

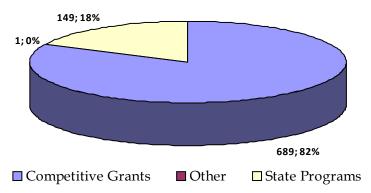
# Transportation and Marketing

# Specialty Crop Block Grant Program

# Fiscal Year 2014 Description of Funded Projects

The fifty States, the District of Columbia, and four U.S. Territories were awarded Fiscal Year 2014 funds to perform a total of 839 projects that benefit the specialty crop industry. All the eligible entities with the exception of the U.S. Virgin Islands submitted their applications by the established deadline of July 9, 2014. The approved awards are listed alphabetically.

# 2014 Project Delivery Types



State Program The proposal illustrated that the State department of agriculture planned to administer the project and/or a

competitive grant program was not conducted.

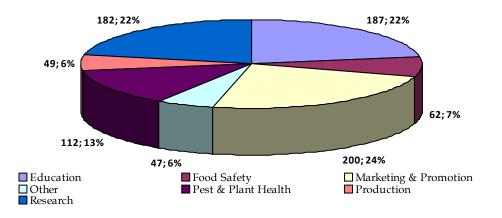
Competitive Grants The proposal demonstrated that a fair and open competition was conducted and the project partner(s) are clearly

involved.

Other The proposal illustrated that project partners met with the grantee to determine project priorities, but an open

competitive grant program was not conducted.

# 2014 Project Types



#### Alabama Department of Agriculture and Industries

**Amount Awarded:** 

\$473,356.76

**Number of Projects:** 

19

- Partner with East Alabama Beekeepers Association to improve the control of contaminates in locally produced honey by assembling a health department certifiable hygienic mobile bottling unit in a cargo trailer so commercial grade honey processing equipment is readily available to all members and publish a better process control plan document.
- Partner with the Urban Unit of Alabama Cooperative Extension System (ACES) at Alabama A&M University to increase the availability of ethnic fruit and vegetable crops in Alabama by evaluating the economic feasibility of the ethnic fruit and vegetable business enterprise in North Alabama, determining cost of production, and marketing capacity and workshops to educate farmers on ethnic crop enterprise and opportunities available.
- Partner with Auburn University to increase specialty crop production and sales to public institutions by developing and presenting information detailing the ins and outs of selling locally grown specialty crops to public institutions such as schools, prisons, and military bases in Mobile County.
- Partner with Alabama Green Industry Training Center, Inc. to improve specialty crop growers' skills in business operations, safety management by providing training for the greenhouse, nursery, floriculture, and sod specialty crop growers across Alabama.
- Partner with Auburn University and the Alabama Cooperative Extension System to increase grape producers' knowledge of V. vinifera and other bunch grape production practices by delivering four in-depth workshops on bunch grape production that will facilitate the transfer the new grape technology.
- Partner with the Alabama Agricultural Development Authority to increase nutrition knowledge and consumption of specialty crops by school children and senior citizens by developing and distributing a packaged program of small plasticulture gardens and nutrition education presentations that can be utilized at any school or elderly housing facility.
- Partner with Auburn University to increase the number of natural pollinators in Alabama by setting up new beekeepers and colonies of bumblebees, surveying them to determine if there is an increase in pollination in the state, and providing instruction and education for these new beekeepers.
- Partner with Auburn University of Montgomery to encourage small fruit and Chinese chestnut production and consumption through advertising, conducting live classes, creating a web portal and planting five demonstration gardens to show potential growers the nutritional and economic value.
- Partner with Hawk's Park Garden Committee to increase child understanding of organic gardening and a healthy diet of fruits and vegetables by implementing a program that enables students to start specialty crops earlier and grow vegetables year round and promoting an outdoor learning experience for students to grow specialty crops.
- Partner with Mobile Development Enterprises to encourage specialty crop production for home use by launching a train-the-trainer component and gardeners will be taught how to grow and manage their plots and prepare the vegetables for consumption.
- Partner with the Bay Area Women Coalition to increase access to fresh fruits and vegetables in low wealth neighborhoods by offering opportunities for community youths, leaders, churches, businesses, and schools to develop and maintain a community garden while providing a significant source of food and income.
- Partner with the Alabama Cooperative Extension System to support the growing specialty crop industry by developing and distributing a printed statewide food and farm guide to raise awareness of Alabama grown produce to consumers, research building a web and mobile version of the guide and pay registration fees for producers to attend a conference where they will take advantage of top quality training on topics to improve their business.
- Partner with the First Baptist Church-Community Ministries, Inc. to teach people of all ages how to garden; develop healthy eating habits through proper nutrition; bring families together to build positive relationships in a nurturing environment; supply fresh produce for Chisholm residents and those living in the Women's Shelter of the Friendship Mission; and foster community change by developing a community garden.
- Partner with the Hampstead Institute to develop healthy eating habits in children by teaching them about fresh fruits and vegetables, healthy eating, and the importance of making good diet choices in the Good Food Day program.

- Partner with Auburn University and Alabama Cooperative Extension System to increase producer, industry professional, and the public's knowledge of the enterprise composition, performance, and economic importance of the fruit and vegetable industry in Alabama by conducting a study into the composition, performance, and the overall economic importance of the fruit and vegetable industry in Alabama.
- Partner with Auburn University to provide a reliable model for Alabama pecan growers to follow to increase their crop yield and profits by investigating the effects of irrigation timing and volume and phosphate fertilizer application methods on pecan yield and quality.
- Partner with Auburn University to enhance greenhouse lettuce production in Alabama by reducing heating costs and
  improving greenhouse cooling through the development of an economic model that illustrates a comparison of conventional
  heating and cooling to non-conventional methods used to modify nutrient solution temperatures using a geothermal heat
  pump for both heating and cooling coupled with energy savings.
- Partner with the University of West Alabama to enhance tomato growth and production yields by using beneficial fungal symbionts by testing the role of using fungal endophytes as bio-fertilizer on tomato plants.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Alaska Division of Agriculture

