

AGRICULTURE PROJECTS FUNDED IN PENNSYLVANIA

by USDA's Sustainable Agriculture Research and Education (SARE) Program 1988-2019

Pennsylvania has been awarded \$13,410,989 grants to support 311 projects, including but not limited to, 59 research and/or education projects, 26 professional development projects and 105 producer-led projects. Pennsylvania has also received additional SARE support through multi-state projects.

RESEARCH AND EDUCATION GRANTS

| Project # | Project Title | SARE support | Project Leaders |
|-----------|--|--------------|--|
| LNE19-380 | Biological Control Options for Fly Control in Poultry Facilities | \$224,003 | Dr.Erika Machtinger Pennsylvania State University |
| LNE19-378 | Sensor-Based Precision Irrigation Systems for Tree Fruit and Vegetable Crops | \$199,936 | Long He Pennsylvania State University |
| LNE18-367 | Carbon Gaps, Nitrogen Bulges, and Phosphorus Imbalances: In Search of Sustainable Soil Organic Matter Management | \$199,956 | Dr.Charles White Plant Science Department, Penn State |
| LNE17-356 | Optimizing yield, milling quality, and disease management in spelt and other heritage grain production in the mid-Atlantic | \$57,281 | Alyssa Collins Penn State Southeast Agricultural Research & Extension Center |
| LNE16-349 | Development of resources for small raw- milk cheesemakers to conduct science- based risk assessments | \$131,271 | Dr.Kerry Kaylegian Penn State University |
| LNE16-352 | Forage brassicas to mitigate methane emissions and increase economic sustainability of forage-based dairy systems | \$192,009 | Dr.Kathy Soder USDA-ARS |
| LNE14-330 | Reducing parasite resistance on equine operations using a comprehensive, whole-farm approach | \$146,873 | Donna Foulk Penn State Extension Dr.Ann Swinker Penn State University |
| LNE14-331 | Getting the most out of cover crops: How timing of termination influences soil health, pest control, and improved crop production | \$222,694 | Dr.Heather Karsten The Pennsylvania State University |
| LNE13-329 | Sustainable cropping systems for dairy farmers in the Northeast, II | \$400,000 | Dr.Heather Karsten The Pennsylvania State University |
| LNE12-320 | Using cultivar mixtures to improve pest control and grain crop production | \$164,919 | Dr.John Tooker Penn State |
| LNE12-321 | Education and decision support strategy for farm-level economic and | \$162,327 | Dr.R Weaver Penn State Univ |

| | environmental assessment of dairy Best Management Practices | | |
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| LNE10-295 | Reducing plastic mulch use by expanding adoption of cover-crop-based no-till systems for vegetable producers | \$144,962 | Stacy Glackin Rodale Institute Alison Grantham Rodale Institute Sandra Wayman Rodale Institute |
| LNE10-303 | Development and implementation of an equine environmental stewardship program | \$135,000 | Dr.Ann Swinker Penn State University |
| LNE09-286 | Improving the efficiency of nitrogen use and reducing ammonia emissions from Pennsylvania dairies | \$179,940 | Dr.Alexander Hristov Pennsylvania State University |
| LNE09-288 | Non-chemical control of wood boring insects affecting apple and peach | \$103,022 | Dr.Greg Krawczyk PSU, Department of Entomology, FREC |
| LNE09-291 | Sustainable cropping systems for dairy farms in the Northeastern US | \$400,000 | Dr.Heather Karsten The Pennsylvania State University |
| LNE08-268 | Increasing Cropping System Sustainability through the Adoption of Cover Crop and Rotational No-Till Strategies | \$144,815 | Rita Seidel Rodale Institute |
| LNE08-276 | On-Farm Training and Participatory Learning: Biologically-based IPM an sustainable Farming Practices for Amish and Mennonite Vegetable Growers | \$143,991 | Cathy Thomas Pennsylvania Department of Agriculture Wade Esbenshade PA Dept. of Ag |
| LNE07-258 | Empowering dairy farmers to build a cottage industry | \$116,901 | Allison Shauger Pennsylvania Association for Sustainable Agricultu Rebecca Robertson Pennsylvania Assn for Sustainable Agriculture |
| LNE07-251 | Enhancing cut flower production and marketing for produce growers: Methods of diversification into proven niches, part II | \$85,900 | Steve Bogash Penn State Cooperative Extension |
| LNE06-236 | Adoption of grass-fed beef management practices | \$58,594 | Dr.John Comerford Penn state University |
| LNE06-239 | Diversifying with Small Ruminants for Profitability | \$85,340 | Allison Shauger Pennsylvania Association for Sustainable Agricultu |
| LNE06-244 | Integrated cover crop innovations for biologically based no-till | \$118,310 | Stacy Glackin Rodale Institute Jeff Moyer The Rodale Institute |
| LNE06-247 | Teaching farmers to make biodiesel fuel from waste vegetable oil | \$46,476 | Matt Steiman Wilson College |
| LNE06-248 | Pennsylvania Regional Organic Fruit Industry Transition | \$99,208 | Dr.Greg Krawczyk PSU, Department of Entomology, FREC James Travis |

| Penn Sta | ate University Fruit Research |
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| and Exte | ncion |

| | | | Penn State University Fruit Research and Extension |
|------------------|--|-----------|--|
| LNE05-227 | In search of sustainable Botrytis management: An extension and research effort | \$87,374 | Elsa Sanchez Penn State University |
| LNE05-234 | Focus on organic dairy: An integrated program for Pennsylvania producers | \$149,277 | Leslie Zuck Pennsylvania Certified Organic |
| <u>LNE05-216</u> | Using cover crops and crop diversity to optimize ecologically based weed management | \$98,732 | Willaim Curran Penn State University |
| <u>LNE05-219</u> | Farm to chef: Increasing farmer and chef capacity for marketing and purchasing agricultural products in western Pennsylvania | \$96,571 | David Eson PA Association for Sustainable Agriculture |
| <u>LNE05-226</u> | WAgN: Sustainable ag network by and for women producers | \$138,292 | Carolyn Sachs Pennsylvania State University |
| <u>LNE04-195</u> | Enhancing Cut Flower Production and Marketing for Produce Growers: Methods of Diversification Into Proven Niches | \$73,241 | Steve Bogash Penn State Cooperative Extension |
| <u>LNE04-196</u> | Sustaining Northeast Farms for Future Generations | \$148,500 | Marion Bowlan Pennsylvania Farm Link |
| <u>LNE04-209</u> | Pennsylvania Food Education to Increase Consumption of Locally Grown Food | \$61,863 | Karima Rose The Food Trust |
| LNE04-212 | Winter Harvest: Teaching a successful local food model from urban Philadelphia | \$35,756 | Brian Snyder Pennsylvania Assoc. for Sustainable Agriculture |
| <u>LNE03-176</u> | Greenhouse IPM for the Amish and Mennonite community of Lancaster County | \$56,890 | David Bingaman Pennsylvania Department of Agriculture |
| <u>LNE03-179</u> | On-farm production of mycorrhizal fungus inocula | \$129,849 | David Douds, Jr. USDA/ARS Eastern Regional Research Center |
| LNE03-181 | Compost Tea for Disease Management in Horticultural Crops | \$147,956 | Paul Hepperly The Rodale Institute |
| <u>LNE03-188</u> | Sustainable parasitic mite control for honeybees | \$134,710 | Nancy Ostiguy Pennsylvania State University |
| <u>LNE03-191</u> | Youth voices in agriculture | \$49,007 | Maria van Hekken The Food Trust |
| LNE02-159 | Use of Horticultural Oils for Mite Management in Fruit Orchards | \$39,281 | Dr.Greg Krawczyk PSU, Department of Entomology, FREC |
| LNE02-164 | Biological Control Practices for High- | \$125,314 | Michael Orzolek |

