportunities for Organic Growers in Texas  $19,924  Douglas Constance  Sam Houston State University

LS03-150  Sustainable and profitable control of invasive species by browsing goats on small farms  $14,199  Dr. James Muir  Texas A&M AgriLife Research

LS02-131  Forage and Livestock Systems for Sustainable High Plains Agriculture  $251,805  Dr. Vivien Allen  Texas Tech University

LS00-117  System for value-added export of manure nitrogen and phosphorus through turfgrass sod  $149,726  Donald Vietor, PhD  Texas A&M University, Soil & Crop Sciences

LS99-100  Systems for sustainability of alfalfa production on acid, Coastal Plain soils using various harvesting strategies  $149,750  Vincent Haby  Texas Agricultural Experiment Station
<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
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<th>Project Leaders</th>
</tr>
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<tbody>
<tr>
<td>LS99-108</td>
<td>System for Conserving and Adding Value to Manure Sources of Nutrients in Turf-grass Sod</td>
<td>$16,854</td>
<td>Donald Vietor, PhD Texas A&amp;M University, Soil &amp; Crop Sciences</td>
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<tr>
<td>LS98-097</td>
<td>Introducing Alternative Crops Into Traditional Cotton-Grain Farming to Aid Transition To “Freedom to Farm” Agriculture</td>
<td>$114,279</td>
<td>Roland E. Roberts Texas A&amp;M University Research and Extension Center</td>
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<tr>
<td>LS97-082</td>
<td>Sustainable Crop/Livestock Systems in the Texas High Plains</td>
<td>$222,125</td>
<td>Dr. Vivien Allen Texas Tech University</td>
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<tr>
<td>LS95-069</td>
<td>Managing Soil Phosphorous Accumulation From Poultry Litter Application Through Vegetable/Legume Rotations</td>
<td>$135,000</td>
<td>D. R. Earhart Texas Agricultural Experiment Station</td>
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<tr>
<td>LS92-047</td>
<td>Farm Scale Evaluation of Alternative Cotton Production Systems</td>
<td>$60,000</td>
<td>William M. Lyle Texas Agricultural Experiment Station</td>
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<tr>
<td>LS92-048</td>
<td>Developing Environmentally Sound Poultry Litter Management Practices for Sustainable Cropping Systems</td>
<td>$140,000</td>
<td>D. R. Earhart Texas Agricultural Experiment Station</td>
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<tr>
<td>LS89-015</td>
<td>Enhancement of the Stability of Southern Region Agroecosystems Through Profitable Transition to Sustainable Agriculture</td>
<td>$121,989</td>
<td>Keith Jones Texas Department of Agriculture</td>
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<tr>
<td>LS88-002</td>
<td>Whole-farm Low/Reduced Input Farming Systems and Educational Program</td>
<td>$90,000</td>
<td>Hoover Carden Prairie View A &amp; M University</td>
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<tr>
<td>LS88-010</td>
<td>Solarization and Living Mulch to Optimize Low-Input Production Systems for Small Fruits (88-87-4)</td>
<td>$80,000</td>
<td>Charles Long Texas A &amp; M University</td>
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**PROFESSIONAL DEVELOPMENT PROGRAM GRANTS**