Amount Awarded: \$232,029.92 Number of Projects: 8

- Partner with the Alaska Child Nutrition Program to enhance the knowledge of food service staff about the production and
  availability of local specialty crops, as well as, to increase the number of Summer Food Service programs serving a wide
  variety of specialty crop food choices in their meals by providing educational opportunities for youth and community
  members such as specialty crop oriented field trips and lessons.
- Increase sales of specialty crops at farmers' markets by continuing to implement the Chef at the Market program, which provides chef demonstrations at farmers' markets utilizing available Alaska Grown specialty crops.
- Partner with the Artic Fungi Project to introduce local specialty crop producers to the opportunities of fungi production by conducting a feasibility study of the year-round commercial cultivation of several species of mushrooms in Alaska for food and packaging material.
- Partner with the University of Alaska Fairbanks and Washington State University to study a sampling of Alaska field grown peonies to verify species identification and the biology and pathogenicity of Botrytis gray mold, which is the single most important disease of Alaska field-grown peonies and cut stems in storage. The research findings will be used to develop grower integrated Botrytis disease management guides for peonies.
- Partner with the University of Alaska Fairbanks to develop guides for peony growers to help manage western flower thrips (Frankliniella occidentalis and tobacco thrips) by defining life cycles of pest and determining problematic stages of development, as well as, identifying plant cultivar susceptibility as it relates to flower colors in peony fields.
- Identify varieties of cauliflower suitable for Alaska field production by assessing yield, head uniformity, maturation dates, field holding capability and head size, shape and color of forty different cauliflower varieties through field trials, will add to scarce information on cauliflower data in the state and will be vital information to specialty crop producers in the state.
- Partner with the University of Alaska Fairbanks to increase the knowledge of Alaska Peony growers and the cut flower industry by developing an adequate nutrient standard and best management practices for field grown peonies.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## American Samoa Department of Agriculture

Amount Awarded: \$262,963.01 Number of Projects: 1

• Promote the integration of specialty crops into the daily diet of the Samoan community by developing an awareness campaign focusing on the health benefits of locally grown Specialty Crop fruits and vegetables, which will include an outreach effort with focus on local primary and secondary schools.

#### Arizona Department of Agriculture

Amount Awarded: \$1,105,843.55 Number of Projects: 19

- Increase Arizona specialty crop producer knowledge of Good Handling Practices and Good Agricultural Practices (GHP/GAP) by providing one-on-one assistance and workshops to help them prepare and obtain GHP/GAP certification.
- Partner with the University of Arizona Cooperative Extension to increase student and teacher knowledge about Arizona's specialty crops food safety practices in school gardens by developing a project-based learning curriculum package that will enable teachers to easily use agriculture to reach College and Career Readiness Standards and classroom learning goals.
- Partner with the University of Arizona to address the need to maintain produce safety during harvest by investigating a long term sterilization method using quaternary ammonium compounds on harvesting materials (e.g., cutting knives, packing crates, plastic pallets and processing tables) to control/eliminate bacteria (e-coli) indicators, communicate the results to growers, as well as, provide graduate student training in field and laboratory methodologies.
- Partner with the University of Arizona to reduce the risk of transmission of foodborne microorganisms during the irrigation of specialty crops by formulating best management practices of irrigation waters.
- Partner with the University of Arizona to reduce concerns about heavy metals in edible fresh fruits and vegetables by exploring management strategies to reduce potential heavy metal exposure in vegetable crops and develop tools to reduce future compliance challenges.
- Partner with Power Fresh Kids to encourage Arizona school children to eat more fruits and vegetables by introducing a kid
  friendly approach, in 10 elementary schools for one week during National Nutrition Month, serving school lunches on 10"
  plates modeled after U.S. Department of Agriculture's Choose MY Plate graphic, educational materials will be provided to
  schools and outreach to parents, outcomes measured by a pre and post survey to measure the increase of consumption and
  knowledge resulting from this project.
- Increase consumer awareness of Arizona Grown produce and nursery plants by continuing a media campaign using digital billboards, public relations efforts with Arizona Grown items, daily Facebook postings and other social media platforms.
- Partner with the Arizona Nursery Association to increase Arizona grown low-water use plant sales by continuing to implement the "Plant Something" promotion to include advertisements (e.g., radio, digital billboards, cable, and print), online media and Facebook postings, and industry specific events.
- Partner with Western Growers Foundation to increase the knowledge of students in the importance of good nutrition and a better understanding of where their food comes from by creating and sustaining edible school gardens at fifty Arizona schools (K-12).
- Partner with the Yuma Fresh Vegetable Association to educate the specialty crop industry about the technological advances and emerging issues in the industry by conducting the 2015 Southwest Ag Summit, which promotes interaction between educators, regulators, specialists, farmers and students of the Southwest specialty crop industry.
- Partner with the Arizona Farm Bureau to introduce more teachers and students to specialty crops by developing and implementing project-based learning curriculum package that will enable teachers to easily use specialty crop agricultural practices in school gardens to reach the Arizona College and Career Readiness Standards and classroom learning goals.
- Partner with the University of Arizona to identify water conservation techniques of irrigated grasses by evaluating low maintenance warm season grasses that are commercially available that may produce an acceptable ground cover surface at reduced irrigation rates.
- Partner with the University of Arizona to reduce fertilizer inputs and increase crop yields in lettuce, broccoli and cantaloupe
  by investigating ways to minimize plant disturbance and placement of fertilizer in a more optimal location around the plant
  will be used.
- Partner with the University of Arizona to decrease costs associated with remedies for pecan tree zinc deficiency by evaluating the effects of varying amounts of fertigated zinc, phosphorus and nitrogen on leaf nutrient concentrations, photosynthesis, tree growth rates, and nut production of pecan trees.
- Partner with the University of Arizona to enhance integrated pest management (IPM) approaches in Arizona's specialty crops by initiating new research on vegetable and melon crop such as celery, sweet corn, watermelons, and onions to document the biology and ecology of key insects and improve upon existing control strategies.
- Partner with the University of Arizona to investigate different methods of controlling weeds in pepper crops and disseminate the results to chile producers by publishing the results in a scientific journal and producing an extension bulletin on herbicide use on chile peppers in Arizona.

- Partner with the University of Arizona to reduce the risk of developing herbicide resistant weed populations for pecan and pistachio crops by comparing the efficacy of long-term pre-emergence herbicide treatments at four orchard sites and measure declines in weed population densities and the number of post-emergence spray operations needed annually.
- Partner with the University of Arizona to decrease the risk of food crop contamination by livestock by defining optimal
  monitoring strategies for irrigation water quality and developing guidelines for the irrigation of food crops, resulting in the
  development of best management practices that can be used nationally by growers utilizing surface water for irrigation
  purposes.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Arkansas Agriculture Department

Amount Awarded:	\$351,089.23	Number of Projects:	8
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- Promote the sale of Arkansas specialty crops by marketing to potential produce purchasers at the annual Produce Marketing Association's (PMA) Fresh Summit in Atlanta through exhibiting the different specialty crop products Arkansas has to offer.
- Collaborate with Hortus, Ltd and the Arkansas Times to increase the knowledge Arkansas consumers have about the nutrition and availability of locally grown specialty crops by implementing a marketing campaign that will include print, web, and radio media.
- Partner with the University of Arkansas to increase the number of new value-added specialty crop products by developing and delivering outreach materials and training opportunities for food entrepreneurs in Arkansas.
- Partner with the University of Arkansas's Center for Agricultural and Rural Sustainability to increase knowledge of the concerns, needs, and economic contributions of the Arkansas horticulture industry by using of a survey instrument compiled into an industry-usable report, and published on the internet.
- Partner with the University of Arkansas to expand the knowledge base of fresh-market blackberry fruit in Arkansas by identifying quality-based attributes of fresh-market blackberries during postharvest storage and disseminating information to fresh-market blackberry industry to improve marketability.
- Partner with the University of Arkansas Pine Bluff to better understand small hive beetles (SHB) location within the state and their preferred habitats by monitoring and mapping their presence in Arkansas, which will result in better preparedness to counter bee infestations, improved honey production, and increased honey income in Arkansas.
- Partner with Rural Community Alliance to reduce the amount of chemicals used and increase acreage devoted to specialty crop production in Arkansas by educating and training Yell County specialty crop producers on the plastic culture method and use of equipment during an annual production meeting with local farmers.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