| | Tunnel Crop Production | | Pennsylvania State University |
|-----------|---|-----------|---|
| LNE02-174 | Low-Income Community Markets Initiative | \$133,813 | Duane Perry The Food Trust |
| LNE01-150 | Use of Composts in Grapes for Improving Vine Health & Soils | \$149,732 | James Travis Penn State University Fruit Research and Extension |
| LNE00-134 | Promoting Sustainable & Locally Grown Farm Products: Creating a Model Partnership to Increase Farmer Access to New Market Opportunities | \$159,253 | Donna Pitz The Food Trust |
| LNE98-099 | Creating a Farmers-Owned Value- Added Production/Processing Facility for Dairy Farmers in Central PA; A Joint Farmer/Community R&D Project | \$40,000 | Jill Abrahamson Union Co. Planning Department Bill Deitrick Union Co. Conservation District Joe Detelj Union Co. Chamber of Commerce Nancy Roberts DePoe Penn State Extension |
| LNE96-070 | Enhancement of Sustainable Pest Management Techniques through Utilization of Banker Plants and Colored Mulches in Commercial Greenhouses | \$144,774 | Michael Orzolek Pennsylvania State University |
| LNE96-072 | Sustaining Grape Production in the Northeast through Farm-tested Information Technologies | \$147,943 | James Travis Penn State University Fruit Research and Extension |
| LNE96-077 | Sea Change Urban Horticulture Center: Sustainable Agriculture Initiatives | \$156,500 | Rosalind Johnson Sea Change Inc. |
| LNE96-078 | Seed Saving and Biodiversity in the Northeastern United States | \$20,000 | Carolyn Sachs Pennsylvania State University |
| LNE93-038 | Biodiversity Education through the Pennsylvania Forest Stewardship Program | \$23,508 | James Finley Pennsylvania State University |
| LNE93-037 | Integrating Stewardship Forestry into Total Farm Management | \$48,408 | James Finley Pennsylvania State University |
| LNE92-032 | A Living Laboratory/Classroom for the Integration of Research and Education Efforts on Alternative Vegetable Production Systems | \$128,400 | Michael Dann Penn State University |
| LNE90-021 | Honeybee Breeding for Tracheal Mite Resistance in the Northeastern United States | \$40,000 | Bruce A. McPheron Penn State University |
| LNE90-022 | Novel Rotation Crops as Alternatives to Fumigant Nematicide Treatment in Deciduous Tree Fruit Production | \$58,745 | John Halbrendt Penn State University, Fruit Research Laboratory |
| LNE89-016 | Evaluation of Alternative Strategies for Small Fruit Production | \$521,768 | Barbara L. Goulart Pennsylvania State University |
| LNE88-008 | Implementation of Electronic Decision | \$110,000 | Edwin Rajotte |

| | Support Technology for Apple Production | | Penn State |
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| LNE88-011 | Taking Charge: Strategies for Sustainable Agriculture in the Northeast (Video Presentations) | \$70,000 | James O. Morgan Rodale |
| LNE88-001 | Development of a Sustainable Apple Production System for the Northeast (ANE92-16) | \$635,700 | Terry Schettini Rodale Institute |
| LNE88-007 | Weed Control in Reduced Tillage Cropping Systems: Use of Overseeded Cover Crops | \$127,000 | Dr.Rhonda Janke Kansas State University |

PROFESSIONAL DEVELOPMENT PROGRAM GRANTS

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| Project # | Project Title | SARE support | Project Leaders |
| ENE16-145 | Training a network of educators for outreach on reduced-tillage organic feed and forage systems | \$66,570 | Leslie Zuck Pennsylvania Certified Organic |
| ENE15-134 | NE Advanced Agroforestry Training for Natural Resource and Agricultural Educators | \$96,444 | Susan Richards Capital RC&D Tracey Coulter PA DCNR Bureau of Forestry |
| ENE15-136 | The impact of corn silage harvesting and feeding decisions on income over feed costs | \$48,873 | Virginia Ishler Penn State University |
| ENE15-139 | Creating a Sense of Belonging for Hispanic Farmers in Extension Programming | \$54,432 | Elsa Sanchez Penn State University |
| ENE13-128 | Farm Energy IQ Training Program | \$145,000 | Edward Johnstonbaugh Penn State Extension |
| ENE12-124 | Tools for Teams: Improving the success of dairy farm teams to benefit farm performance | \$96,133 | Lisa Holden Penn State |
| ENE12-125 | Enhancing Cooperative Extension capacity to support the advancement of adding value and direct marketing by farmers in the Northeast | \$161,960 | Winifred McGee Penn State Extension |
| ENE10-114 | Reading the Farm: Discovering whole- farm interactions | \$32,734 | Mary Barbercheck PSU Dept. of Entomology |
| ENE09-113 | Preparing small and mid-size growers of fruits and vegetables for on-farm food safety certification | \$162,119 | Dr.Joan Thomson Penn State University |
| ENE07-104 | Whole farm nutrient planning for organic farms | \$96,756 | Elsa Sanchez Penn State University |
| ENE06-100 | Developing labor management expertise among agricultural advisors | \$117,070 | Lisa Holden Penn State |
| ENE05-089 | Soil quality workshop: Concepts and practices | \$43,659 | Mary Barbercheck PSU Dept. of Entomology |

