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 $311 million to more than 7,449 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... Virginia

Project Highlight: Fighting Downy Mildew with Better Crop Selection

Seed crop growers of cucumbers, squashes, melons, gourds and watermelons have faced severe losses in Virginia from downy mildew. To stem these losses and to reduce the economic impact, seed grower Edmund Frost used a SARE grant to find varieties of melons, cucumbers and winter squash able to withstand downy mildew. By finding such varieties, he could share results with other seed growers and gather information needed to make progress with seed production and breeding of the resistant varieties.

Frost conducted trials that identified 15 cucumber varieties with the ability to produce twice as much as standard varieties labeled “resistant,” 20 winter squash and tropical pumpkin varieties with better downy mildew resistance than other varieties, and several varieties that produce good-quality melons in areas with high downy mildew pressure.

While the identified pumpkin varieties showed downy mildew resistance, there were quality problems that Frost looked at in a second SARE-funded project. Frost made significant progress with three pumpkin varieties and shared the results with growers at two conferences. One of the seeds bred during the project, F6 Seminole-Waltham seed, is now being sold to growers.

For more information on these projects, see sare.org/projects, and search for project numbers FS13-273 and FS16-291.

SARE in Virginia

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

$5,787,078 in total funding

121 grant projects

(since 1988)

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

**Total awards:** 121 grants
- 45 Farmer/Rancher
- 24 Graduate Student
- 12 On Farm Research/Partnership
- 7 Professional Development Program
- 24 Research and Education
- 9 Sustainable Community Innovation

**Total funding:** $5,787,078
- $395,236 Farmer/Rancher
- $288,009 Graduate Student
- $155,564 On Farm Research/Partnership
- $526,040 Professional Development Program
- $4,309,502 Research and Education
- $112,727 Sustainable Community Innovation

Find a complete list of projects on page 3.

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**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/virginia](southern.sare.org/sare-in-your-state/virginia)

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**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/virginia](southern.sare.org/state-pages/virginia) to learn more.

- **Eric Bendfeldt**
  - Virginia Tech
  - (540) 432-6029 Ext: 106
  - ebendfel@vt.edu

- **Chris Mullins**
  - Virginia State University
  - (804) 524-5834
  - cmullins@vsu.edu