# California Department of Food and Agriculture

Amount Awarded:	\$19,881,478.15	Number of Projects:	61

- Partner with the Center for Produce Safety Foundation, in collaboration with the University of California, Davis and the University of Arizona, to develop data to support collective expert evaluations for the replacement of quantitative irrigation water standards based on generic E. coli with a semi-quantitative threshold based on a designed risk-assumption Limit of Detection based on either E. coli and/or Bacteroides as an improved indicator system for acute and chronic fecal contamination.
- Partner with the Center for Produce Safety Foundation, in collaboration with Virginia Polytechnic Institute, to identify practical indicators to predict foodborne pathogen contamination and investigate economical methods to disinfect Salmonella spp., E. coli O157:H7, and L. monocytogenes in irrigation water.

- Partner with the Center for Produce Safety Foundation, in collaboration with the U.S. Department of Agriculture's Animal and Plant Health Inspection Service-Wildlife Services, to determine whether wildlife contribute to foodborne disease risk by contaminating leafy green produce during visits to agricultural fields by estimating the magnitude of contamination of leafy green produce fields by three critical foodborne pathogens causing human illness; testing hypotheses related to the spatial distribution of leafy green produce fields in relation to large areas of wildlife habitat; testing hypotheses related to diversity and synanthropy of wildlife; using these results to identify wildlife species that have high potential for contaminating fields with foodborne pathogens; and proposing potential mitigation measures for producers to reduce or eliminate contamination of leafy green produce with foodborne pathogens carried by wildlife.
- Partner with the Center for Produce Safety Foundation, in collaboration with the University of Massachusetts, to empower
  farmers to conduct routine and risk-based testing of agricultural water for Salmonella spp. by developing a kit-based
  detection system.
- Partner with the Center for Produce Safety Foundation, in collaboration with the University of California, Davis, to protect consumers, reduce food waste, and improve specialty crop sustainability associated with the detection of clinically relevant Shiga toxin-producing E. coli by developing the efficacy and validation data necessary to support the adoption of the specific test method proposed in commodity-specific guidance documents and standards in order to optimize risk management practices and better defining the role of wildlife as vectors of pre-harvest contamination.
- Partner with the Center for Produce Safety Foundation, in collaboration with the University of Arizona, to develop a more accurate and quantitative method for the detection of fecal contamination in irrigation water through the use of improved methodologies of environmental virus concentration and isolation and the identification of novel viral targets consistent with the norms of an "ideal indicator organism," a low cost and rapid method for the detection and quantification of fecal contamination in irrigation water can be developed that will provide more accurate tools to evaluate the risk to human health of fresh produce from contaminated irrigation water.
- Partner with the Center for Produce Safety Foundation, in collaboration with Michigan State University, to improve the methods for validating pathogen reduction processes for pistachios, with particular attention to enhancing existing operations and enabling processors of any scale to reliably validate those processes by producing produce guidelines to validate preventive control measures for pistachios.
- Partner with the Center for Produce Safety Foundation, in collaboration with the Centers for Disease Control, to determine the feasibility of using ultrafiltration and molecular testing as tools for monitoring agricultural water quality and to provide an evidence base supporting the implementation of ultrafiltration-associated testing protocols by crop producers as part of site-specific and product-specific risk-based sampling programs by developing sampling and testing procedures for analysis of large-volume irrigation water samples for alternative microbial water quality parameters.
- Collaborate with the Buy California Marketing Agreement and the California Travel and Tourism Commission to increase exposure and sales of "CA Grown" specialty crops by implementing a media program that features individual specialty crop farmers and highlighting the seasonal availability of California grown specialty crops at local events and expos.
- Partner with the California Exposition and State Fair to increase Californians' knowledge of the efforts by California olive oil producers to establish and enforce the highest industry standards, and why such standards are important by hosting events promoting California olive oil and providing information on industry standards, labeling and strategies for identifying quality olive oil in the state.
- Partner with the California Olive Oil Council to increase olive oil sales and consumer awareness by conducting a marketing campaign in California, the Pacific Northwest, and the Mid-Atlantic region that promotes retail locations selling California olive oil and hosts educational outreach events.
- Partner with the Wine Institute to increase demand for California wine nationally, with the objective of increasing both average prices and grower return, by growing California wine tourism and promoting events through a promotional campaign, media and advertising, statewide events in New York, Los Angeles, and San Francisco.
- Partner with the University of California, Davis to enhance the marketability and competiveness of specialty crops through development of markets for local producers by hosting market tours, farmer-to-farmer meetings, and consultative follow-ups for beginning, small, and immigrant growers.
- Partner with the California State Floral Association to increase consumer awareness and sales of California flowers by creating an online presence through a social media campaign, bloggers, webinars, and a mobile app to provide consumers with relevant, current, and credible content to inform them how flowers can be a part of their daily lives.
- Partner with the California Association of Nurseries and Garden Centers to increase sales of nursery plants by implementing the "Plant Something!" marketing campaign, which will include radio promotions in Sacramento, San Francisco and Los Angeles, and establishing a website and social media presence.