| ENE03-076 | An educational program for training extension professionals and vocational agriculture teachers on high-tunnel technology | \$79,154 | William Lamont Pennsylvania State University |
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| ENE02-072 | Strengthening Community Engagement in Sustainable Local Food Systems | \$99,483 | Dr.Joan Thomson Penn State University |
| ENE02-073 | Direct Marketing for Increasing Farm Profitability: Training for Trainers Project | \$53,813 | Maria van Hekken The Food Trust |
| ENE02-066 | Teaching the Entrepreneurial Process | \$28,704 | John Berry PSU, Cooperative Extension, Lehigh County |
| ENE00-055 | Establishing a Demonstration & Electronic Media Training Center for Farmer-Educators in Pasture-Based Livestock Production | \$77,579 | Dr.John Comerford Penn state University |
| ENE00-058 | Organic Grains Cropping Systems & Marketing: In-Service Education | \$95,005 | Bill Liebhardt The Rodale Institute |
| ENE98-040 | Diagnostic Team Approach to Enhancing Dairy Farm Sustainability, Phase II | \$50,000 | C. William Heald The Pennsylvania State University |
| ENE96-016 | A Diagnostic Team Approach to Enhancing Dairy Farm Sustainability | \$34,650 | Lisa Holden Penn State |
| ENE96-021 | Regionally Based Professional Development Program for Grazing Systems Management | \$92,149 | Lawrence Muller Dept. of Dairy & Animal Science, Pennsylvania State University |
| ENE96-025 | Cooperating for Sustainability and Adding Value: A Training Program on Cooperatives and Value Added Marketing for USDA Staff in the Northeast | \$100,000 | Tim Bowser Pennsylvania Association for Sustainable Agriculture |
| ENE96-026 | Management and Evaluation of Soil Health: Inservice Education for the Mid- Atlantic Region | \$60,000 | Laurie Drinkwater Rodale Institute |
| ENE95-011 | On-farm Research & Extension Education Program | \$90,373 | Phil Rzewnicki Pennsylvania State University Cooperative Extension |
| ENE95-010 | Education of Extension Workers in Sustainable Agriculture Practices Utilizing the PASA Conference and Farm Visits | \$35,000 | James Travis Penn State University Fruit Research and Extension |
| ENE94-004 | Education of Pennsylvania Extension Workers in Sustainable Agriculture Practices | \$21,902 | James Travis Penn State University Fruit Research and Extension |
| | FARMER/RAN | ICHER GRANTS | 3 |

FARMER/RANCHER GRANTS

| Project # | Project Title | SARE support | Project Leaders |
|-----------|-------------------------------------|--------------|-----------------|
| FNE19-945 | Farmer-Built Grain Pearling Machine | \$14,748 | Nigel Tudor |

Weatherbury Farm

| FNE18-886 | PA Queen Project and the HHBBC Field Test Mite-Biting Behavior using Backyard Scientists | \$15,000 | Jeffrey Berta Always Summer Herbs |
|-----------|--|----------|---|
| FNE18-896 | Aggregation and Cooperative Marketing Opportunities for Enhancing Chestnut (Castanea spp.) Production and Conservation | \$13,180 | Erik Hagan Windswept Agroforestry Farm |
| FNE18-911 | Evaluation of Pasture Dragging as Non- Chemical Control Method for Filth Fly Pests of Pastured Beef Cattle | \$14,059 | Matt Steiman Dickinson College Farm |
| FNE17-863 | Mite-biting behavior in feral swarms: The Pennsylvania Queen Improvement Project | \$15,000 | Jeffrey Berta Always Summer Herbs |
| FNE17-865 | Single-producer-scale preparation of warm-season grass for poultry bedding | \$13,555 | Will Brandau Wood Crest Farm |
| FNE17-878 | Advanced cultivation tools for walk- behind tractors | \$7,944 | Mark Nuneviller Nuneviller Farms |
| FNE17-881 | Growing Verona grapes organically in Pennsylvania | \$14,832 | Randall Rice Mountain View Vineyard |
| FNE16-836 | Pennsylvania queen bee program and Heartland Honey Bee Breeders Cooperative: Mite-biting behavior and overwintering success | \$14,999 | Jeffrey Berta Always Summer Herbs |
| FNE16-837 | Kale leaf nutrient density response to various mulches | \$15,000 | Gregory Boulos Blackberry Meadows Farm |
| FNE16-839 | Mid-Atlantic malting barley improvement | \$14,987 | Mark Brault Deer Creek Malthouse |
| FNE16-841 | Organic production methods for Belgian endive: Boosting small organic farmers' winter income | \$12,357 | James Eisenstein Jade Family Farm |
| FNE15-819 | Pennsylvania queen bee improvement program and the Heartland Honey Bee Breeders Coop: Testing for mite-biting behavior | \$14,999 | Jeffrey Berta Always Summer Herbs |
| FNE15-830 | Developing a criteria to select colostrum samples of poor quality | \$4,644 | Sarah Hazelton Hazel-Rod Farm |
| FNE15-834 | The implementation of barrier strip cropping to mitigate bird damage on organic oilseed sunflowers | \$15,000 | Dr.Samuel Yoder, VMD Green Alchemy |
| FNE14-804 | Controlling grape root borer with pheromones | \$14,802 | R. Martin Keen Landey Vineyards |

| FNE14-794 | Will Nozevit make a difference in the health of a honeybee colony? | \$15,000 | Craig Cella Craig A. Cella |
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| FNE13-771 | Pennsylvania queen bee improvement program: Sharing the best | \$15,000 | Jeffrey Berta Always Summer Herbs |
| <u>FNE13-787</u> | Experimental hybrid top bar hive | \$14,998 | Anaiis Salles Green Sanctuary Earth Institute of Pennsylvania |
| FNE12-737 | Queen bee improvement program: Another step foward | \$14,999 | Jeffrey Berta Always Summer Herbs |
| FNE12-749 | Development of a low-cost vertical patternator, part II | \$6,940 | R. Martin Keen Landey Vineyards |
| FNE12-752 | Alternative honey bee nutrition: Beyond sugar syrup | \$14,888 | Dr.Petrusia Kotlar Paslawsky Linden Hill Farm and Apiary |
| FNE11-732 | Dynamic Attachment Frame System | \$14,900 | Eric Vander Hyde Barefoot Gardens |
| FNE11-734 | The Use of Plumbagin as an Organic Anthelmintic Against H.contortus in Sheep | \$14,916 | Dr.Samuel Yoder, VMD Green Alchemy |
| FNE11-705 | Queen Bee Improvement Program- Building on the Foundation of Pennsylvania Survivor Stock | \$14,984 | Jeffrey Berta Always Summer Herbs |
| FNE11-706 | Feasibility of Shift Trellis Use for Northeastern Blackberry Production | \$3,318 | Roy Brubaker Village Acres |
| FNE11-707 | Using new frames and foundation as a way to control disease in Honeybee Hives | \$15,000 | Craig Cella Craig A. Cella |
| FNE11-719 | Establishment of Miscanthus (Miscanthus x giganteus) as an Alternate Bedding Supply | \$7,350 | Steven Harnish Central Manor Dairy |
| FNE11-730 | Evaluation of 12 Yellow Flesh Peach Cultivars for Organic Production in the Northeast | \$14,536 | Jim Travis Fruit Farmer |
| FNE10-681 | Honey Bee Hive Equipment Sterilization | \$15,000 | Craig Cella Craig A. Cella |
| FNE10-689 | Development of a Low Cost Vertical Patternator | \$5,818 | R. Martin Keen Landey Vineyards |
| FNE10-702 | Comparison of Incorporated and Non- Incorporated Cover Cropping with an Organic Sunflower Fuel Project | \$11,694 | Dr.Samuel Yoder, VMD Green Alchemy |
| FNE09-658 | Evaluating New, Extra-Hardy Grape | \$4,919 | Steve Groff |