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For detailed information on SARE projects, go to [www.SARE.org](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.
Virginia has been awarded $5,787,078 grants to support 119 projects, including but not limited to, 22 research and/or education projects, 7 professional development projects and 45 producer-led projects. Virginia 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>
| LS20-324 | Organic Soil Health Education Online Course and Resources for the Southern SARE Region Farmers and Ranchers | $49,882      | Lauren Snyder   
Organic Farming Research Foundation   
Carol Williams   
Southern SSAWG |
| LS20-327 | A Modular Curriculum for Growing Food Grain for the Local Market               | $50,004      | Dr.Heather Coiner, Little Hat Creek Farm   
Common Grain Alliance |
| LS20-332 | Silvopasture for Poultry Production with Outdoor Access: Impact on animal welfare, economic, and environmental parameters | $275,079     | Dr.Leonie Jacobs   
Virginia Polytechnic Institute and State University (Virginia Tech)   
John Fike   
Va Tech   
Dr.John Munsell   
Virginia Tech - Department of Forest Resources and Environmental Megan O'Rourke   
Virginia Tech   
Gabriel Pent   
Dept. of Crop and Soil Environmental Science, Virginia Tech |
Virginia Tech |
| LS16-268 | Integrating Row Covers Into Sustainable Production Systems to Strengthen the Sustainability of Specialty Crops Farmers | $252,542     | Dr.Mark Reiter   
Virginia Polytechnic Institute and State University   
Dr.Ramon Arancibia   
University of Missouri Extension |
| LS13-255 | Made in the Shade - Using Silvopasture Research and On-farm Demonstrations to Advance These Sustainable Agroforestry Systems | $190,000     | John Fike   
Va Tech |
| LS13-258 | Towards ecologically-based fertilizer recommendations that improve soil quality in high-density apple orchards | $140,000     | Dr.Gregory Peck   
Cornell University |
| LS08-206 | Sustainable agriculture in Virginia and North Carolina: a multi-state assessment of the economic, social and political context | $155,481     | Dr.Jonah Fogel   
University of Virginia |
| LS07-195 | How farmers learn: improving sustainable agriculture education | $205,000     | Dr.Nancy Franz   
Virginia Tech |
<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Title</th>
<th>SARE Support</th>
<th>Project Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>LS06-191</td>
<td>Promoting the development of economically and ecologically sustainable pasture-fed beef markets</td>
<td>$198,652</td>
<td>Denise Mainville Department of Agricultural &amp; Applied Economics</td>
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<tr>
<td>LS03-156</td>
<td>Saving our Seed: A program to train farmers</td>
<td>$204,500</td>
<td>Tony Kleese Carolina Farm Stewardship Association Brian Cricket Rakita Carolina Farm Stewardship Association</td>
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<tr>
<td>LS03-149</td>
<td>Enhancing Sustainability of Organic Broccoli Production through Integration of No-tillage and Farmscaping</td>
<td>$163,741</td>
<td>Ronald Morse Virginia Polytechnic Institute &amp; State University</td>
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<tr>
<td>LS99-099</td>
<td>Economic and Environmental effects of Compost use for Sustainable Vegetable Production</td>
<td>$153,969</td>
<td>Greg Evanylo Virginia Tech</td>
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<tr>
<td>LS97-083</td>
<td>The Hometown Creamery Revival</td>
<td>$145,474</td>
<td>Vicki Dunaway Dairy Farm Cooperators</td>
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<tr>
<td>LS97-084</td>
<td>Regionally Centered Sustainable Agriculture System</td>
<td>$173,240</td>
<td>Anthony Flaccavento Clinch Powell Sustainable Development Initiative</td>
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<tr>
<td>LS96-080</td>
<td>Alternative Agriculture Strategies for Rural Community Sustainable Development Northampton County, Virginia</td>
<td>$228,517</td>
<td>Terry Thompson The Nature Conservancy Virginia Coast Reserve</td>
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<tr>
<td>LS95-070</td>
<td>Effects of Organic and Chemical Fertility Inputs on Soil Quality in Limited Resource Vegetable Farms</td>
<td>$184,319</td>
<td>Greg Evanylo Virginia Tech</td>
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<tr>
<td>LS91-037</td>
<td>Low-Input Crop and Livestock Systems for the Southeastern United States</td>
<td>$360,000</td>
<td>J.P. Fontenot Virginia Tech</td>
</tr>
<tr>
<td>LS90-029</td>
<td>An Expert Crop Rotation Planning System (CROPS) for Implementing and Evaluating Low-input Crop and Livestock Systems</td>
<td>$60,000</td>
<td>Nicholas Stone Virginia Polytechnic Institute &amp; State University</td>
</tr>
<tr>
<td>LS88-008</td>
<td>Development, Implementation and Evaluation of Low-input Crop and Livestock Systems for the Southern Region (88-96-2)</td>
<td>$390,000</td>
<td>John Luna Oregon State University</td>
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<tr>
<td>LS88-008.2</td>
<td>Low-Input Crop and Livestock Systems for the Southeastern United States</td>
<td>$360,000</td>
<td>John Luna Oregon State University</td>
</tr>
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</table>

