### 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 \$406 million to more than 8.802 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, granteeproduced information products and other educational materials.



www.sare.org

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

# Virginia

Project Highlight: Fighting Downy Mildew with Better Crop Selection

Seed crop growers of cucumbers, squash, 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 <a href="mailto:sare.org/projects">sare.org/projects</a>, and search for project numbers FS13-273 and FS16-291.

## **SARE in Virginia**

southern.sare.org/state-profiles/virginia/

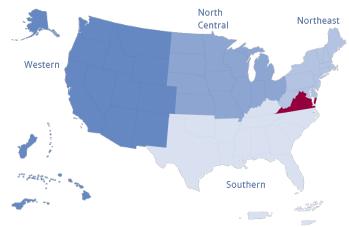
\$1,734,601 in total funding

33 grant project

(since 1988)

For a complete list of grant projects state by state, go to

www.sare.org/state-summaries



## **SARE in Virginia**

## **Grants awarded** 2019-2024

# Total awards: 33 grants

- 9 Farmer/Rancher
- 3 Research and Education
- 3 Professional Development Program
- 6 On Farm Research/Partnership
- 9 Graduate Student
- 3 Education Only

# Total funding: \$1,734,601

\$149,909 Farmer/Rancher

\$950.013 Research and Education

\$230,449 Professional Development Program

\$114,376 On Farm Research/Partnership

\$139,969 Graduate Student \$149,885 Education Only

Find a complete list of projects on page 3.

## Farmer and rancher impacts 2019-2024

SARE grantees have reported the following impacts from their projects:

6,463 farmers participated in a SAREfunded project

1,114 farmers reported a change in knowlege, awareness, skills or attitude

## 128 farmers changed a practice



Learn about local impacts at: southern.sare.org/sare-in-your-state/virginia/

## **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-profiles/virginia/ to learn more.

Eric Bendfeldt Virginia Tech (540) 432-6029 Ext: 106

ebendfel@vt.edu



Sanjun Gu Virginia State University (804) 524-5480 squ@vsu.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.



# AGRICULTURE PROJECTS FUNDED IN VIRGINIA

by USDA's

Sustainable Agriculture Research and Education (SARE) Program

Virginia has been awarded \$6,766,700 grants to support 143 projects, including but not limited to, 21 research and/or education projects, 10 professional development projects and 53 producer-led projects. Virginia has also received additional SARE support through multi-state projects.

#### RESEARCH AND EDUCATION GRANTS

Project #	Project Title	SARE Support	Project Leaders
LS22-367	Biological Recycling of Agricultural residues with Mushroom for Multidimensional Use	\$371,000	Dr.adnan Yousuf Virginia State University Dr.Asmare Atalay Virginia State University, Agriculture Research Station Dr.Chyer Kim Virginia State University Dr.Theresa Nartea Virginia State Universty Cooperative Extension Dr.Eunice Ndegwa Virginia State University Dr.Laban Rutto Viriginia State University
LS20-332	Silvopasture for Poultry Production with Outdoor Access: Impact on animal welfare, economic, and environmental parameters	\$279,078	Dr.Leonie Jacobs Virginia Polytechnic Institute and State University (Virginia Tech) John Fike school of Plant and Environmental Sciences, Va Tech Dr.John Munsell, PhD Virginia Tech - Department of Forest Resources and Environmental Gabriel Pent Dept. of Crop and Soil Environmental Science, Virginia Tech
LS20-337	Development and Evaluation of IPM Systems Components for Insect Pests and Pathogens of Cucurbit Crops in the Southeastern U.S.	\$299,935	Dr.Thomas Kuhar 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 school of Plant and Environmental Sciences, 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
LS06-191	Promoting the development of economically and ecologically sustainable pasture-fed beef markets	\$198,652	Denise Mainville Department of Agricultural & Applied Economics
LS03-149	Enhancing Sustainability of Organic Broccoli Production through Integration of No- tillage and Farmscaping	\$163,741	Ronald Morse Virginia Polytechnic Institute & State University
LS03-156	Saving our Seed: A program to train farmers	\$204,500	Tony Kleese Carolina Farm Stewardship Association Brian Cricket Rakita Carolina Farm Stewardship Association
LS99-099	Economic and Environmental effects of Compost use for Sustainable Vegetable Production	\$153,969	Greg Evanylo Virginia Tech
LS97-083	The Hometown Creamery Revival	\$145,474	Vicki Dunaway Dairy Farm Cooperators
LS97-084	Regionally Centered Sustainable Agriculture System	\$173,240	Anthony Flaccavento Clinch Powell Sustainable Development Initiative
LS96-080	Alternative Agriculture Strategies for Rural Community Sustainable Development Northampton County, Virginia	\$228,517	Terry Thompson The Nature Conservancy Virginia Coast Reserve