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<tr>
<th>Project #</th>
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<tr>
<td>PDP21-06</td>
<td>Sustainable Aquatic Habitat Management on Agricultural Lands</td>
<td>$60,000</td>
<td>Brittany Chesser Texas A&amp;M AgriLife Extension Service Dr. Aaron Sumrall Texas A&amp;M AgriLife Extension Service</td>
</tr>
<tr>
<td>ES20-151</td>
<td>Beekeeping Curriculum and Training for Texas Agricultural Extension Agents and 4-H Youth Leaders</td>
<td>$79,516</td>
<td>Nicole Gueck AgriLogic Consulting, LLCElizabeth “Wizzie” Brown Texas AgriLife Extension Service Leesa Hyder Texas Beekeepers Association Molly Keck Texas AgriLife Extension Service Ashley Ralph Texas Beekeepers Association Mary Reed Texas Apiary Inspection Services</td>
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<tr>
<td>ES19-147</td>
<td>Training Texas County Extension Agents and Mentor Ranchers to Improve Small Ruminant Health and Productivity Through Natural Genetic Selection Strategies</td>
<td>$76,996</td>
<td>Dr. Reid Redden Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>ES18-139</td>
<td>Natural Resource Management for Sustainable Agriculture Production in East Texas</td>
<td>$42,773</td>
<td>Dr. Vanessa Corriher-Olson Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>ES18-142</td>
<td>Promotion and Adoption of Sustainable Agriculture Practices in Texas: Training the Trainers</td>
<td>$80,000</td>
<td>Dr. Jake Mowrer Texas A&amp;M AgriLife Extension</td>
</tr>
</tbody>
</table>
### Ranching with Wildlife: Teaching Sustainable Livestock Production Practices for Wildlife Habitat
- **Project #:** ES17-136
- **SARE Support:** $78,838
- **Project Leaders:**
  - John Tomecek
  - Texas A&M Agrilife Extension Service

### Farming for the Future: Adopting Sustainable Agriculture Practices
- **Project #:** ES13-120
- **SARE Support:** $55,904
- **Project Leaders:**
  - Dr. Megan Clayton
  - Texas A&M AgriLife Extension Service, Department of Rangeland, Wildlife, and Fisheries Management

### Achieving Rangeland Sustainability Through Total Resource Management
- **Project #:** ES99-045
- **SARE Support:** $157,061
- **Project Leaders:**
  - William Fox, Ph.D.
  - Texas Cooperative Extension
  - C. Wayne Hanselka, Ph.D.
  - Texas Cooperative Extension

### Environmentally and Economically Sustainable Use of Rangeland
- **Project #:** LST94-002
- **SARE Support:** $72,570
- **Project Leaders:**
  - James F. Cadenhead
  - Texas A & M Research and Extension