PROFESSIONAL DEVELOPMENT PROGRAM 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>ES18-144</td>
<td>Sharing the Wealth of Cover Crops: Improved cover crop and soil health knowledge sharing and networking</td>
<td>$79,091</td>
<td>Wade Thomason Virginia Tech</td>
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<tr>
<td>ES11-110</td>
<td>Comprehensive Training in Direct Marketing of Meat and Meat Products for Cooperative Extension Agents and Agricultural Professionals</td>
<td>$90,573</td>
<td>Scott Greiner Virginia Tech</td>
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<tr>
<td>Project #</td>
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<tr>
<td>ES06-085</td>
<td>Sustainable Organic No-Till Systems: A Training Program for CES and NRCS Field Professionals</td>
<td>$104,623</td>
<td>Ronald Morse Virginia Polytechnic Institute &amp; State University</td>
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<tr>
<td>ES03-071</td>
<td>Developing a Hair Sheep Production Systems for Southwest Virginia</td>
<td>$51,879</td>
<td>Martha Mewbourne</td>
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<tr>
<td>ES01-053</td>
<td>Innovative Cropping Systems SARE-PDP Project, Colonial Soil and Water Conservation District</td>
<td>$49,913</td>
<td>Brian Noyes Colonial Soil and Water Conservation District</td>
</tr>
<tr>
<td>ES01-059</td>
<td>Training for the Pasture Land Management Research Extension &amp; Education Program</td>
<td>$49,981</td>
<td>John Galbraith Virginia Polytechnic Institute &amp; State University</td>
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<tr>
<td></td>
<td><strong>FARMER/RANCHER GRANTS</strong></td>
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<tr>
<td>FS18-308</td>
<td>Evaluating the Effectiveness of Locally Available Woodchips for Weed Control</td>
<td>$9,756</td>
<td>Patrick Johnson NANIH Farm and Garden, Inc.</td>
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<tr>
<td>FS16-287</td>
<td>Retro Fitting an Existing Orchard</td>
<td>$9,837</td>
<td>Marianne Cicala Farmer</td>
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<tr>
<td>FS16-289</td>
<td>Analyzing Baby Ginger as a Profitable Crop Through Organic Certification and Value-Added Processing</td>
<td>$9,978</td>
<td>William Crenshaw Farmer</td>
</tr>
<tr>
<td>FS16-291</td>
<td>Winter Squash Evaluation and Improvement for Downy Mildew Resistance and Fruit Quality</td>
<td>$14,862</td>
<td>Edmund Frost Common Wealth Seed Growers / Twin Oaks Seed Farm</td>
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<tr>
<td>FS16-292</td>
<td>Comparing Methods for No-Till Lespedeza Pasture Establishment</td>
<td>$8,688</td>
<td>Gail Hobbs-Page Farmer</td>
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<tr>
<td>FS14-280</td>
<td>Controls on vegetable growth, flowering, and production of Hops in the Southeastern USA</td>
<td>$8,834</td>
<td>Justen Dick Kelly Ridge Farms, LLC</td>
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<tr>
<td>FS14-285</td>
<td>Development of a Clean Hay Mulch System for a Diverse, Biologically Managed CSA Vegetable Farm</td>
<td>$5,866</td>
<td>Arthur and Carol Upshur Copper Cricket Farm</td>
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<tr>
<td>FS12-261</td>
<td>Are beeswax cappings contaminated with pesticides?</td>
<td>$3,500</td>
<td>Elizabeth LeGall Meadows Edge Farm</td>
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<td>FS10-243</td>
<td>Winter Production of Nucleus Honeybee Colonies</td>
<td>$9,944</td>
<td>John Fraser</td>
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<tr>
<td>FS09-241</td>
<td>Developing a Sustainable Commercial Production System for the Goji berry</td>
<td>$7,349</td>
<td>Norma Wilson</td>
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<tr>
<td>FS09-238</td>
<td>Development of a novel grazing system for sustainability of a cow-calf operation</td>
<td>$9,500</td>
<td>Jason Carter VA Cooperative Extension Joe Shomo</td>
</tr>
</tbody>
</table>
FS08-223 Promoting Sustainable Beekeeping Practices through local production of nucs (nucleus colonies) and local queen honeybees $14,736 Karla Eisen Prince William Regional Beekeepers Association

FS08-225 Improving Sustainability of A Long-term Certified Organic Cash Grain Production System $8,828 W. Todd Henry Hillsborough Farm Kathy Henley Hillsborough Farm, Inc.

FS08-227 Optimizing management of manure composts to yield high value mushroom crops and soil amendments $6,317 Mark Jones Sharondale Farm

FS08-229 Enhanced genetic selection of dairy sheep for the Southern US $9,486 Marcia McDuffie Allen’s Creek Farm

FS08-231 Financial analysis of growing no till organic field corn and wheat using cover crops for weed suppression $8,827 Joel Thomas Yowell

FS07-217 Low Input No-Till Vegetable Production in the Shenandoah Valley $9,988 Michael Phillips

FS07-218 Biodegradable Mulch $3,457 Eric Plaksin

FS06-210 Which Edamame Variety is best for a Market Garden? $4,459 Patricia Stansbury Epic Gardens

FS05-186 Growing Alternative Crops in Tobacco Greenhouses $4,085 Charlie Broadwater Clinch Mountain Farmers, Inc