LS95-070	Effects of Organic and Chemical Fertility Inputs on Soil Quality in Limited Resource Vegetable Farms	\$184,319	Greg Evanylo Virginia Tech
LS95-071	Developing Municipal/On- Farm Linkages for On-Farm Composting and Utilization of Yard Wastes: A Regional Resource Issue Project	\$69,167	Greg Evanylo Virginia Tech
LS91-037	Low-Input Crop and Livestock Systems for the Southeastern United States	\$360,000	J.P. Fontenot Virginia Tech
LS90-029	An Expert Crop Rotation Planning System (CROPS) for Implementing and Evaluating Low-input Crop and Livestock Systems	\$60,000	Nicholas Stone Virginia Polytechnic Institute & State University
LS88-008	Development, Implementation and Evaluation of Low-input Crop and Livestock Systems for the Southern Region (88-96-2)	\$390,000	John Luna Oregon State University
LS88-008.2	Low-Input Crop and Livestock Systems for the Southeastern United States	\$360,000	John Luna Oregon State University

## PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

Project #	Project Title	SARE Support	Project Leaders
SPDP24-031	Training on Accessible Apiculture for People and Veterans with Disabilities thru Virtual and Onsite training.	\$75,589	Justin Ruger Accessible Beekeeping
SPDP23-020	Expanding the Agroforestry Regional Knowledge (ARK) Exchange Network in Virginia	\$79,957	Dr.Katie Trozzo Virginia Tech Department of Agricultural, Leadership, and Community Education Dr.Eric S. Bendfeldt Virginia Cooperative Extension Herbert Brown, Jr. Virginia State University's Small Farm Outreach Program Dr.Kim Niewolny Virginia Tech Adam Taylor Virginia Tech Catawba Sustainability Center

SPDP22-11	Advancing Comprehensive, Peer-to-Peer Soil Health Training across Virginia	\$74,903	Rory Maguire Virginia Tech William Crutchfield Virginia State University Mary Sketch		
ES18-144	Sharing the Wealth of Cover Crops: Improved cover crop and soil health knowledge sharing and networking	\$79,091	Virginia Tech Wade Thomason Virginia Tech		
ES11-109	Expanding the Expertise of Agricultural Professionals to Serve New Constituents: Practical Training on Organic Horticulture and Hoophouses	\$99,980	Jim Lukens Southern Sustainable Agriculture Working Group Pamela Kingfisher Southern SAWG		
ES11-110	Comprehensive Training in Direct Marketing of Meat and Meat Products for Coopertative Extension Agents and Agricultural Professionals	\$90,573	Scott Greiner Virginia Tech		
ES06-085	Sustainable Organic No-Till Systems: A Training Program for CES and NRCS Field Professionals	\$104,623	Ronald Morse Virginia Polytechnic Institute & State University		
ES03-071	Developing a Hair Sheep Production Systems for Southwest Virginia	\$51,879	Martha Mewbourne		
ES01-053	Innovative Cropping Systems SARE-PDP Project, Colonial Soil and Water Conservation District	\$49,913	Brian Noyes Colonial Soil and Water Conservation District		
ES01-059	Training for the Pasture Land Management Research Extension & Education Program	\$49,981	John Galbraith Virginia Polytechnic Institute & State University		
FARMER/RANCHER GRANTS					

Project #	Project Title	SARE Support	<b>Project Leaders</b>
FS24-366	A Comparison of the Microbiome Population Induced by Different Microbial Foods for the Production of a Safe and Effective Aerated Compost Tea	\$18,699	Nicky Schauder Permaculture Gardens LLC
FS24-368	Progress Towards a Dwarf Edible Winter Pea for Companion Planting with Wheat	\$18,486	Jason Myers-Benner Tangly Woods