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### FARMER/RANCHER GRANTS

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
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<tbody>
<tr>
<td>FS19-312</td>
<td>Tagasaste: A new feed source for West Texas</td>
<td>$9,670</td>
<td>Malinda Beeman, Marfa Maid Dairy</td>
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<tr>
<td>FS18-306</td>
<td>Subsoiling as an Effective and Affordable Water Capture Tool</td>
<td>$9,720</td>
<td>Amanda Krause, Parker Creek Ranch</td>
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<td>FS17-299</td>
<td>Organic Sweet Potato as a Commercial Crop in South Texas</td>
<td>$10,000</td>
<td>Lois Kim, Farmer</td>
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<tr>
<td>FS14-281</td>
<td>Organic Cultivation Methods for Asparagus as an Alternative Crop in South Texas</td>
<td>$14,736</td>
<td>Gilbert Garza, Texas/Mexico Border Coalition CBO</td>
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<tr>
<td>FS13-277</td>
<td>Evaluating switchgrass in marginal land as a beneficial insect habitat and as compost source for vegetable production</td>
<td>$8,379</td>
<td>Cynthia Remsing, Lynn Remsing</td>
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<tr>
<td>FS12-262</td>
<td>Development of an innovative forage crop system for pasture raised swine</td>
<td>$8,303</td>
<td>Ron Luce, Poppa Skinny's Farm</td>
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<tr>
<td>FS10-246</td>
<td>Low Cost Geothermal Greenhouse Heating System for Southern Climates</td>
<td>$9,999</td>
<td>Tanya Miller, Millican Farms, LLC</td>
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<tr>
<td>FS07-219</td>
<td>Treating Soil Compaction Using Woven Weed Fabric</td>
<td>$9,886</td>
<td>Roy Riddle</td>
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<tr>
<td>FS06-198</td>
<td>Evaluation of Mulches for Organic Cantaloupe Production in Semi-Arid Regions</td>
<td>$9,855</td>
<td>John Chandler</td>
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<tr>
<td>FS06-205</td>
<td>Cover Crop Optimization for Sustainable Forage Systems on a Southern Dairy Farm</td>
<td>$9,872</td>
<td>Neil R. Miller, World Hunger Relief, Inc.</td>
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<tr>
<td>FS05-190</td>
<td>Addressing Cedar Infestations - Using Animal Impact to Increase Forage Production and Improve Soil Health</td>
<td>$14,987</td>
<td>Peggy Cole Jones, Holistic Resource Management of Texas, Inc</td>
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<tr>
<td>FS05-196</td>
<td>Weed Control for Row Crops Using Corrugating Linerboard/Medium Paper</td>
<td>$7,399</td>
<td>Michael E. Tolbert, The Landowners Association of Texas-Tyler Chapter</td>
</tr>
<tr>
<td>FS03-161</td>
<td>Sustainable Pastured Layer Research Project</td>
<td>$14,992</td>
<td>Graciela Alvarado, Texas/Mexico Border Coalition Community Based Org.</td>
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<tr>
<td>Project #</td>
<td>Project Title</td>
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<td>Project Leaders</td>
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</table>
| FS03-174  | Goat Range-Nutrition Performance Test | $13,113 | Marvin F. Shurley  
Meat Goat Association |
| FS02-151  | Increase Soil Organic Matter in Citrus Soils | $8,112 | Jim Hoffimann |
| FS01-142  | Pepitas de Ajo: permanent ground cover in garlic production | $14,132 | Lydia Villanueva  
Comm. Approaching Sustainability w/ Agroecology |
| FS99-088  | Internal Parasite Resistance Selection Method for Sheep | $4,844 | Ray Cloudt |
| FS99-090  | Crop Rotation and Rotational Grazing Study | $9,876 | Ken Graff |
| FS98-075  | An Intensive Marketing Workshop for Growers and Ranchers | $7,561 | Sue Johnson  
Texas Organic Growers Association |
| FS97-050  | Effects of Conservation Tillage on Water Quality in Southern Texas | $8,000 | Charles Eubanks  
Cameron County Field |
| FS97-053  | Cool Season and Warm Season Grasses to Stabilize Erodible Soils and Increase Profitability | $10,000 | David Kearney  
Wichita County Field Crops Committee |
| FS96-036  | Native Warm Season Grasses As Alternative Hay Source to Annual Sorghum/Sudan Grasses on Family-Operated Goat Dairy | $9,640 | Lee B. Dexter  
White Egret Farm |
| FS95-021  | Pecan IPM Using Black-Eyed Peas as a Trap Crop | $4,000 | Kyle Brooksheir |
| FS94-001  | Controlling Aphids with Harmonia Lady Beetle in Pecan Orchards | $4,600 | Cindy Wise  
Texas Pecan Growers Assoc. |
| FS94-010  | Site Specific Applications of Seed/Fertilizer/Chemicals | $10,000 | Ricky & Becky Meinen |