| Cultivars in Vermont | Cedar Meadow Farm |
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| FNE09-667 | Planting Small Seeded Vegetable Crops into a High Residue, Reduced Tillage Environment | \$6,491 | Neil Myerov Myerov Family Farm |
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| FNE08-636 | Grafting tomatoes in multi-bay high tunnels as a way to overcome soil-borne diseases | \$5,992 | Steve Groff Cedar Meadow Farm |
| FNE08-639 | Control of grape root borer | \$3,182 | R. Martin Keen Landey Vineyards |
| FNE08-650 | Farmer-built compost turner with hydraulic drive | \$9,472 | Nigel Tudor Weatherbury Farm |
| FNE08-652 | The viability of growing and grazing high-sugar rye grass in southwestern Pennsylvania | \$5,215 | George Wherry |
| FNE08-625 | Evaluation of southern peas as cash cover crop in Pennsylvania | \$5,399 | Michael Byers Demeter's Garden |
| FNE08-626 | Honeybees: To overwinter or not | \$7,500 | Craig Cella Craig A. Cella |
| FNE08-634 | Rotational grazing as a tool for Christmas tree producers | \$3,966 | Jeremy Freymoyer |
| FNE07-601 | Selecting better honeybees for the Northeast | \$7,965 | Craig Cella Craig A. Cella |
| FNE07-607 | Rotational grazing as a management tool for Christmas tree producers | \$4,663 | Jeremy Freymoyer |
| FNE07-610 | Control of grape root borer | \$2,719 | R. Martin Keen Landey Vineyards |
| FNE07-611 | No-till seeding of cover crops into standing soybeans | \$558 | Edward Kuckuck |
| FNE06-583 | Energy-efficient short-term cold storage for vegetables and herbs | \$7,276 | Linda Moist Clan Stewart Farm |
| FNE06-567 | How to make beekeeping more sustainable | \$6,369 | Craig Cella Craig A. Cella |
| FNE06-575 | Field trials to evaluate the benefits of biofumigation as part of a potato cropping system in the Northeast | \$8,079 | Glenn Hetherington |
| FNE06-576 | Control of grape root borer | \$2,589 | R. Martin Keen Landey Vineyards |

| FNE06-581 | Composting bedded pack barn | \$9,975 | Cory Miles Helluvahill Farm |
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| FNE05-550 | Control of grape root borer | \$2,892 | R. Martin Keen Landey Vineyards |
| FNE04-504 | Beekeeping: More Honey with less Chemicals | \$10,000 | Craig Cella Craig A. Cella |
| FNE04-520 | Control of Grape Root Borer | \$2,227 | R. Martin Keen Landey Vineyards |
| FNE03-450 | Think Globally, Eat Locally | \$3,273 | Katheryn Andersen Charlestown Cooperative Farm |
| FNE03-500 | Continuation of an On-Farm Comparison of Fertility Treatments on One Sweet Corn Variety Planted and Harvested at Two Different Times During the Season. | \$1,960 | Brooks Way Way Fruit Farm |
| FNE03-458 | Using Sorghum Sudan Grass and Mega Millet for Summer Grazing Sheep | \$2,110 | Roger Coulter Willowmoor Farm |
| FNE03-471 | Control of Grape Root Borer | \$3,031 | R. Martin Keen Landey Vineyards |
| FNE03-481 | Food for Thought | \$3,375 | Brian Moyer Green Haven Farm |
| FNE03-486 | Effects of Vermicompost Applied in a High Tunnel | \$3,912 | Claire Orner Quiet Creek Herb Farm |
| FNE03-488 | Study of More Cost Effective Ways of Crop Production | \$3,595 | Jason Pontius KJ Farm |
| FNE03-496 | Comparison of Trellis-Grown Cucumbers and Tomatoes Versus Free- Standing Plants on Three Types of Mulch, With and Without Intercropping for Disease Severity and Yield | \$4,970 | Kristie Schwartz |
| FNE03-498 | Growing Native Ginseng for Conservation and Profit | \$6,786 | David Thompson |
| FNE02-404 | Construction and Use of Cover Crop Roller for Organic No-Till | \$6,275 | John Brubaker |
| FNE02-407 | Use of Parasitic Wasp (Trichogramma ostriniae) for Bio-Control of European Corn Borer (Ostrinia nubilalis) in Sweet Corn | \$2,705 | Jame Crawford |

| FNE02-411 | Developing Sustainable Management Systems for Native Pollinators | \$3,343 | Maryann Frazier Singing Creek Farm |
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| FNE02-442 | Using a Winter Cover Crop of Rye and Hairy Vetch for Soil Conservation and Weed Control in a Mixed Vegetable System | \$2,096 | Matt Steiman Wilson College |
| FNE02-446 | An On-Farm Comparison of Fertility Treatments on One Sweet Corn Variety Planted & Harvested at Two Different Times During the Season | \$3,813 | Brooks Way Way Fruit Farm |
| FNE01-359 | Design & Preparation of Raised Beds for Year-Round Vegetable Production in Urban Agriculture | \$4,214 | Mat Brener Greensgrow Farm |
| FNE01-378 | Eighth Annual Groff Farm Field Day | \$7,340 | Steve Groff Cedar Meadow Farm |
| FNE01-394 | The Use of Corn Gluten Meal for Weed Control In Vineyards | \$792 | Dominic Strohlein |
| FNE00-307 | Hardy kiwi pollination and production | \$7,060 | David Jackson |
| FNE00-310 | Pasture Aeration. | \$600 | Larry Lemmon |
| FNE00-312 | Establishing alfalfa in existing pasture. | \$1,320 | Jeff Mamett |
| FNE00-313 | Comparing soil nutrient levels to seasonal weather fluctuations, part II. | \$3,300 | Klass and Mary Howel Martens |
| FNE00-318 | Pasture illumination. | \$780 | Richard Stahl |
| FNE00-320 | Slow-release natural/organic fertilizers in nursery crop production, part II. | \$660 | Richard Tregidgo |
| FNE00-301 | The control of pest pressure on cabbages using predator habitats. | \$7,948 | David Fogarty-Harnish |
| FNE00-338 | 2000 "Farming for the Future" field day. | \$3,900 | Steve Groff Cedar Meadow Farm |
| FNE00-306 | Establishment of cover crops in corn and soybeans. | \$461 | J. Robert Huntsberger |
| FNE00-352 | Research, development, and marketing of value-added pork products. | \$9,254 | Barbara Wiand |