FS24-375	Investigating production capabilities and uses of Black Soldier Fly Larvae (BSFL) for organic waste processing in the urban environment	\$19,737	Dave Littere Future Acres Urban Farming
FS23-347	Summer and Winter Squash Research and Breeding for the Southeast	\$20,000	Edmund Frost Common Wealth Seed Growers / Twin Oaks Seed Farm
FS23-353	Effects of Aerated Compost Tea on Swiss Chard, Kale & Lettuce Production in Virginia	\$12,447	Nicky Schauder Permaculture Gardens LLC
FS22-340	Small Grains on Very Small Farms	\$13,987	Michael Grantz Great Day Gardens
FS22-345	Effects of Using a Native Legume as a Cover Crop in Small Scale Vegetable Production	\$15,000	Patrick Johnson NANIH Farm and Garden, Inc.
FS21-332	Cropland Remediation of Heavy Metals	\$11,707	William Drumheller, Sr. Royall D Farm, LLC
FS20-325	Breeding and Evaluation of Butternut Squash Varieties for Southeast Organic Farms	\$19,846	Edmund Frost Common Wealth Seed Growers / Twin Oaks Seed Farm
FS18-308	Evaluating the Effectiveness of Locally Available Woodchips for Weed Control	\$9,756	Patrick Johnson NANIH Farm and Garden, Inc.
FS16-287	Retro Fitting an Existing Orchard	\$9,837	Marianne Cicala Farmer
FS16-289	Analyzing Baby Ginger as a Profitable Crop Through Organic Certification and Value-Added Processing	\$9,978	William Crenshaw Farmer
FS16-291	Winter Squash Evaluation and Improvement for Downy Mildew Resistance and Fruit Quality	\$14,862	Edmund Frost Common Wealth Seed Growers / Twin Oaks Seed Farm
FS16-292	Comparing Methods for No-Till Lespedeza Pasture Establishment	\$8,688	Gail Hobbs-Page Farmer
FS14-280	Controls on vegetable growth, flowering, and production of Hops in the Southeastern USA	\$8,834	Justen Dick Kelly Ridge Farms, LLC

FS14-285	Development of a Clean Hay Mulch System for a Diverse, Biologically Managed CSA Vegetable Farm	\$5,866	Arthur and Carol Upshur Copper Cricket Farm
FS13-273	Identifying and Marketing Quality Open-Pollinated and Organic Cucurbit Seedstocks for Virginia	\$9,963	Edmund Frost Common Wealth Seed Growers / Twin Oaks Seed Farm
FS12-261	Are beeswax cappings contaminated with pesticides?	\$3,500	Elizabeth LeGall Meadows Edge Farm
FS10-243	Winter Production of Nucleus Honeybee Colonies	\$9,944	John Fraser
FS09-238	Development of a novel grazing system for sustainability of a cow-calf operation	\$9,500	Jason Carter VA Cooperative Extension Joe Shomo
FS09-241	Developing a Sustainable Commercial Production System for the Goji berry	\$7,349	Norma Wilson
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
FS03-169	Using Compost Tea to Enhance Growth of Pasture for Livestock Grazing	\$8,784	George Nolting
FS03-173	Pasture-based Goat and Sheep Producer to Processor Transfer Station Project	\$15,000	Marilyn Sanford Mid-Atlantic Meat Goat & Lamb Marketing Cooperativ
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
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
FS02-154	Scott County Hair Sheep Faire	\$3,068	Martha Mewbourne
FS02-158	Winter Green Manure Crops for Organic Vegetable Production in the Tidewater Virginia Region	\$4,785	J. W. Phillips
FS01-136	A Natural Control for Algae in Virginia Farm Ponds	\$5,140	Linda Layne Virginia Fish Farmers Association

FS00-108	Community Supported Agriculture Marketing Program	\$14,975	Alice Coles Bayview Citizens for Social Justice Inc.
FS00-115	Agricultural Entrepreneur Course	\$14,500	Sharon Keith Farmer Market Association
FS00-117	Building a Successful Small- Farmer Marketing Group When Customers are Geographically Dispersed	\$14,800	Ned Johnson Highlands Bioproduce, Inc.
FS00-119	Developing a Producers' Cooperative and Market for Free-Range Poultry	\$9,672	Andy Lee Good Earth Organic Farm
FS00-120	Cut Flowers: Tilapia Aquaponics Study	\$5,111	Bert McLaughlin
FS00-124	Marketing Open-Pollinated Garden Seed as an Alternative Crop	\$4,486	Brian Rakita Acorn Farm
FS98-073	Developing a Dairy Hair Sheep: Assessing the Potentials	\$4,377	Amy Hayner
FS98-077	Test Marketing and Financial Analysis of Fresh Cut Flowers	\$5,416	Emmet Lowe
FS98-081	Soil Nutrient Balancing in Vegetable Production	\$7,325	Mark W. Schonbeck Virginia Association for Biological Farming
FS95-020	No-Tillage Production of Transplanted Crops in High Cover Crop Residues	\$8,300	Linford Belcher
FS95-024	Alternative Control of Soil Diseases in Vegetable Production	\$5,625	Dennis C. Dove Buttercup Gardens
	GRADU	ATE STUDENT GR	ANTS
Project #	Project Title	SARE Support	Project Leaders