FS05-192 Managing Cover Crops Under-The-Trellis: A Vital Step Toward Vineyard Sustainability $9,958 Jason Murray Virginia Cooperative Extension

FS05-194 On Farm Hatchery for Fingerling Catfish $9,450 James O. Shands

FS04-179 Production Cost vs. Market Value Comparison of Rare Breed and Commercial Swine $10,000 Darin Buse

FS04-180 A Varroa Mite Management Project $13,271 Billy M. Davis Loudoun Beekeepers Association

FS03-173 Pasture-based Goat and Sheep Producer to Processor Transfer Station Project $15,000 Marilyn Sanford Mid-Atlantic Meat Goat & Lamb Marketing Cooperative

FS03-177 Nigerian Dwarf Goats for Value-added Dairy Products to Provide Sustainable Off-season Farm Income $7,317 Liane Young Kush-Hara Organic Farm

FS03-169 Using Compost Tea to Enhance Growth of Pasture for Livestock Grazing $8,784 George Nolting

FS02-147 Appropriate-Scale, Inexpensive Cheese Vat for the Farmstead Cheesemaker $6,430 Vicki Dunaway

FS02-153 Making Honey Bee Pollination More Sustainable by Reducing Miticides to Control Varroa Mites $9,340 Wyatt A. Mangum
<table>
<thead>
<tr>
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<th>Project Leaders</th>
</tr>
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<tbody>
<tr>
<td>FS02-154</td>
<td>Scott County Hair Sheep Faire</td>
<td>$3,068</td>
<td>Martha Mewbourne</td>
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<tr>
<td>FS02-158</td>
<td>Winter Green Manure Crops for Organic Vegetable Production in the Tidewater Virginia Region</td>
<td>$4,785</td>
<td>J. W. Phillips</td>
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<tr>
<td>FS01-136</td>
<td>A Natural Control for Algae in Virginia Farm Ponds</td>
<td>$5,140</td>
<td>Linda Layne, Virginia Fish Farmers Association</td>
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<td>FS00-120</td>
<td>Cut Flowers: Tilapia Aquaponics Study</td>
<td>$5,111</td>
<td>Bert McLaughlin</td>
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<td>FS00-124</td>
<td>Marketing Open-Pollinated Garden Seed as an Alternative Crop</td>
<td>$4,486</td>
<td>Brian Rakita, Acorn Farm</td>
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<tr>
<td>FS00-108</td>
<td>Community Supported Agriculture Marketing Program</td>
<td>$14,975</td>
<td>Alice Coles, Bayview Citizens for Social Justice Inc.</td>
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<tr>
<td>FS00-115</td>
<td>Agricultural Entrepreneur Course</td>
<td>$14,500</td>
<td>Sharon Keith, Farmer Market Association</td>
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<tr>
<td>FS00-117</td>
<td>Building a Successful Small-Farmer Marketing Group When Customers are Geographically Dispersed</td>
<td>$14,800</td>
<td>Ned Johnson, Highlands Bioproduce, Inc.</td>
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<tr>
<td>FS00-119</td>
<td>Developing a Producers’ Cooperative and Market for Free-Range Poultry</td>
<td>$9,672</td>
<td>Andy Lee, Good Earth Organic Farm</td>
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<tr>
<td>FS98-073</td>
<td>Developing a Dairy Hair Sheep: Assessing the Potentials</td>
<td>$4,377</td>
<td>Amy Hayner</td>
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<tr>
<td>FS98-077</td>
<td>Test Marketing and Financial Analysis of Fresh Cut Flowers</td>
<td>$5,416</td>
<td>Emmet Lowe</td>
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<tr>
<td>FS98-081</td>
<td>Soil Nutrient Balancing in Vegetable Production</td>
<td>$7,325</td>
<td>Mark W. Schonbeck, Virginia Association for Biological Farming</td>
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<tr>
<td>FS95-020</td>
<td>No-Tillage Production of Transplanted Crops in High Cover Crop Residues</td>
<td>$8,300</td>
<td>Linford Belcher</td>
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<tr>
<td>FS95-024</td>
<td>Alternative Control of Soil Diseases in Vegetable Production</td>
<td>$5,625</td>
<td>Dennis C. Dove, Buttercup Gardens</td>
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</tbody>
</table>