| FNE99-250 | Economic and Environmental Impact of No-Till Processing Tomatoes vs. Conventional Processing Tomatoes | \$1,950 | Steve Groff Cedar Meadow Farm |
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| FNE99-259 | Mobile Shade Rack | \$1,226 | Kirk Kreger |
| FNE99-273 | Improving Soil Micronutrients | \$2,028 | Bob Russo |
| FNE99-275 | Promoting Summer Lettuce/Mesclun Growth and Preventing Deer Damage with Shadecloth | \$511 | Judy Smeltzer |
| FNE99-281 | Slow Release Natural/Organic Fertilizers in Nursery Crop Production | \$1,590 | Richard Tregidgo |
| FNE99-233 | Evaluation of Forage Soybeans | \$745 | Tim Brown |
| FNE99-238 | Spring Hydroseeding of Switchgrass on Winter Wheat | \$1,830 | Franklin Chow |
| FNE99-248 | Pastured Poultry Products | \$3,660 | Barb Gorski |
| FNE98-193 | Farmers Marketing Strategy for Westmoreland City | \$6,300 | Paul Sarver |
| FNE98-206 | Low-input Sustainable Dairy Farming Through Draft Horse Power | \$1,825 | Dennis Trainor |
| FNE98-221 | Effect of Compost Teas in Controlling Late Blight Damage to Tomatoes in Pennsylvania | \$500 | Donald Kretschmann |
| FNE97-170 | Comparison of Weed control and Soil Erosion Control in 15" row Corn vs 30" row Corn | \$1,495 | Steve Groff Cedar Meadow Farm |
| FNE96-146 | Alternative Rotation System for Vegetables | \$2,960 | Allen G. Matthews Farmer's Alternative Resource and Market Cooperative (FARM Coop) |
| FNE96-120 | Minimizing Equipment Costs on a Grazing Farm | \$2,683 | Marion Bowlan |
| FNE96-128 | Economic Comparison & Weed Control Observation of 15" Row Corn vs. 30" Row Corn | \$1,040 | Steve Groff Cedar Meadow Farm |
| FNE95-113 | Quick Protein | \$2,610.35 | Jim Weaver |
| FNE94-057 | Evaluation of Water Retaining Soil | \$5,087 | Mike Kotz |

| Amendment, Cropping Systems and an Alternative Labor Source for Vegetable Production | | |
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| The Evaluation and Demonstration of the Ability of Garden-Mate(tm) to Afford Adequate Herbicidal Activity in Sweet Corn at Reduced Rates of Atrazine and Metoloclor | \$781.71 | Harry Zimmerman Cinnamon Hill Farm |
| Early Winter Strawberry Production | \$1,943.12 | Harry Zimmerman Cinnamon Hill Farm |
| Evaluation of Integrated and Biological Pest & Disease Controls in Orchards | \$1,839 | Dwight Mickey |
| Reactions of Peracetic Acid to Botrytis cinerea | \$1,830 | James Perkins 7 Springs Farm |
| Evaluation of a Biocontrol Method for Farm Fly Management | \$2,155 | Diane Mathews-Gehringer 4 Springs Farm |
| Stewardship Forestry on the Farm | \$3,890 | George W. Freeman |
| Fiber-producing goats as an alternative to chemical weed and brush control in pasture reclamation and management | \$5,000 | Ellen Reker |
| A Wetland Demonstration Project for Water Quality Improvement, Wildlife Habitat Creation, and Farmer Education | \$5,000 | Derek & B.C. Dickson |
| | Alternative Labor Source for Vegetable Production The Evaluation and Demonstration of the Ability of Garden-Mate(tm) to Afford Adequate Herbicidal Activity in Sweet Corn at Reduced Rates of Atrazine and Metoloclor Early Winter Strawberry Production Evaluation of Integrated and Biological Pest & Disease Controls in Orchards Reactions of Peracetic Acid to Botrytis cinerea Evaluation of a Biocontrol Method for Farm Fly Management Stewardship Forestry on the Farm Fiber-producing goats as an alternative to chemical weed and brush control in pasture reclamation and management A Wetland Demonstration Project for Water Quality Improvement, Wildlife | Alternative Labor Source for Vegetable Production The Evaluation and Demonstration of the Ability of Garden-Mate(tm) to Afford Adequate Herbicidal Activity in Sweet Corn at Reduced Rates of Atrazine and Metoloclor Early Winter Strawberry Production Evaluation of Integrated and Biological Pest & Disease Controls in Orchards Reactions of Peracetic Acid to Botrytis cinerea Evaluation of a Biocontrol Method for Farm Fly Management Stewardship Forestry on the Farm \$3,890 Fiber-producing goats as an alternative to chemical weed and brush control in pasture reclamation and management A Wetland Demonstration Project for Water Quality Improvement, Wildlife |

GRADUATE STUDENT GRANTS

| Project # | Project Title | SARE support | Project Leaders |
|------------------|--|--------------|--|
| GNE19-222 | Optimization of Greenhouse Crop Pollination through Artificial Homeostatic Control of Bumblebee Hive Temperature | \$13,931 | Rudolf Schilder Hannah Stewart Penn State University |
| GNE19-225 | Development of a Robotic Pruning System for Sustainable Apple Production | \$15,000 | Long He Pennsylvania State University Azlan Zahid Penn State |
| GNE19-216 | Assessing the Effects of Neonicotinoid Treatments on Pumpkin on Bee Visitation and Pathogen Transmission | \$11,435 | Margarita Lopez-Uribe Ginamaria Roman-Echevarria Pennsylvania State University |
| <u>GNE19-195</u> | Purification and Testing of Corn-based Biopesticide | \$15,000 | Dr.Surinder Chopra Penn State Univ Debamalya Chatterjee The Pennsylvania State University |
| GNE19-199 | Development of Microbial Communities to Suppress Tomato Foliar Pathogens | \$15,000 | Kevin Hockett The Pennsylvania State University Hanareia Ehau-Taumaunu Pennsylvannia State University |
| GNE19-202 | Mitigation of Heat Stress in Dairy Cattle by Dietary Supplementation of Octanoic Acid | \$15,000 | Dr.Chad Dechow The Pennsylvania State University Longfei Han |

| | | | Penn State University |
|------------------|--|----------|--|
| GNE19-214 | Defining Mechanisms Underlying Mite Tolerance and Honey Bee Survival | \$14,998 | Dr.Christina Grozinger Penn State Allyson Ray The Pennsylvania State University |
| GNE19-215 | Using Protective Cultures to Control Listeria monocytogenes in Microbiomes from Small-Scale Dairy Production Facilities | \$14,940 | Jasna Kovac The Pennsylvania State University Maria Laura Rolon The Pennsylvania State University |
| GNE18-173 | Native Perennial Grasses in Multifunctional Riparian Buffers for Improving Water Quality and Farm Profitability | \$14,991 | Dr.Thomas Richard Penn State University Steph Herbstritt The Pennsylvania State University |
| <u>GNE18-174</u> | Sexuality and Sustainable Agriculture: Examining Queer Farmers' Quality of Life in Pennsylvania | \$14,997 | Dr.Kathleen Sexsmith Penn State University Michaela Hoffelmeyer Penn State Rural Sociology M.S. Program |
| <u>GNE18-176</u> | Ultrasensitive and On-field Detection of a Plant Virus by a Nanotube-filtering Device and Isothermal Amplification | \$14,937 | Dr.Cristina Rosa Penn State Juan Francisco Iturralde Martinez The Pennsylvania State University |
| GNE18-180 | Combining Infection Sources, Periods, and Persistence into the Integrated Management of Bitter Rot on Apples | \$14,992 | Kari Peter Pennsylvania State University Phillip Martin The Pennsylvania State University |
| <u>GNE18-186</u> | Symbiotic Nitrogen Fixation in Non- legumes: N-supply, Yield and Quality Effects in Tomato and Pepper | \$14,850 | Dr.Sjoerd Duiker Penn State University Ryan Sebring Pennsylvania State University |
| <u>GNE18-164</u> | Assessing the Impact of Organic Farming Practices on Building Drought Resistant Soil | \$14,346 | Alain Plante University of Pennsylvania Abdelrahman Alfahham University of Pennsylvania |
| GNE18-189 | Exploring Disease Pressure in Response to Climate Change | \$14,993 | Dr.Cristina Rosa Penn State Joseph Walls, III The Pennsylvania State University Md Tariqul Islam |
| GNE18-165 | Harnessing Forage Mixtures to Increase Ecosystem Services of Arthropod Predators and Weed Suppression | \$14,987 | Dr.John Tooker Penn State Julie Baniszewski Pennsylvania State University |
| <u>GNE18-190</u> | Sustainable Urban Agriculture in Pennsylvania: Assessing Best Practices for Historically Marginalized Farmers | \$14,970 | Dr.Kathryn Brasier Pennsylvania State University Hannah Whitley The Pennsylvania State University |
| <u>GNE18-168</u> | How Does 40 Years of No-till Affect Soil Microbial Nitrogen Dynamics | \$14,964 | Mary Ann Bruns The Pennsylvania State University Mara Cloutier Pennsylvania State University |
| GNE17-144 | To be Host or not to be: Finding Sustainable Management through Endophyte Interactions | \$15,000 | Dr.Maria del Mar Jimenez-Gasco The Pennsylvania State University Laura del Sol Bautista Jalon The Pennsylvania State University |
| <u>GNE17-147</u> | UV-blocking plastics for sustainable control of Spotted Wing Drosophila in | \$14,705 | Richard Marini PennState |