Project #	Project Title	<b>SARE Support</b>	Project Leaders
GS23-291	Virginia Orchard IPPM: Native wildflower plot to provide alternative forage, habitat, and refuge for bee pollinators	\$16,500	Dr.Margaret Couvillon Virginia Tech Ian McKellips Virginia Tech
GS22-258	Climate Change and the Sustainability of Deciduous Fruit and Nuts in the Southern States	\$16,500	Dr.Wei Zhang Virginia Tech Yuanyuan Wen Virginia Tech

GS22-270	The Role of Black Farmer Organizers in Promoting Healthy and Sustainable Local Community Food Access	\$15,258	Dr.Kim Niewolny Virginia Tech Nicole Nunoo Virginia Tech
GS22-272	Improving Vegetable Soybean Seedling Emergence Through Novel Organic Seed Treatments	\$14,998	Dr.Steven Rideout Virginia Tech Xiaoying Li Virginia Tech
GS21-245	Spraying Too Much: Understanding the biology of the red headed flea beetle to inform IPM in nursery crops	\$16,480	Alejandro Del Pozo-Valdivia Virginia Tech Eleanor Lane Virginia Tech
GS20-232	Assessing Suitable Production Techniques for Ramps in Appalachia	\$14,660	Dr.John Munsell, PhD Virginia Tech - Department of Forest Resources and Environmental PABITRA ARYAL School of Plant and Environmental Sciences, Virginia Tech
GS19-204	Production of High Protein Feeds from Brewer's Spent Grain to Replace Fishmeal in Aquaculture Diets	\$16,333	Dr.Haibo Huang Virginia Tech YANHONG HE IFF
GS19-201	Investing in Tribal Food Securtiy and Agricultural Recovery	\$15,740	Marcus Comer Teena Hamlin IFF
GS19-202	Cortisol as an Indicator of Stress in Animals Under Different Grazing Systems	\$13,500	John Fike school of Plant and Environmental Sciences, Va Tech Sanjok Poudel Virginia Polytechnic Institute and State University
GS18-188	Ecology and Impact of Chauliognathus spp. as Beneficial Insects in Agricultural Integrated Pest Management	\$15,234	Dr.Thomas Kuhar Virginia Tech Katlyn Catron Virginia Tech
GS18-187	Farmers' Market Leadership: Factors contributing to success and failure	\$11,823	Eric Kaufman Virginia Tech Jama Coartney Virginia Tech
GS17-167	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)	\$14,813	Chris Bergh Virginia Tech Nicole Quinn Virginia Tech