**GRADUATE STUDENT GRANTS**

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<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
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</thead>
</table>
| GS21-241  | Harnessing the Wild Relatives of Rice for Novel Adaptive Phenoypes: Genetics and breeding for agricultural sustainability beyond the Green Revolution | $16,500 | Dr.Benildo Reyes  
Texas Tech University  
Swarupa Mandal  
Texas Tech University |
| GS21-248  | African American Absentee Landowners in Houston and Their Knowledge of Rural Land Ownership Conservation Practices: A needs assessment | $14,532 | Dr.Chanda Elbert  
Texas A&M University  
Ashley Pellerin  
Texas A&M University |
| GS21-251  | Effectiveness of Tarping and Tillage as Weed Management Strategies in South Texas | $16,499 | Dr.Alexis Racelis  
University of Texas - Rio Grande Valley  
Christopher De la Rosa  
University of Texas Rio Grande Valley |
| GS20-226  | Comparing the Effects of Forage Mix and Nutrient Management on Soil Greenhouse Gas Flux in Semi-arid Improved Pastures | $16,450 | Lindsey Slaughter  
Texas Tech University  
Billi Petermann  
Texas Tech University |
<table>
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<tr>
<th>Grant Number</th>
<th>Title</th>
<th>Funding Amount</th>
<th>Principal Investigator(s)</th>
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</table>
| GS20-227     | Texas Little Bluestem (Schizachyrium scoparium) Phenotypic Attribute Correlations to Collection Site Environment Characteristics | $11,889        | Dr. James Muir  
Texas A&M AgriLife Research  
Kimberlee Howell  
Tarleton State University |
| GS20-229     | Cannabis sativa L. as a Feed Source in Backyard Rabbit Production    | $16,419        | Frank Owsley  
Tarleton State University  
Kristen Jacobson  
Tarleton State University |
| GS19-198     | The Success of Organic and Other Sustainable Dual-Purpose Wheat Systems Depend on Access to Adapted Varieties | $16,500        | Dr. Bill Pinchak  
Texas A&M AgriLife Research  
Philip Hinson  
Texas A&M University |
| GS19-211     | Roadblocks to Success: Needs assessment of small producers in Texas   | $10,132        | Dr. Ken Mix  
Texas State University  
Katie Tritsch  
Texas State University |
| GS19-209     | Improving Resilience, Sustainability and Nutritional Properties of Specialty Crops Using Composted Spent Coffee Grounds | $16,044        | Dr. David Reed  
Texas A&M University  
Amanda Birnbaum  
Texas A&M University |
| GS18-193     | Investigating Controls Over Nodulation and Nitrogen Fixation in Leguminous Cover Crops in Subtropical South Texas | $16,500        | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Stephanie Kasper  
University of Texas Rio Grande Valley |
| GS18-196     | Effects of Cumulative Cattle Trampling on Soil Bulk Density and Infiltration of Rain Water on an Annual Forage Crop Pasture | $9,001         | Dr. Charles West  
Texas Tech University  
Dr. Kathryn Radicke-Vanderburg  
West Texas A&M University / Purdue Global University / Unity College |
| GS18-179     | Developing Suitable Cover Crop Systems for South Texas: Evaluating Different Late-Summer and Winter Cover Crop Species | $16,352        | Muthu Bagavathiannan  
Texas A&M University  
Spencer Samuelson  
Corteva Agriscience |
| GS16-160     | Agroecological methods to manage brassica pests on organic farms     | $11,000        | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Madeline Marshall  
Corteva Agriscience |
| GS16-161     | Examining the role of bats in pest management in agroecosystems of south Texas | $10,223        | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Katharine Jones  
The University of Texas at Rio Grande Valley |
| GS15-148     | Multifunctionality of Cover Crops in South Texas: Looking at multiple benefits of cover cropping on small farms in a subtropical climate | $8,953         | Dr. Alexis Racelis  
University of Texas - Rio Grande Valley  
Savannah Rugg  
University of Texas Pan-American |
| GS15-152     | Evaluation of winter annual cover crops under multiple residue managements: Impacts on land management, soil water depletion, and cash crop productivity. | $9,383         | Dr. Charles West  
Texas Tech University  
Dr. Lisa Baxter  
University of Georgia (Tifton Campus) |
| GS14-133     | Effects of Simulated and Insect Herbivory on Total and Protein Percipitable Phenolic Concentrations of Two Legumes | $9,040         | Dr. James Muir  
Texas A&M AgriLife Research  
Tiana Blackmon  
Tarleton State University |
| GS14-138     | Use of Artificial Lighting to Increase Photoperiod Length for Pasture-Raised Laying Hens to Improve Egg Productivity and Quality | $10,997        | Dr. Jackie Wahrnumd  
University of Kentucky  
Margaret Morgan  
Texas A&M University-Commerce |
| GS12-109     | Factors contributing to the economic impact of cotton fleahoppers, Pseudatomoscelis seriatus | $9,336         | Micky Eubanks  
Auburn University  
Loriann Garcia  
Texas A&M University |
<table>
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<tr>
<th>Project #</th>
<th>Project Title</th>
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<tr>
<td>OS21-140</td>
<td>Introducing Beneficial Entomopathogenic Nematodes for Biological Control and Enhanced Plant Resistance to Improve Pest Management in Cucurbit Crops</td>
<td>$20,000</td>
<td>Anjel Helms Texas A&amp;M University</td>
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<tr>
<td>OS20-138</td>
<td>Strategic Management of Legume Cover-forage Crops to Optimize Utility in a Challenging Environment</td>
<td>$20,000</td>
<td>Dr.Reagan Noland Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>OS20-139</td>
<td>Incorporating Native Plants in Insectary Strips to Promote Insect Diversity and Belowground Beneficial Microbes</td>
<td>$20,000</td>
<td>Pushpa Soti University of Texas Rio Grande Valley</td>
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<tr>
<td>OS19-128</td>
<td>Sustainable Pasture Management in Texas: Optimizing forage production and nutrient use in various environments and soils</td>
<td>$14,298</td>
<td>Dr.James Kiniry usda-ars</td>
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<tr>
<td>OS19-131</td>
<td>Advancing the Frontier of Legume Cover Crops and Building Integrated System Resilience in Semi-arid West Texas</td>
<td>$15,000</td>
<td>Dr.Reagan Noland Texas A&amp;M AgriLife Extension</td>
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<tr>
<td>OS18-119</td>
<td>Supporting Alternative Crop Options Through Improved Fertility Recommendations for Canola in Central and South Texas</td>
<td>$14,811</td>
<td>Fernando Guillen-Portal Texas A&amp;M University</td>
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<tr>
<td>OS18-121</td>
<td>Integrating Cover Crops as Potential Weed and Pest Management Strategy in Organic Vegetable Farms in South Texas</td>
<td>$15,000</td>
<td>Pushpa Soti University of Texas Rio Grande Valley</td>
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</table>
Using Mycorrhizal Fungi to Improve Soil Health and Increase Yield in Organic Vegetable Farms