Penn State University

| | ever-bearing raspberries in high tunnels | | Maria Cramer The Pennsylvania State University |
|------------------|---|----------|--|
| GNE17-155 | A root-centric view of root-microbe interactions in apple replant disease | \$15,000 | Dr.David Eissenstat Penn State Emily Lavely The Pennsylvania State University |
| GNE17-142 | Designing farms that support wild bees | \$15,000 | Dr.Christina Grozinger Penn State Melanie Kammerer Allen Penn State University |
| <u>GNE16-137</u> | Effects of yield regulation practices on grapevine productivity, health, and economic sustainability | \$14,864 | Dr.Michela Centinari Penn State University Maria Smith Ohio State |
| GNE16-119 | Do cover crops stabilize wine grape productivity in a variable climate? | \$14,999 | Dr.Michela Centinari Penn State University Dr.David Eissenstat Penn State Suzanne Fleishman The Pennsylvania State University Department of Plant Science |
| <u>GNE16-138</u> | Targeting sustainable soil management practices using crop modeling in soybean systems. | \$14,984 | Dr.Gregory Roth Penn State University Armen Kemanian Pennsylvania State University Jack Watson Pennsylvania State University Giovani Stefani Fae Penn State University |
| GNE16-118 | Understanding the epidemiology of pathogens within bee communities in Pennsylvania | \$14,969 | Dr.Heather Hines The Pennsylvania State University Briana Ezray The Pennsylvania State University |
| GNE16-140 | Assessing the impact of energy-related landowner coalitions on the sustainability of Pennsylvania farming communities | \$14,845 | Dr.Kathryn Brasier Pennsylvania State University Grace Wildermuth The Pennsylvania State University |
| GNE16-122 | Interseeded cover crops: Evaluating nitrogen retention services provided by plant-microbe relationships | \$14,998 | Dr.Jason Kaye Pennsylvania State University Sarah Isbell The Pennsylvania State University |
| GNE16-127 | Renewable alternative bedding for commercial broiler chicken production | \$14,258 | Dr.Paul Patterson Penn State University Dr.Michael Hulet Penn State University Dr.Jude Liu Penn State University Amy Barkley Penn State University |
| <u>GNE16-131</u> | Macroarthropod decomposers in field crops: Influence on residue breakdown and response to prophylactic insecticides | \$15,000 | Dr.John Tooker Penn State Kirsten Pearsons The Pennsylvania State University |
| GNE16-133 | Undercover agent: Uncovering the effects of cover crops on a beneficial soil fungus | \$14,569 | Mary Barbercheck PSU Dept. of Entomology Brianna Flonc The Pennsylvania State University |
| GNE16-134 | Impacts of cover crops and tillage on | \$14,635 | Mary Barbercheck |

| | predator-prey interactions within organic cropping systems | | PSU Dept. of Entomology Karly Regan Pennsylvania State University |
|------------------|---|----------|--|
| GNE16-135 | Plant probiotics? Understanding how soil health practices influence plant-insect interactions | \$15,000 | Dr.John Tooker Penn State Elizabeth Rowen Pennsylvania State University |
| GNE16-120 | Evaluating brown mid-rib (BMR) dwarf pearl millet as a forage for lactating dairy cows | \$14,885 | Dr.Alexander Hristov Pennsylvania State University Dr.Michael Harper Milk Specialties Global |
| <u>GNE15-093</u> | Boosting plant defenses using silicon fertilization | \$14,993 | Gary Felton Penn State University Flor Acevedo Penn State University |
| <u>GNE15-100</u> | Winter is coming: Improving overwintering survival of honey bee colonies in Pennsylvania | \$14,940 | Dr.Christina Grozinger Penn State Dr.Mehmet Ali Doke Pennsylvania State University |
| GNE15-105 | Local and regional food systems, soil phosphorus, and resilience in a northeastern regional farmers' market network | \$14,796 | Dr.Karl Zimmerer Penn State Russell Hedberg Penn State |
| GNE14-081 | The role of cover crop diversity on key generalist predator attraction and pest suppression | \$14,996 | Mary Barbercheck PSU Dept. of Entomology Jermaine Hinds Pennsylvania State University |
| GNE14-090 | Development of pheromonal tools for honeybee breeding | \$14,998 | Dr.Thomas Baker Pennsylvania State University Dr.Christina Grozinger Penn State Gabriel Villar Pennsylvania State University |
| GNE13-060 | Soil health and soil management decision-making in the mid-Atlantic. | \$14,959 | Carolyn Sachs Pennsylvania State University Jennifer Hayden Penn State University |
| GNE13-059 | Root cortical aerenchyma in maize hybrids in Pennsylvania and interaction with mycorrhiza and soil-borne pathogens | \$14,999 | Kathleen Brown The Pennsylvania State University Dr.Jonathan Lynch The Pennsylvania State University Dr.Gregory Roth Penn State University Tania Galindo Pennsylvania State University |
| <u>GNE12-037</u> | The role of cover crops as a floral resource for native bee conservation in agroecosystems | \$14,929 | Mary Barbercheck PSU Dept. of Entomology Katherine Ellis Penn State University |
| GNE12-042 | A Comparative Assessment of Land Link Programs in the Northeast Region | \$9,984 | Clare Hinrichs The Pennsylvania State University Leslie Pillen Pennsylvania State University |
| <u>GNE12-044</u> | Predator-prey interactions in a high residue, reduced tillage agroecosystem | \$14,234 | Mary Barbercheck PSU Dept. of Entomology Ariel Rivers Pennsylvania State University |
| <u>GNE12-050</u> | The human cost of food: Sustaining | \$4,042 | Carolyn Sachs |