GS17-176	Enhancing Biological Control in Vegetable Production in Eastern Virginia and Maryland	\$16,105	Megan O'Rourke Virgnia Tech Christopher McCullough Virginia Tech
GS17-177	Effect of Cultural Practices in Controlling Southern Blight of Potato in the Mid-Atlantic Region	\$16,413	Dr.Steven Rideout Virginia Tech Jose Garcia Gonzalez Virginia Tech
GS16-153	Living Soil for a Sustainable Future: Assessing the Effects of Cover Crops and Tillage on the Soil Microbial Community and Health	\$10,995	Dr.Ramon Arancibia University of Missouri Extension Samantha Taggart Virginia Tech
GS16-162	Designing and Evaluating Complex Cover Crop Mixtures	\$10,994	Dr.Mark Reiter Virginia Polytechnic Institute and State University Bethany Wolters Virginia Tech
GS16-164	Shade Effects on Yield, Botanical Composition, Nutritive Value, and Ergot Alkaloid Concentrations of Forage Mixtures for Silvopastures	\$11,000	Dr.Chris Teutsch Virginia Polytechnic Institute and State University Dr.Kelly Mercier USDA-NRCS
GS15-144	Improved Trapping Strategies for Managing Harlequin Bug: Applying recent research and discovery of its aggregation pheromone as a tool for vegetable growers	\$9,893	Dr.Thomas Kuhar Virginia Tech Anthony Dimeglio Bayer Crop Science
GS15-150	Non chemical methods of weed control in strawberry annual plasticulture system	\$11,000	Dr.Jayesh Samtani Virginia Tech. University Sanghamitra Das Bayer Crop Science
GS14-130	Acoustic analysis: A novel way to measure livestock grazing behavior	\$10,981	Gabriel Pent Dept. of Crop and Soil Environmental Science, Virginia Tech John Fike school of Plant and Environmental Sciences, Va Tech Gabriel Pent Dept. of Crop and Soil Environmental Science, Virginia Tech
GS14-131	Making Pest Management More Sustainable in Cucurbit Production	\$10,922	Dr.Thomas Kuhar Virginia Tech Dr.James Wilson Virginia Tech
GS13-120	Management of Mexican Bean Beetle, Epilachna varivestis Mulsant, in Snap Beans Using Cultural Control Strategies	\$10,622	Dr.Thomas Kuhar Virginia Tech Louis Nottingham Virginia Tech

GS12-113	Mob grazing effects on nutrient runoff in cool season pastures	\$10,974	Dr.W. Cully Hession Virginia Tech Emily Williams Virginia Polytechnical Institute and State University		
GS12-118	Increasing Fresh Virginia- Grown Edamame Supply through Season Extension Techniques	\$10,731	Dr.Maru Kering Virginia State University Dr.Bo Zhang Virginia State University Shawntae Nolen Virginia State University		
GS09-079	Optimal Nutritive Value of Honeylocust Seed Pods Within Temperate Silvopasture	\$9,894	John Fike school of Plant and Environmental Sciences, Va Tech Jacob Johnson Virginia Polytechnic Institute and State University		
GS09-081	Trap cropping for management of Harlequin bug in cole crops	\$9,523	Dr.Thomas Kuhar Virginia Tech Anna Wallingford Virginia Tech		
GS05-050	Effect of European Corn Borer on Corn Whole-Plant Yield and Forage Quality	\$6,107	Roger Youngman Virginia Polytechnic Institute and State Univ. Siddharth Tiwari Virginia Polytechnic Institute and State Univ.		
GS04-031	Effects of Organic Amendments on Soil Humic Substances Content and Physiological Properties of Water-Stressed Zea mays and Glycine max	\$9,793	Greg Evanylo Virginia Tech Chandra Bowden Virginia Tech		
GS03-024	Optimizing Forage Production and Quality Within a temperate Silvopasture System	\$9,959	John Fike school of Plant and Environmental Sciences, Va Tech		
	ON FARM RESEARCH/PARTNERSHIP GRANTS				
Project #	Project Title	SARE Support	Project Leaders		
OS23-167	Development of a Safer Vehicle for Draft Animal Use	\$27,959	Lincoln Montgomery-Rodgers, DVM A.V.S.		
OS23-168	Killing Perennial Weeds Using Light Blocking Tarps	\$7,871	Shawn Jadrnicek Virginia Cooperative Extension		
OS22-152	Adjustable Farrier Stocks for Draft Power	\$19,000	Lincoln Montgomery-Rodgers, DVM A.V.S.		