- Partner with the Sonoma County Local District 3 Winegrape Commission to raise grape returns with marketing aimed at growing premium sales, leading to higher winegrape prices by executing a marketing program that includes producing videos highlighting Sonoma growers for use on websites and social media.
- Partner with the Center for International Trade Development, Fresno to increase export sales of California specialty crops by facilitating reverse trade missions targeting Asia and the Middle Eastern/Indian Markets and outbound missions to China, coordinating one-on-one meetings between California specialty crop suppliers and foreign buyers, and conducting facility site visits, product demonstrations, and California specialty crop product promotions.
- Partner with the Colusa County Resource Conservation District to enhance the marketability and competitiveness of specialty crops by providing specialty crop producers with new marketing tools and opportunities using seven approaches to achieve results: social media, printed publications, marketing workshop, Model Farm Tour, exhibits, presentations, and active participation in developing a Center Action Plan.
- Increase in direct farm-to-consumer sales of specialty crop products on a statewide basis by incorporating specialty crop products and producers into local community efforts to combat hunger, enhance agricultural education in schools, and to better connect consumers to specialty crop growers.
- Partner with the Oakland Unified School District to increase the purchase of California specialty crops by implementing an in-house produce processing program to eliminate reliance on expensive and/or imported pre-cut fruits and vegetables into the school system through student and parent awareness and consumption of specialty crops, developing student-vetted recipes which highlight California specialty crops as well as restructuring the salad bar program to be sourced entirely from California specialty crop producers.
- Partner with California State University, Chico Research Foundation to increase the purchase and consumption of locally grown specialty crops by rural senior adults through marketing campaign of specialty crops that includes a promotional efforts and word-of-mouth publicity by program participants, providing timely feedback to specialty crop farmers about which specialty crops are preferred by senior adults, establishing a steady market channel for specialty crops, and providing specialty crop farmers with promotional specialty crop materials.
- Partner with American Farmland Trust California to educate consumers and specialty crop growers of the environmental stewardship activities utilized in specialty crop operations by conducting beneficial management practice profiles of a diverse selection (crops/practices/regions) of specialty crop stewardship leaders and making the information available online and in trade journals, newsletter articles, conferences, workshops, and field day presentations.
- Partner with the Agriculture and Land-based Training Association to directly support the capacity and market access of beginning and limited resource farmers organic fruit and vegetable producers by providing educational and business development services which enable participating specialty crop farmers to make the transition to independent organic farm owner and operator upon graduation from the program.
- Partner with the University of California, Santa Cruz to increase the crop knowledge and production efficiencies of small-scale beginning specialty crop growers, with an emphasis on organic and sustainable production practices, by providing them with training, mentoring, and written resources—in Spanish and English—they need to develop viable organic specialty crop operations that can succeed in the face of economic and climate-related risks.
- Partner with Noyo Food Forest to inspire youth to pursue careers in the specialty crop industry while increasing utilization
  of local specialty crops in Fort Bragg school cafeterias by developing an experiential training program focusing on high
  school age and older youth, who will learn to produce specialty crops, which will be purchased by the school for use in
  school meals; teach nutrition to younger students; and earn stipends as they prepare to enter sustainable agricultural training
  programs.
- Partner with the Ventura Unified School District to Increase the amount of fresh, seasonal, locally grown specialty crop
  products consumed by students in Ventura County schools by facilitating production planning, marketing, and distribution
  of specialty crops in schools; providing school staff training and development to increase utilization of specialty crop
  products in school menus; and developing and disseminating educational tools to increase students' and families' awareness
  and consumption of California specialty crops.
- Partner with the International Rescue Committee, Inc. to improve knowledge of how to obtain nutritious specialty crops by creating an education, training, and marketing infrastructure that will make it possible for diverse immigrant households to continue to consume a healthy, culturally appropriate diet focused on fruits and vegetables and support the growth of economic networks based on the traditional agricultural/culinary practices and purchasing habits of global populations living as neighbors in urban communities.

- Partner with North Coast Opportunities, Inc. to increase and institutionalize the use of locally-produced specialty crops in 15 schools in Lake County school districts by assessing needs and purchasing items to support preparation, storage, and processing of specialty crops; training food service staff and summer students in best practices for incorporating specialty crops into meals, menu planning, and on-site prepping; working with farmers to help them understand institutional market needs and purchasing policies, develop market relationships with schools, and plan production to meet school needs.
- Partner with the University of California, Santa Cruz to increase the procurement and consumption of California specialty
  crops in 15 school districts in Monterey, San Benito, and Santa Cruz Counties by working with Food Service Directors to
  identify and implement collective buying strategies of California fresh fruits and vegetables to reduce costs that can then be
  re-invested in specialty crop procurement.
- Partner with California State University, Chico Research Foundation to increase networking and response-capacity among key players in the local specialty crop food system by expanding a piloted educational program that will train a new generation of farmers, strengthen food security and grow the (chiefly organic) specialty crop economy by serving low-income residents, growers, help agencies, and K-18 (kindergarten through graduate school) agriculture/farming students.
- Partner with Occidental College to increase demand for California specialty crops by developing an initiative to support a
  system of robust and sustainable Farm to School programs in Los Angeles County, which will increase specialty crop
  producers connections to school food cafeteria programs; create innovative promotional materials designed for school
  audiences that highlight Southern California specific crops and production practices; and create new Farm to School
  specialty crop agritourism opportunities and programs.
- Partner with the California Cherry Board to increase the level of use of specific sustainable practices by cherry growers over time through conducting assessment workshops, using SureHarvest value-mapping, and identifying key best management practices.
- Partner with the University of California, Davis to economically strengthen the California olive industry by educating olive processors to master the new de-bittering process, reducing water used in California-style olive processing, reduce volume and toxicity of olive processing wastewater, and increasing nutritional content for California-style olives.
- Partner with SureHarvest to increase almond grower adoption of best management practices which provide marked environmental and grower economic benefits through grower self-assessments and grower education.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to enhance the marketability of California Persimmons by analyzing different varieties of persimmons for their nutritional content and developing a process for preparing a dried persimmon product.
- Partner with the California Apple Commission to improve the marketability of California apples by investigating different types of shade cloth and the effects they have on apples grown and their economic viability in California.
- Partner with the University of California, Davis to increase awareness of new knowledge of grafted fresh market tomato performance in California field conditions among stakeholders to create less risk-averse growers who will adopt grafted fresh market tomatoes by collating and analyzing all available data on yield/fruit quality/economics on grafted tomatoes in the ~300 studies published since 2000; performing grafted fresh market tomato field trials in Merced County and San Joaquin County; producing a comprehensive catalog summarizing published data and results of field trials for each variety; and disseminating findings to California stakeholders.
- Partner with Sustainable Conservation to increase grower awareness and acceptance of on-farm floodwater capture by developing and calibrating a model for nitrate and salt leaching from specialty crops when floodwater is applied for the purpose of recharging groundwater.
- Partner with the University of California, Parlier to improve efficiency of water and nitrate fertilizer management for strawberry growers by developing new data on water and nitrogen use of strawberries and to provide growers with a comprehensive, free, and user-friendly online tool to support water and nitrogen fertilizer decisions.
- Partner with the University Corporation at Monterey Bay to reduce water application by Central Coast growers of leaf lettuce, cabbage, and possibly other cool-season vegetables by demonstrating the use of California Irrigation Management Information System evapotranspiration, as modified by CropManage and Satellite Irrigation Management System models, to support evapotranspiration-based irrigation scheduling decisions in cool-season vegetables.
- Partner with San Jose State University, in collaboration with Moss Landing Marine Laboratories, to improve water quality and help specialty crop farmers to comply with regulations through a better understanding of the most cost effective practices for treating surface runoff under different farm constraints by constructing, studying, and comparing four different beneficial management practices for use by specialty crop farmers within the Salinas Valley.