| | farm labor using alternative labor practices on diversified farms in Pennsylvania | | Pennsylvania State University Kathleen Wood The Pennsylvania State University Kathleen Wood Penn State University | |
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| GNE11-014 | Striving for sustainable pest management in no-till, field-crop systems: Understanding the role of insecticidal seed treatments | \$14,494 | Dr.John Tooker Penn State Maggie Douglas Pennsylvania State University, Dept. of Entomology | |
| <u>GNE11-017</u> | Cover crop cocktails: Harnessing diversity to enhance nitrogen retention in agroecosystems | \$14,998 | Dr.Jason Kaye Pennsylvania State University Denise Finney Penn State University | |
| GNE11-028 | Bumble bee nest density in diversified farms to ensure pollination services | \$14,964 | Dr.Shelby Fleischer Penn State Chanpreet Sidhu The Pennsylvania State University | |
| GNE10-002 | Evaluating Normande, U.S. Purebreds, and Normande Crossbreds on Production, Reproductive Performance, Survivability, and Partitioning of Energy During Periods of High and Low Pasture Availability | \$13,955 | Dr.Chad Dechow The Pennsylvania State University Dustin Brown The Pennsylvania State University | |
| <u>GNE10-006</u> | Exploiting plant genotypic diversity for sustainable insect pest management | \$13,179 | Dr.John Tooker Penn State Ian Grettenberger Pennsylvania State University | |
| GNE10-009 | Self-regulating weed control through the enhancement of beneficial ground dwelling invertebrates | \$15,000 | Dr.John Tooker Penn State Dr.Tomas Carlo Penn State University Dr.Shelby Fleischer Penn State Dr.Robert Gallagher Penn State University Dr.Timothy Leslie Long Island University - Brooklyn Jeffrey Law Pennsylvania State University | |
| | ON FARM RESEARCH/PARTNERSHIP GRANTS | | | |

ON FARM RESEARCH/PARTNERSHIP GRANTS

| Project # | Project Title | SARE support | Project Leaders |
|-----------|--|--------------|---|
| ONE19-339 | Planting Green Strategies for Maximizing Corn Emergence | \$29,526 | Zachary Larson Penn State Extension |
| ONE19-340 | Maximizing Pollination Services for Blueberry Production in Pennsylvania | \$29,990 | Margarita Lopez-Uribe |
| ONE19-346 | Producing Quality Poultry Bedding with a Trailer Mounted System | \$29,993 | Wesley Ramsey Penn Soil RC&D Council |
| ONE19-352 | Does Artificial Feed Impact Health and Survival of Honey Bee Colonies? | \$22,695 | Dr.Robyn Underwood Penn State University |
| ONE18-319 | Effects of Unimproved Equine Manure Stacking on Soil and Groundwater | \$14,795 | Rachel Onuska Bucks County Conservation District |

| | Nutrients at Sites with Seasonally High Water | | |
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| ONE18-320 | Developing Markets for Warm Season Grass within the Pennsylvania Farm Community | \$14,993 | Michael Palko Biomass Renewable Energy LLC |
| ONE18-309 | Small-Scale Production Possibilities for Peanuts in Pennsylvania | \$3,516 | Sarah Bay Nawa Tuscarora Organic Growers Cooperative |
| <u>ONE17-294</u> | Community benchmarks for productivity and profitability for diversified pastured livestock farmers | \$14,326 | Dr.Franklin Egan Pennsylvania Association for Sustainable Agriculture |
| <u>ONE17-307</u> | Crediting cover crops and soil organic matter in a variable rate nitrogen fertilizer prescription | \$14,832 | Dr.Charles White Plant Science Department, Penn State |
| ONE17-308 | Evaluating the use of low-input technology for small-scale, no-till organic farming systems | \$14,990 | Dr.Gladis Zinati Rodale Institute |
| ONE16-257 | New apple rootstocks' influence on mineral composition of leaves and fruit | \$14,562 | Dr.Rob Crassweller Penn State University |
| ONE16-260 | Investigating bat activity in various agricultural landscapes to develop organic insect pest management | \$14,938 | Kate Harms Rodale Institute |
| <u>ONE16-278</u> | Organic weed management using chemically and microbially designed compost extracts | \$14,728 | Dr.Gladis Zinati Rodale Institute |
| ONE16-287c | Promoting cover crops on grain and vegetable farms in Pennsylvania | \$11,111 | Dr.Sjoerd Duiker Penn State University |
| ONE15-232 | Increasing farmer participation in local government | \$14,999 | Judy Chambers Penn State Extension Adams County |
| ONE15-240 | Using heat recovery ventilation systems in high tunnels to increase winter crop production | \$9,782 | Chris Lent National Center for Appropriate Technology (NCAT) |
| ONE15-239 | Development of tools and procedures to improve the consistency of farmstead cheeses | \$14,999 | Dr.Kerry Kaylegian Penn State University |
| ONE15-250 | Developing an IPM program against slugs in mid-Atlantic no-till grain fields | \$12,714 | Dr.John Tooker Penn State |
| ONE14-214 | Market assessment for Northeast forest- grown mushrooms | \$14,564 | Allen Matthews Chatham University |
| ONE14-224 | Evaluating the feasibility, effectiveness and challenges of sprouted grains on grazing dairy farms | \$14,503 | Dr.Kathy Soder USDA-ARS |
| ONE14-225 | FARMDATA: An internet-based production record system for vegetable | \$14,689 | Matt Steiman Dickinson College Farm |

| | farm improvement | | |
|-----------|--|----------|--|
| ONE13-189 | Advancing on-farm understanding and application of silvopasture technologies in Pennsylvania | \$14,426 | Susan Parry USDA-NRCS |
| ONE13-194 | The adoption of an on-farm culture program by small- and medium-sized dairies in Pennsylvania to make proactive decisions | \$14,683 | Andrea Tholen Penn State Extension-Mercer Amber Yutzy Penn State Extension |
| ONE13-174 | Evaluation of continuous suckling or ewe-rearing strategy by lamb producers | \$14,792 | Marlon Knights West Virginia University |
| ONE13-178 | Sustainable grass energy pellets for the Northeast | \$14,378 | Dr.Daniel Ciolkosz Penn State Ag & Bio Engineerin |
| ONE13-186 | Impact of using high-quality biological compost and compost extract on corn production, plant nutrient content, and soil quality | \$14,926 | Dr.Elaine Ingham Rodale Institute Dr.Gladis Zinati Rodale Institute Stacy Glackin Rodale Institute |
| ONE12-160 | Dairies Utilizing Mob Grazing in the Northeast | \$14,856 | Mena Hautau Penn State Extension |
| ONE12-166 | Creating a web-based tool to link farmers with institutional land-lease opportunities | \$15,000 | Lisa Mosca Pennsylvania Horticultural Society |
| ONE12-172 | Refining the potential for interseeding cover crops in corn | \$14,703 | Dr.Gregory Roth Penn State University |
| ONE11-136 | A Novel, Laborsaving Trellising System for Grape Tomatoes | \$14,980 | Steve Bogash Penn State Cooperative Extension |
| ONE11-150 | Native Bee Habitat Rehabilitation; Encouraging greater adoption of sustainable pollination practices – part III | \$14,934 | Alexandru Surcica Penn State Cooperative Extension |
| ONE10-128 | Assessing Bee Pollination Requirements in Pumpkin | \$14,405 | Alexandru Surcica Penn State Cooperative Extension |
| ONE10-129 | Native Bee Habitat Rehabilitation; Encouraging Greater Adoption of Sustainable Pollination Practices- Part II | \$14,254 | Alexandru Surcica Penn State Cooperative Extension |
| ONE10-130 | Maximizing natural enemy-provided control in no-till, field crop systems | \$10,008 | Dr.John Tooker Penn State |
| ONE09-094 | Improving Native Bee Pollination Part 2: Alternative Nest Boxes Building on the Lessons from the Field in 2008 | \$9,203 | Steve Bogash Penn State Cooperative Extension |
| ONE09-097 | Rolled Down Cover Crop Mulch for Pumpkin and Soybean Production | \$6,857 | S. Tianna DuPont Penn State |