OS22-158	Evaluation of Current Virginia Peanut Cultivars and Advanced Breeding Lines for Southern Corn Rootworm Resistance	\$20,000	Sally Taylor Virginia Tech Tidewater Agricultural Research and Extension Center
OS21-143	Tapping New Forest Farming Opportunities in Central Appalachia Through Black Walnut Syrup Production	\$19,546	Dr.A. L. (Tom) Hammett Virginia Tech
OS21-144	Cluster Protection Shelter to Reduce Fungicide Usage in Conventional and Organic Vineyards	\$20,000	Mizuho Nita Virginia Tech
OS18-111	Evaluating Legume Cover Crops for Sustainable Corn Grain Production in the Virginia Coastal Plain	\$9,747	Keith Balderson Northern Neck Soil and Water Conservation District
OS18-122	Sustainable Varroa Mite Management in Honey Bee Queen Production	\$14,998	Dr.James Wilson Virginia Tech
OS17-103	Integrating Cropping Practices to Improve Nutrient Management Plans and Ensure Environmental and Economic Sustainability in Dairy Farming Systems	\$15,000	Gonzalo Ferreira Virginia Tech
OS17-107	Use of Protective Covers to Reduce Fungicide Usages in Organic Wine Grape Production in Virginia	\$15,000	Mizuho Nita Virginia Tech
OS13-069	Developing jujube (Ziziphus jujube Mill) or Chinese date as an alternative fruit tree crop to improve sustainability of small farmers in Mississippi	\$15,000	Dr.Ramon Arancibia University of Missouri Extension
OS12-065	Sustainable practices for the management of the invasive brown marmorated stink bug, Halyomorpha halys (Stal), on vegetables	\$14,820	Dr.Thomas Kuhar Virginia Tech
OS10-051	Appalachian Forest Farming Network for Native Medicinal Plant Production	\$15,000	Dr.James Chamberlain, III Research Scientist
OS07-037	Allelopathic potential of a biculture cover cropping system utilizing Fabaceae and Brassicaceae cover crops	\$12,840	Janet Spencer Virginia Cooperative Extension

OS06-030	Reducing soil erosion and nitrogen leaching through sustainable cropping systems	\$6,271	Wade Thomason Virginia Tech
OS02-001	Production, Marketing and Financial Analysis of Seedless Watermelons Growing in Tobacco Transplant Greenhouses	\$12,118	Scott Jessee Virginia Polytechnic Institute & State Univ.
OS02-005	Direct Marketing Assessment for the Potential of Ethnic Crops	\$9,775	Jason Murray Virginia Cooperative Extension
OS02-007	Developing Sustainable Internal Parasite Control Programs for Small Ruminants	\$14,995	Joseph Tritschler Virginia State University
SUSTAINABLE COMMUNITY INNOVATION GRANTS			
Project #	Project Title	SARE Support	Project Leaders

Proje	ect #	Project Title	<b>SARE Support</b>	Project Leaders
CS12-0	090	The Montgomery County Farm to Community Planning Project	\$9,997	Ellen Stewart Friends of the Farmers Market
CS12-0	091	Refugee Farm Worker Training Program	\$10,000	Adrianna Vargo Local Food Hub
CS08-0	066	Growing Food & Community: 2009 Initiatives	\$10,000	Dawn Story Growing Food & Community
CS06-0	043	Building sustainable communities through agricultural and food-based entrepreneurship	\$10,000	Julie Brown Institute for Advanced Learning and Research
CS06-0	047	Value-added Sustainable Agriculture Initiative	\$40,000	Kathyln Chupik Appalachian Sustainable Development
CS03-0	011	Making the Connection: Enhancing Agricultural Understanding in an Urbanizing Area	\$7,200	Suzanne Heflin Prince William County Farm Tour
CS03-0	015	Community Development through a Regional Food System Plan	\$10,000	Barbara Schwenk Accomack-Northampton Planning District Commission
CS02-0	001	Agri-tourism: A Strategy Toward Sustainable Farm, Business, Family and Community	\$8,230	Brian Calhoun Virginia Cooperative Extension

CS02-003	Making the Connection:
	Enhancing Agricultural
	Understanding in an
	Urbanizing Area

## \$7,300 Suzanne Heflin

Prince William County Farm Tour

### **EDUCATION ONLY GRANTS**

Project #	Project Title	SARE Support	Project Leaders
EDS22-37	Empowering Farmers, Farmers Market Managers, and Gleaners to Safely Address Local Hunger and Food Insecurity	\$49,999	Dr.Harry Schonberger Virginia Tech Dr.Renee Boyer, Ph.D. Virginia Tech Dr.Tiffany Drape, Ph.D. Virginia Tech Allyson Ey Society of St. Andrew Dr.Laura Strawn, Ph.D. Virginia Tech
EDS20-17	Organic Soil Health Education Online Course and Resources for the Southern SARE Region Farmers and Ranchers	\$49,882	Brise Tencer Organic Farming Research Foundation
EDS20-20	A Modular Curriculum for Growing Food Grain for the Local Market	\$50,004	Dr.Heather Coiner Common Grain Alliance

## Total funding from the USDA SARE program to Virginia \$6,766,700





For further information on projects, contact 770-412-4787 or ssare@uga.edu. Sustainable Agriculture Research and Education (SARE) is funded by USDA's National Institute of Food and Agriculture (NIFA).