Deep Soil Profile Sampling of Nitrate for Residual Nitrogen Credit in Winter Wheat – Texas Blacklands

Determining accurate nitrate level requirements in an aquaponic system.

Developing farmer-appropriate integrated pest management strategies in South Texas: The potential of push-pull technologies to regulate organic brassica pest

Huitlacoche Production as an Alternative Crop in South Texas

Adaptable Wide Stale Seedbed System Combining Precision Fertilizer Placement, Conservation Irrigation Management with Reduced Tillage Practices for Long Term Farm Sustainability

BIOLOGICAL CONTROL OF SALTCEDAR ON WEST TEXAS RANCHES CONSERVES FORAGE AND WATER RESOURCES

Use of Guar (Cyamopsis tetragonolaba (L.) Taub) for cover crop rotation and green manuring

Livestock and Feedstock: Distiller’s Grain and Fuel Ethanol

Comparison of Stockpiled Bermudagrass + Annual Ryegrass and Traditional Hay-Only Winter Feeding Practices

Evaluation and Maintenance of Sustainable Systems for Alfalfa Production and Marketing Strategies on Coastal Plain Soils

**SUSTAINABLE COMMUNITY INNOVATION GRANTS**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS10-076</td>
<td>Investing in Community Linkages to Improve our Food System</td>
<td>$10,000</td>
<td>Jay Crossley Houston Tomorrow</td>
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<tr>
<td>CS10-081</td>
<td>Establishing Sustainable Agriculture &amp; Community Development in Elgin Texas</td>
<td>$10,000</td>
<td>Amy Miller City of Elgin</td>
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<td>CS06-040</td>
<td>Building Local Food &amp; Local Communities in Western Oklahoma</td>
<td>$10,000</td>
<td>Darryl Birkenfield Ogallala Commons</td>
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<tr>
<td>CS03-012</td>
<td>Sustainable Agriculture Innovations Lead to Rural Success</td>
<td>$10,000</td>
<td>Gayla Kessinger Canutillo Independent Schoo</td>
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Total funding from the USDA SARE program to
Texas
$8,776,053

For further information on projects, contact Candace Pollock, Southern SARE public relations coordinator, at (770) 412-4786 or cpollock@uga.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA’s National Institute of Food and Agriculture (NIFA).