- Partner with the Almond Board of California to improve the accuracy and timeliness of spatial nut crop data by applying remote sensing analysis and agronomic knowledge to locate and quantify nut crop acreage and age by imagery selection; geographic information systems acquisition; performing quality assurance/quality control ground truthing and data analysis.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to decrease the energy costs incurred from
  a specialty crop dehydrator by developing a processor-friendly solar thermal drum dryer that can be used to quickly dry
  specialty crop products such as apple, pear, berry, and vegetable purees and pomaces from tomatoes, grapes, olives, and
  carrots.
- Partner with the University of California, Davis to increase efficient use of water resources in orchard and vineyard crop
  production by implementing precision irrigation management in orchard and vineyard crops to conserve water; expanding
  stewardship practices, natural resource conservation, and the development of ecosystem services to improve the
  environmental and financial performance of California specialty crop growers.
- Partner with the University of California, Davis to increase competitiveness of the fresh market tomato industry and
  ecosystem services related to water conservation and environmental quality by identifying management practices for
  reliable production in dry years with lower inputs, determining the pest pressures likely to be affected under deficit
  irrigation, and increasing awareness of alternative planting and irrigation strategies through establishing trials on plant
  density, conducting on-farm experiments on irrigation and plant spacing, and examining tradeoffs in management inputs
  and other analyses.
- Partner with California Sustainable Winegrowing Alliance to increase adoption of sustainability practices that will improve resource economic efficiency and conservation through developing an economic cost/return assessment tool, develop and integrate economic tool; develop and disseminate resources; producing media with information from findings; conduct workshops and outreach.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to increase the sustainability of lettuce production in California by developing and implementing beneficial management practices that improve farm viability and the agricultural economy as well as the environment and identifying drought-tolerance traits in lettuce, leading to the development of cultivars with reduced water requirement and costs, while mitigating the effects of reduced water availability.
- Partner with the University of California, Davis to expand stewardship practices and natural resource conservation to
  improve the performance of California almond orchards by comparing the isotopic composition of xylem and soil water to
  determine the contribution of deep and shallow roots to total plant water uptake under different climates and management;
  developing empirical relationships between evapotranspiration-driven leaf hydrogen and oxygen isotopic enrichment and
  water use efficiency; and comparing these with standard physiological measurements to determine water stress and improve
  management based on new evapotranspiration estimates and crop-specific coefficients.
- Partner with the University of California, Davis to generate data showing increased savings and efficiencies that will follow from the introduction of the genomics technology referred to as Next Generation Sequencing (NGS) by producing technical and factual information that will document the time and cost savings vineyard managers will realize through the adoption of NGS analysis as a replacement for the biological assay.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service, in collaboration with the University of California, Davis, to improve the environmental and financial performance of California specialty crop growers by deploying a downy mildew detection system in the field for the development of disease forecast models for both spinach and lettuce downy mildew based on which the frequency of fungicide applications can be reduced.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to help lettuce growers reduce crop losses by reducing the damage caused by bacterial leaf spot and tospoviruses through developing and spreading the knowledge of cultivars with disease resistance.
- Partner with the University of California, Davis to increase grape producer's crop yields by reducing the damage of Grapevine Red Blotch Virus through developing and promoting the use of a more inexpensive Grapevine Red Blotch Virus (GRBaV) detection method.
- Partner with the U.S. Department of Agriculture's Agriculture Research Service to increase the production of melons and decrease the use of pesticides reducing the damage of powdery mildew by screening mildew populations, establish new sources of mildew resistance, and promoting the use of the identified resistant varieties.
- Partner with the University of California, Riverside to increase the number of avocado growers using recommended best practices for prophylactic treatment of trees and sanitation of infested material from dying trees by developing an effective management of the insect/fungus complex to reduce populations of insects within their groves and protect their trees.

- Partner with the University of California, Davis to minimize economic and environmental harm to tomato farmers by creating a DNA test to identify T. absoluta infestations to decrease the time it takes regulators to correctly respond and prevent its establishment, contain its spread, and reduce the length of expensive and disruptive quarantine holds.
- Partner with the University of California, Davis to develop and refine pest management techniques for a new invasive pest (the Bagrada) of crucifer crops (i.e., cauliflower and broccoli) in the Salinas Valley by studying the biology, damage potential and management of a new invasive bug, the Bagrada, that has begun to damage California crops.
- Partner with the University of California, Davis to take advantage of new opportunities and utilize genetic-based approaches to target mealybugs, including the invasive vine mealybug, and, indirectly, the viruses that they transmit to grapevines by creating an RNA interference approach to a new, more environmentally sustainable method to combat Mealybugs and grapevine leafroll-associated viruses, which have devastated the California Grape industry.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to determine potential vectors and alternate hosts to develop red blotch management guidelines by studying the Grapevine Red Blotch-Associated Virus to understand its characteristics and provide to the grape industry new prevention techniques to eliminate potential virus and vector reservoirs.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to expand the capability to detect an array
  of economically important soilborne pathogens more rapidly by developing inexpensive and less technologically
  sophisticated diagnostic tools.
- Partner with the Hopland Band of Pomo Indians to support the expansion of Native American specialty crop production and distribution by creating marketing and distribution opportunities for the Native American Pomo specialty food products in Sonoma, Lake and Mendocino counties through hosting educational workshops, creating a food hub for specialty crop items such as black walnuts, elderberries, acorns and grapes, and also promoting specialty crop items from a mobile food stand.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Colorado Department of Agriculture

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- Partner with Pueblo County to promote the awareness and sales of the Pueblo Chile through a marketing campaign and demonstration garden that will create a unique Pueblo Chile brand, promote visitors to Pueblo chile farms, and encourage the production and interest in the Pueblo Chile.
- Partner with the Colorado Potato Administrative Committee to increase the sale of Colorado potatoes in Mexico through studying the Mexican potato market and marketing Colorado Potatoes through Mexican vendors.
- Increase the sales of Colorado produce suppliers by marketing and raising awareness about Colorado produce at the 2015 Produce Marketing Association's (PMA) Fresh Summit Expo.
- Increase sales of Colorado raised local produce through a marketing campaign that will educate consumers to purchase locally made produce through a demonstration garden at the Governor's Mansion, an advertisement push in print, high profile events, and other media outlets.
- Partner with the Colorado Fruit and Vegetable Growers Association to increase the sales of Colorado fruits and vegetables
  by assessing grower and consumer needs, developing and implementing education outreach, promotional products, and
  networking opportunities.
- Partner with the Colorado Wine Industry Development Board to increase the availability of scientific research around the grape industry by creating a website where all Colorado focused research can be housed and made widely available.
- Partner with Fort Lewis College to enhance beginning specialty crop producers' knowledge of farming techniques by creating incubator plots for new farmers that incorporates hands-on training and using the tools needed to develop these new skills associated with specialty crop production.
- Partner with Colorado State University to increase the knowledge and education of Colorado specialty crops producers by providing research and technical support and extension education programs.
- Partner with the Colorado Potato Administrative Committee to increase the export of potatoes by developing and distributing a new method of screening for the potato virus (PVYn).
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Connecticut Department of Agriculture