| ONE09-100 | Developing an on-farm method to estimate DM loss in corn silage silos | \$9,572 | Dr.Kenneth Griswold Kemin AgriFoods North America |
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| ONE09-102 | Cultural practices to improve fresh market onion quality and profitability | \$9,969 | Christine Hoepting Cornell Cooperative Extension Vegetable Program |
| ONE09-107 | Native Bee habitat Rehabilitation; Encouraging greater adoption of sustainable pollination practices | \$9,894 | Alexandru Surcica Penn State Cooperative Extension |
| ONE09-093 | Advanced Trellis Methods and Mechanical Harvesting for Grape Tomatoes | \$9,815 | Steve Bogash Penn State Cooperative Extension |
| ONE08-079 | Improving Pollination through bumblebee habitation; Evaluation of nest box types in bumblebee colonization | \$9,833 | Steve Bogash Penn State Cooperative Extension |
| ONE08-083 | Use of alternative row covers and pollinators to manage insect pests and improve cucurbit production and profitability | \$9,764 | Michele Gauger Pennsylvania Association for Sustainable Agriculture |
| ONE07-068 | Enterprise benchmarks for direct-to- consumer farm marketers | \$9,101 | John Berry PSU, Cooperative Extension, Lehigh County |
| ONE07-075 | Improving air quality and dairy profitability through reduced protein feeding | \$9,997 | Eugene Schurman Penn State Cooperative Extension |
| ONE07-076 | Tower-hive configuration for the maximization of honey yields and increased efficacy of easy drone brood removal | \$9,461 | Dennis vanEngelsdorp University Maryland |
| ONE07-077 | Promoting sustainable crop pollination by wild bees through farmer outreach and education | \$9,330 | Neal Williams Bryn Mawr College |
| ONE05-042 | Assessment of regional organic alternative dairy management practices | \$9,225 | Dr.Hubert Karreman Penn Dutch Cow Care |
| ONE05-034 | Evaluating two-colony hives for increased productivity and varroa mite control | \$9,744 | Maryann Frazier Penn State University |
| ONE05-035 | Increased use of cover crops in field and vegetable crop rotations through farmer-directed on-farm research and outreach opportunities | \$9,859 | Ronald Hoover The Pennsylvania State University Michele Gauger Pennsylvania Association for Sustainable Agriculture |
| ONE04-019 | Pastured Pork Marketing — Cultivating a Meat CSA for Wil-Den Family Farms | \$10,000 | David Eson PA Association for Sustainable Agriculture |
| ONE04-022 | Potato Leafhopper Resistant Alfalfa: The Potential for Improving Organic and Traditional Farming Systems | \$10,000 | Marvin Hall Penn State University |
| <u>ONE04-024</u> | Selling Grass-Fed Beef to College Market | \$6,909 | Heather House PASA |

| ONE04-029 | Enhancing Dairy Profitability and Reducing Potential Water Pollution Through Lower Dairy Ration Phosphorus Levels | \$9,633 | Eugene Schurman Penn State Cooperative Extension |
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| ONE03-008 | Developing a model for evaluating marketing expense for value-added products that can be used to more intelligently price core products | \$9,105 | Drew Keegan Pennsylvania Preferred |
| ONE03-010 | Sustainable agriculture and forestry demonstration project | \$10,000 | Kimberlee Moninger Sustaining Greene County |
| ONE03-003 | Development of attract-and-kill technology against the oriental fruit moth in Pennsylvania apple orchards | \$9,375 | M. L. Evenden West Chester University |
| ONE03-006 | Reducing herbicide usage, minimizing grazing down time, and improving pasture productivity with banded application of herbicide during pasture renovation | \$9,980 | David Hartman Penn State University Ronald Hoover The Pennsylvania State University |

SUSTAINABLE COMMUNITY INNOVATION GRANTS

| Project # | Project Title | SARE support | Project Leaders |
|------------------|--|--------------|--|
| CNE12-099 | A How-To-Guide for the Urban, Micro- Agricultural Entrepreneur: For Aspiring Farmers in Low-income, urban, neighborhoods. | \$14,967 | Laura Thornton Sustainable Urban Development, Inc. |
| CNE11-091 | An Experience Economy Approach to Enhancing Chautauqua-Lake Erie Area Wine Tourism | \$15,000 | Donna Quadri Iowa State University |
| CNE10-075 | Lehigh Valley Composting Initiative | \$13,584 | Rebecca Kennedy Lehigh County Conservation District |
| CNE10-076 | PA Food for Profit On-Line Project | \$14,278 | Winifred McGee Penn State Extension |
| <u>CNE09-060</u> | A mobile farmers' market for senior and WIC Farmers Market Nutrition Program beneficiaries | \$19,498 | Schirlyn Kamara Threshold Foundation |
| <u>CNE08-043</u> | Addressing seasonality barriers in farm- to-college initiatives with winter storage vegetables | \$9,701 | Emily Gunther Fair Food |
| CNE07-022 | Promoting Pennsylvania cheese at farmers' markets | \$9,212 | Patrick Gorman The Food Trust |
| <u>CNE07-033</u> | Regional food infrastructure network | \$25,000 | Leah Smith PASA |
| CNE07-036 | Pennsylvania Keystone Kitchens incubator project | \$19,783 | Winifred McGee Penn State Extension |

| Project # | Project Title | SARE support | Project Leaders |
|------------|---|--------------|---|
| NEPA17-001 | Establishing a Service Provider Network for Alternative Grain Crops in Pennsylvania | \$132,668 | Dr.Kristy Borrelli The Pennsylvania State University |
| NEPA14-001 | Monitoring and Predicting Ecosystem Functions in Agricultural Systems | \$133,305 | Dr.Kristy Borrelli The Pennsylvania State University |

Total funding from the USDA SARE program to Pennsylvania \$13,410,989





For further information on projects, contact Deb Heleba, Northeast SARE communications specialist, at 802-651-8335, ext 552 or debra.heleba@uvm.edu.

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