**GRADUATE STUDENT GRANTS**

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<tbody>
<tr>
<td>GS20-232</td>
<td>Assessing Suitable Production Techniques for Ramps in Appalachia</td>
<td>$14,660</td>
<td>Dr. John Munsell, Virginia Tech - Department of Forest Resources and Environmental Sciences, Virginia Tech</td>
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<tr>
<td>GS19-202</td>
<td>Cortisol as an Indicator of Stress in Animals Under Different Grazing Systems</td>
<td>$13,500</td>
<td>John Fike, Sanjok Poudel, Virginia Polytechnic Institute and State University</td>
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</table>
Production of High Protein Feeds from Brewer's Spent Grain to Replace Fishmeal in Aquaculture Diets
Haibo Huang
Yanhong He
Virginia Polytechnic Institute & State University

Investing in Tribal Food Security and Agricultural Recovery
Marcus Comer
Teena Hamlin
Virginia Polytechnic Institute & State University

Ecology and Impact of Chauliognathus spp. as Beneficial Insects in Agricultural Integrated Pest Management
Dr. Thomas Kuhar
Katlyn Catron
Virginia Tech

Farmers’ Market Leadership: Factors contributing to success and failure
Eric Kaufman
Jama Coartney
Virginia Tech

Development of a Novel Approach for Monitoring the Samurai Wasp, Trissolcus japonicus (Ashmead), an Effective Parasitoid of the Brown Marmorated Stink Bug, Halyomorpha halys (Stal)
Chris Bergh
Nicole Quinn
Virginia Tech

Enhancing Biological Control in Vegetable Production in Eastern Virginia and Maryland
Megan O'Rourke
Christopher McCullough
Virginia Tech

Effect of Cultural Practices in Controlling Southern Blight of Potato in the Mid-Atlantic Region
Steven Rideout
Jose Garcia Gonzalez
Virginia Tech

Living Soil for a Sustainable Future: Assessing the Effects of Cover Crops and Tillage on the Soil Microbial Community and Health
Dr. Ramon Arancibia
Samantha Taggart
University of Missouri Extension
Virginia Tech

Designing and Evaluating Complex Cover Crop Mixtures
Dr. Mark Reiter
Virginia Polytechnic Institute and State University

Shade Effects on Yield, Botanical Composition, Nutritive Value, and Ergot Alkaloid Concentrations of Forage Mixtures for Silvopastures
Dr. Chris Teutsch
Kelly Mercier
Virginia Polytechnic Institute and State University

Improved Trapping Strategies for Managing Harlequin Bug: Applying recent research and discovery of its aggregation pheromone as a tool for vegetable growers
Dr. Thomas Kuhar
Anthony Dimeglio
Virginia Tech

Non chemical methods of weed control in strawberry annual plasticulture system
Dr. Jayesh Samtani
Sanghamitra Das
Virginia Tech