Amount Awarded: \$396,469.28 Number of Projects: 8

- Partner with the University of Connecticut (UConn) to increase the use of tissue and soil analysis as a management tool for fertilizer decisions by fruit growers through conducting a study at 15 grower locations and disseminating the research results via factsheets, the UConn website, newsletters, and at grower meetings.
- Partner with the Harvest New England Association, Inc. to break down the barriers to regional specialty crop purchases by
  educating producers at the Harvest New England Agricultural Marketing Conference and Trade Show, educating consumers
  at Harvest New England Days, and connecting wholesale buyers with wholesale specialty crop producers through five
  matchmaking meetings.
- Increase consumer awareness of the availability and diversity of Connecticut grown specialty crops by implementing a radio advertising campaign.
- Partner with Agrivolution, Inc. to increase the overall yield of strawberries per growing area by developing economically
  viable hydroponic controlled environment strawberry cultivation techniques and systems that allow for year round
  strawberry cultivation in Connecticut.
- Partner with the University of Connecticut to increase the production of ethnic vegetable/novel small fruits (e.g., okra, tomatillos, yardlong beans, and kale) in Connecticut by conducting an economic feasibility analysis examining the market demand, production barriers and economic viability for producing these specialty crops, and disseminating the information via workshop presentations, published materials, websites and social media.
- Partner with the Connecticut Christmas Tree Growers Association, Inc. to find practical solutions to phytophthora root rot problems that can be adopted by Christmas tree growers through conducting field trials incorporating soil acidity, root dip, bark sprays and various species of firs (Turkish, Nordmann, Trojan, Fraser and Canaan).
- Partner with the University of Connecticut to provide cabbage and pepper producers with information regarding how to
  control the diamondback moth, imported cabbage worm and Brown marmorated stink bug eggs by conducting field trials,
  planting 15-20 different flowers and plants in close proximity to the cabbage and pepper plants to determine which flowers
  and plants are the most effective at attracting natural predators. The research results will be disseminated via UConn
  Integrated Pest Management (IPM) Program workshops, presentation at local and regional conferences for growers and
  extension staff, and printed and online publications.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### University of the District of Columbia, College of Agriculture

Amount Awarded: \$221,328.44 Number of Projects: 5

- Partner with Capital Area Food Bank to increase the availability of and demand for fruits and vegetables among those who rely on food assistance through establishing community gardens at fifteen sites throughout the District of Columbia.
- Partner with Bread for the City to encourage the District of Columbia residents to establish their own sustainable specialty crop gardens by hosting a community garden/orchard in which they can learn best practices associated with gardening.
- Partner with Purple Mountain Organics to connect the District of Columbia's low-income population with a specialty crop (sweet potatoes) that they may not otherwise have access by maintaining additional community gardens.
- Partner with DC UrbanGreens, Inc. to encourage food desert residents to consume more specialty crops by establishing and maintaining neighborhood gardens.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Delaware Department of Agriculture

Amount Awarded: \$337,467.80 Number of Projects: 9

• Partner with the University of Delaware to improve knowledge of the effects of using poultry manure in watermelon production to determine if they are eligible for an exemption to use manure within the 9 month time frame by developing a sample survey and testing watermelon fruits for contamination.

- Increase the number of Delaware farmers requesting U.S. Department of Agriculture Good Agricultural Practices (GAP) by offering a cost-share to defray the costs of the audit and through advertisement of this opportunity.
- Partner with the Delaware Farm Bureau to increase the awareness of specialty crops in Delaware, highlight the health benefits of eating those crops and identify where those crops can be purchased, and, ultimately, increase sales and revenues of specialty crops in Delaware through strategically placed billboard advertising signs on major highways in Delaware.
- Partner with the Delaware Wineries Association to increase yearly sales revenue of Delaware wines by developing and implementing a marketing plan, which includes distributing materials on Delaware wines, online advertising, and hosting two annual events focused on promoting the quality and availability of Delaware made wine to increase attendance at wine focused events, and increase the number of acres of wine grapes planted in Delaware.
- Promote consumption of specialty crops through guidance on handling, storing and preparing these fresh fruits and
  vegetables by developing, printing and distributing a new set of recipe cards featuring specialty crops and disseminating the
  information through the Department of Delaware Agriculture's existing farmers' market and farm stand networks,
  government offices, at public events, via nonprofit organizations, and an online Recipe Center.
- Partner with the University of Delaware to increase vegetable production knowledge among workshop participants and increase the use of the "Veg Recs" website by developing and conducting workshops on vegetable production and by enhancing the Veg Recs website to make it a more valuable resource for vegetable growers.
- Partner with Delaware State University to increase underserved farmer knowledge and skills to diversify farm and adopt organic blueberry production by investigating the best organic option to grow blueberry and educating farmers with a practical demonstration in sustainable production, harvesting, and post harvesting and marketing aspects.
- Partner with the University of Delaware Cooperative Extension to introduce Asian Persimmons to the Delaware market by
  planting persimmon trees, conducting consumer tests, conducting workshops and field days, and posting results on their
  website.
- Partner with the University of Delaware Cooperative Extension to update research on the use of nitrogen and potassium on watermelons, cantaloupes, tomatoes and peppers through studies of small fruit and vegetable plots to evaluate current recommendations for growing these specialty crops and rectifying differences in recommendations in the region.

#### Florida Department of Agriculture and Consumer Services

Amount Awarded: \$4,579,401.97 Number of Projects: 34

- Partner with the University of Florida to improve microbiological safety of tomatoes by performing a meta-analysis of data collected to develop scientifically-validated amendments for the Tomato Good Agricultural Practices (T-GAPs); validating the interactions model in one field season; developing a comprehensive outreach model which will make the data and model available to the producers for their evaluation prior to any discussions of the formal amendments of Florida T-GAPS.
- Partner with the Florida Tomato Committee to increase sales of Florida tomatoes through a marketing campaign across the eastern seaboard highlighting their nutritional benefits.
- Partner with the Florida Specialty Crop Foundation to increase the sales and knowledge of Florida blueberries nutritional benefits by identifying barriers to marketing and promoting a cohesive image of Florida-grown blueberries through a survey of producers and distributors; identifying consumers' perceptions of and barriers to purchasing Florida-grown blueberries; developing a marketing plan for Florida blueberry producers; and developing and disseminating outreach materials, such as a trade publication, insert, or website to jump-start the marketing campaign for the industry.
- Partner with the Florida Organic Growers to increase financial viability for specialty crop farmers at participating farmers' markets by promoting the purchase of local specialty crops at farmers' markets to low income Florida residents.
- Increase the sale of Florida specialty crops to Taiwan by investigating Taiwanese buying habits and consumer preferences for specialty crops to determine the feasibility of marketing more Florida products.
- Partner with Miami-Dade County to increase the overall market viability of the local specialty crop farming industry and
  demand for locally grown specialty crops and to improve public access to healthy, locally grown foods by educating the
  public on the importance of nutrition through the consumption of specialty crops; publicizing specialty crops at local
  markets; encouraging residents to procure and eat healthy, locally produced, specialty crops; and providing specialty crop
  producers/vendors convenient access to those educated consumers.
- Partner with the University of Florida to increase specialty crop producers' knowledge of new and emerging markets and the requirements of selling to them by providing producers a marketing toolkit, sharing productivity enhancing management practices and demonstrating modern agricultural production practices to new and small farmers.