Acoustic analysis: A novel way to measure livestock grazing behavior
Gabriel Pent
John Fike
Gabriel Pent
Dept. of Crop and Soil Environmental Science, Virginia Tech
<table>
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<tr>
<th>Project #</th>
<th>Project Title</th>
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<tr>
<td>GS14-131</td>
<td>Making Pest Management More Sustainable in Cucurbit Production</td>
<td>$10,922</td>
<td>Dr. Thomas Kuhar, Virginia Tech&lt;br&gt;Dr. James Wilson, Virginia Tech</td>
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<td>GS13-120</td>
<td>Management of Mexican Bean Beetle, <em>Epilachna varivestis</em> Mulsant, in Snap Beans Using Cultural Control Strategies</td>
<td>$10,622</td>
<td>Dr. Thomas Kuhar, Virginia Tech&lt;br&gt;Dr. Louis Nottingham, Virginia Tech</td>
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<td>GS12-113</td>
<td>Mob grazing effects on nutrient runoff in cool season pastures</td>
<td>$10,974</td>
<td>Dr. W. Cully Hession, Virginia Tech&lt;br&gt;Emily Williams, Virginia Polytechnic Institute and State University</td>
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<tr>
<td>GS12-118</td>
<td>Increasing Fresh Virginia-Grown Edamame Supply through Season Extension Techniques</td>
<td>$10,731</td>
<td>Dr. Maru Kering, Virginia State University&lt;br&gt;Dr. Bo Zhang, Virginia State University&lt;br&gt;Shawntae Nolen, Virginia State University</td>
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<td>GS09-079</td>
<td>Optimal Nutritive Value of Honeylocust Seed Pods Within Temperate Silvopasture</td>
<td>$9,894</td>
<td>John Fike, Va Tech&lt;br&gt;Jacob Johnson, Virginia Polytechnic Institute and State University</td>
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<tr>
<td>GS09-081</td>
<td>Trap cropping for management of Harlequin bug in cole crops</td>
<td>$9,523</td>
<td>Dr. Thomas Kuhar, Virginia Tech&lt;br&gt;Anna Wallingford, Virginia Tech</td>
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<tr>
<td>GS05-050</td>
<td>Effect of European Corn Borer on Corn Whole-Plant Yield and Forage Quality</td>
<td>$6,107</td>
<td>Roger Youngman, Virginia Polytechnic Institute and State Univ.&lt;br&gt;Siddharth Tiwari, Virginia Polytechnic Institute and State Univ.</td>
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<td>GS04-031</td>
<td>Effects of Organic Amendments on Soil Humic Substances Content and Physiological Properties of Water-Stressed Zea mays and Glycine max</td>
<td>$9,793</td>
<td>Greg Evanylo, Virginia Tech&lt;br&gt;Chandra Bowden, Virginia Tech</td>
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<td>GS03-024</td>
<td>Optimizing Forage Production and Quality Within a temperate Silvopasture System</td>
<td>$9,959</td>
<td>John Fike, Va Tech</td>
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**ON FARM RESEARCH/PARTNERSHIP GRANTS**

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<tr>
<th>Project #</th>
<th>Project Title</th>
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<th>Project Leaders</th>
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<tbody>
<tr>
<td>OS18-122</td>
<td>Sustainable Varroa Mite Management in Honey Bee Queen Production</td>
<td>$14,998</td>
<td>Dr. James Wilson, Virginia Tech</td>
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<tr>
<td>OS18-111</td>
<td>Evaluating Legume Cover Crops for Sustainable Corn Grain Production in the Virginia Coastal Plain</td>
<td>$9,747</td>
<td>Keith Balderson, Northern Neck Soil and Water Conservation District</td>
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<tr>
<td>OS17-103</td>
<td>Integrating Cropping Practices to Improve Nutrient Management Plans and Ensure Environmental and Economic Sustainability in Dairy Farming Systems</td>
<td>$15,000</td>
<td>Gonzalo Ferreira, Virginia Tech</td>
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<tr>
<td>OS17-107</td>
<td>Use of Protective Covers to Reduce Fungicide Usages in Organic Wine Grape Production in Virginia</td>
<td>$15,000</td>
<td>Mizuho Nita, Virginia Tech</td>
</tr>
<tr>
<td>OS13-069</td>
<td>Developing jujube (<em>Ziziphus jujube</em> Mill) or Chinese date as an alternative fruit tree crop to improve sustainability of small farmers in Mississippi</td>
<td>$15,000</td>
<td>Dr. Ramon Arancibia, University of Missouri Extension</td>
</tr>
</tbody>
</table>
Sustainable practices for the management of the invasive brown marmorated stink bug, Halyomorpha halys (Stal), on vegetables

$14,820
Dr. Thomas Kuhar
Virginia Tech

Appalachian Forest Farming Network for Native Medicinal Plant Production

$15,000
Dr. James Chamberlain, III Research Scientist

Allelopathic potential of a biculture cover cropping system utilizing Fabaceae and Brassicaceae cover crops

$12,840
Janet Spencer
Virginia Cooperative Extension

Reducing soil erosion and nitrogen leaching through sustainable cropping systems

$6,271
Wade Thomason
Virginia Tech

Production, Marketing and Financial Analysis of Seedless Watermelons Growing in Tobacco Transplant Greenhouses

$12,118
Scott Jessee
Virginia Polytechnic Institute & State Univ.

Direct Marketing Assessment for the Potential of Ethnic Crops

$9,775
Jason Murray
Virginia Cooperative Extension

Developing Sustainable Internal Parasite Control Programs for Small Ruminants

$14,995
Joseph Tritschler
Virginia State University

Total funding from the USDA SARE program to Virginia
$5,787,078

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).