- Partner with the University of Florida to enhance the sustainability of potato production and the environment by evaluating the soil supplying capacities of phosphorus (P) and calcium (Ca) with the omission plot techniques (zero P and zero Ca rates); developing an optimum P and Ca management strategy for P-rich soil; and increasing awareness among the potato growers about improved nutrient management practices and enhance P and Ca use efficiency.
- Partner with the University of Florida to provide specialty crop growers effective and economical management of thrips and other pests by determining the efficacy of conventional and biorationale insecticides and ultraviolet-reflective technologies.
- Partner with the University of Florida to increase the efficiency and environmental sustainability of small specialty crop farmers in Florida by collaboratively designing and hosting three regional small farms specialty crop conferences; developing a new food safety curriculum and training for farmers' market managers and specialty crop producers selling directly to consumers; and engaging key stakeholders in an assessment of the challenges and opportunities of marketing buy local initiatives for specialty crop production in Florida.
- Partner with Florida Agriculture in the Classroom to increase knowledge about the nutritional value of locally raised specialty crops amongst Florida youth by providing material to teachers to both encourage the adoption of school gardens and roll out new lesson plans that allow teachers to teach science, technology, engineering, and mathematics (STEM) lessons based on the garden.
- Partner with the Florida Specialty Crop Foundation to increase specialty crop producers' knowledge of concepts related to agricultural financial management by facilitating a management conference that educates producers through a series of informative sessions.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to reduce the damage weeds bring to the cut flower and vegetable industry in Florida by evaluate the only new bio-fumigant material recently registered in the U.S., trade name Dominus (IRF-135, allyl isothiocyanate) and a combination of organic acids "SPK," both with and without herbicides for the control of soilborne pests of vegetables and cut flowers.
- Partner with the Florida Specialty Crops Foundation to increase crops yields within the Florida snap bean industry by researching and identifying bean cultivars that will be resistant against Bean Red Node (BRN) and sharing this research with seed producers and the public.
- Partner with the University of Florida to gain knowledge of key biological characteristics of 'resident' ambrosia beetles that vector Laurel Wilt in avocado orchards to optimize management tactics against these species by determining if the insecticides recommended for control of redbay ambrosia beetle (RAB) are effective to control ambrosia beetles that vector Laurel Wilt in avocado orchards and identifying insecticides that were not effective on RAB but can be effective on ambrosia beetles that vector Laurel Wilt in avocado orchards.
- Partner with the University of Florida to increase the profitability of the blueberry industry by developing a new rootstock that will increase the efficiency of the harvesting process.
- Partner with the University of Florida to increase crop yields in the blueberry and peach industries by studying the critical bud temperatures in order to implement strategies to combat lethal low-temperature exotherms.
- Partner with the University of Florida to increase the quality of the Florida peach harvest and therefore increase sales by studying the effect of nitrogen rates on the peach and disseminating this data to producers.
- Partner with the University of Florida to increase blueberry yields by determining optimum nitrogen (N) fertilization rates during blueberry plant establishment in newly planted fields; and determining optimum N fertilization rates for mature blueberry plantings that optimize yield, berry quality and profitability while minimizing risks of negative environmental impacts from nitrate leaching.
- Partner with the Florida Specialty Crop Foundation to increase tomato and green bean yields by determining the biology of novel tomato virus (NTV) and fill gaps in basic Tobacco streak virus (TSV) knowledge; determining the insect vector type and mode of virus transmission; determining temporal and spatial distribution of each virus and its vectors; and evaluating management strategies for NTV and TSV.
- Partner with the Florida Specialty Crop Foundation to increase cucurbit (watermelon, cucumber, squash and cantaloupe) yields by developing a decision support system (DSS) that integrates the three models for managing foliar disease of cucurbits.
- Partner with the Florida Specialty Crop Foundation to increase strawberry producers' yields by evaluating strawberry crop termination techniques and weed management options for cucurbits and eggplants double cropped with strawberry; modeling the impact of input reduction (multiple use of plastic) and diverse rotations (monocrops versus double cropping) on weed population trends over time; and developing weed management protocols that facilitate input reduction and double cropping and determining the impact on grower income and income stability.

- Partner with the University of Florida to increase the efficiency and income of the landscaping industry by evaluating seven different sod production fertilization regimens to quantify their potential impact on nonpoint source pollution and developing improved production recommendations that will reduce the environmental impact of sod production systems while improving the long-term financial stability of those associated with the industry.
- Partner with the Florida Specialty Crop Foundation to increase crop pollination, and thus crop yields, by preventing the colonization of barn owl nesting boxes by Africanized Honey Bees (AHB), thus preserving a threatened wildlife species and a widely recognized integrated pest management (IPM) program for sustainable rodent control; reducing the threat posed by AHBs to agricultural workers through safety seminars and by pulling feral swarms into highly visible bee bait boxes, removing them; preserving crop pollinators by re-queening feral hives with a European honey bee queen, hopefully offsetting the serious problem of colony collapse being experienced nationwide.
- Partner with the University of Florida to increase knowledge about the effectiveness of integrated approaches involving grafting and fungicides for managing Fusarium wilt in watermelon production systems by determining the effects of using grafted watermelon transplants with resistant rootstocks for controlling Fusarium wilt in problem-fields, and in field "hot spots" where high disease pressure has led to consistent failure of previous watermelon crops; assessing the quality attributes of watermelon fruit from grafted plants; comparing grafted and non-grafted watermelon production at different inrow spacings to determine the feasibility of reducing planting density for grafted watermelons while maintaining fruit yield; and analyzing industry preference for different procedures of grafted transplant production and associated costs and returns of grafted watermelon production.
- Partner with the University of Florida to protect the South Florida industry with Laurel Wilt resistant varieties and expand U.S. production of 'Hass'-like fruit by identifying parent genotypes and associated molecular markers that confer a higher degree of Laurel Wilt tolerance; identifying new cultivars from Hass x Bacon progenies that appear to be well-adapted to east central Florida and South Florida; and establishing performance evaluation trials of Hass-like varieties on three rootstocks to identify superior cultivars for Florida production.
- Partner with the University of Florida to increase the yields of Florida strawberry growers in order to take advantage of high winter strawberry prices by employing new genome scanning technology for strawberry and new software and statistical approaches to accelerate breeding for early yield; testing early yielding prototype varieties in commercial fields; and performing an economic analysis to ensure that the new breeding strategy is optimized for both the breeding program and grower profitability.
- Partner with the Florida Specialty Crop Foundation to extend the postharvest quality and safety of Florida fresh market blueberries and peaches by conducting postharvest time/temperature studies at grower/shipper facilities; comparing the results of the above tests with postharvest quality and microbial populations of blueberries and peaches cooled day of harvest; and determining the costs and benefits of current cooling practices and compare with those necessary to implement the proposed Best Temperature Management Practices.
- Partner with the University of Florida to address fruit rot diseases of blueberries by developing strategies to combat gray mold and ripe rot and disseminating these strategies to blueberry producers.
- Partner with Florida A&M University to provide the metabolic profiles of grape berry and their enological properties in relation to regulated deficit irrigation (RDI) by determining the RDI affects on wine quality and composition, determining the optimum duration and berry developmental stage for imposing RDI that results in superior wines, and identifying Florida hybrid bunch cultivars positively responding to RDI.
- Partner with the Florida Specialty Crop Foundation to help an specialty crop employer determine whether the H-2A program provides a viable solution to address his/her labor needs by evaluating the extent of labor shortages and estimate the economic ramifications of that shortfall; identifying barriers to adoption of the H-2A program; and developing an "enterprise" budget for the H-2A program.
- Partner with the Florida Nursery Growers Association to increase incomes in the floriculture industry by testing and marketing to the industry new floriculture varieties that will thrive in Florida.
- Partner with the University of Florida to limit the potential damage by the invasive lantana by evaluating the male and female fertility of 21 lantana varieties in south and central Florida to identify varieties with consistent sterility; assessing the hybridization potential of lantana varieties with Florida native lantana to identify noninvasive varieties; preparing Infraspecific Taxon Protocol; and disseminating scientific data on the sterile, non-invasive lantana varieties.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Georgia Department of Agriculture

Amount Awarded: \$1,400,940.62 Number of Projects: 23

Partner with the Eastern Cantaloupe Growers Association to educate cantaloupe growers about the most current food safety
research so they can fully employ 'best practices' in their operations and comply with the national cantaloupe guidance
document by providing recall and crisis communication training to growers and identify consumer trends for purchasing
cantaloupes, which will include hosting a summit with workshops.

- Partner with the Georgia Watermelon Association to increase the watermelon knowledge of consumers and producers by providing consumers with information which communicates best practices in the purchasing, storage and preparation of watermelons and providing the latest 'best practices' information to Georgia watermelon growers on production procedures related to pest management, irrigation, food safety or others.
- Partner with the Georgia Green Industry Association to increase awareness and demand for nursery and greenhouse crops by Georgia consumers by implementing a "Plant Something!" marketing campaign promoting local sources of Georgia grown nursery plants, industry certifications, and the environmental, economic, and health benefits of Georgia grown ornamental plants.
- Partner with the Georgia Peach Council to develop a 'Marketing Tool Kit' for retailers to utilize to increase the demand for Georgia peaches grown in July; campaign to promote George grown peaches during the month of July.
- Partner with the Georgia Pecan Growers Association to increase the awareness of the health benefit of pecans as well as the sales and returns for Georgia pecan producers by developing a targeted, bilingual marketing campaign that includes various media and hosting an exhibit at the Produce Marketing Association's (PMA) Fresh Summit.
- Partner with the Georgia Fruit & Vegetable Growers Association to increased number of producer new/renewed contacts during the Produce Marketing Association's (PMA) Fresh Summit resulting increase in sales by hosting a pavilion at the largest trade show in North America (PMA's Fresh Summit).
- Partner with the Georgia Public Broadcasting to increase students' interest and knowledge of specialty crops by integrating specialty crop information into curriculum through vignettes highlighting in season specialty crops and how they are prepared and promoting proper selection of specialty crops at farmers' markets.
- Partner with the Vidalia Onion Committee to sustain Vidalia onion sales by developing a social media advertising campaign meant to increase sales and demand for Vidalia Onions across various demographics, with a focus on the Millennial generation.
- Partner with the Children's Museum of Atlanta to educate children and their adult caregivers about Georgia grown fruits and vegetable crops through hosting cooking classes, conducting traveling educational programs at schools, and creating programming at the museum.
- Partner with the Georgia Agritourism Association to enhance the available knowledge for specialty crop agritourism producers, local and state regulators and consumers with up-to-date industry news, posting of educational opportunities and tools for new and established specialty crop agritourism producers, as well as creating a starting point for consumers to search and visit a specialty crop agritourism operation by facilitating educational workshops during the Agritourism Conference for specialty crop agritourism producers seeking to develop or expand agritourism markets.
- Partner with Georgia Organics to increase the number of organic specialty crop producers in Georgia by producing a series
  of webinars to market the value of organic certification to specialty crop producers and train specialty crop producers on the
  cornerstones of organic certification.
- Partner with the Georgia Fruit & Vegetable Growers Association to increase producer knowledge about food safety, production practices, and other areas of interest by hosting educational venues, including the Southeast Regional Fruit and Vegetable Conference, webinars, on farm food safety consultations, and workshops; developing educational materials and blogs which will assist consumers in finding the latest produce nutritional value, Georgia Grown produce information, background and locations with locally grown produce; and increasing the opportunities to support educational programing for the U.S. Department of Agriculture's 'Farm to School' and the Georgia Department of Agriculture's 'Feed My School' program.
- Partner with the Hospitality Education Foundation of Georgia to increase student awareness and therefore their loyalty to Georgia's specialty crops by partnering students with specialty crop businesses, where they will learn each department and write a summary report; creating a foodservice event where students are invited to lead educational seminars and industry will critically evaluate their understanding of specialty crop businesses and product understanding; and creating an innovative video, for classroom use, to reinforce specialty crop business knowledge for years.

- Partner with the Atlanta Veterans Farmers Market to increase the U.S. veteran knowledge of organic specialty crop production and certification process by providing training for disabled and homeless veterans for the production of organic specialty crops that are eligible for the Georgia Veteran's Organic Produce and Veterans Organic Produce label.
- Partner with the Vineyard and Winery Association of West Georgia to increase the knowledge of wine grapes among current and potential growers through educational opportunities with experts on wine-grapes, wine making and cooperatives that ultimately result in more growers due to an increase in interest in the wine-grape industry.
- Partner with the Center For Applied Nursery Research to identify azalea cultivars that reliably flower in market windows, cultural practices that can enhance flowering, and cultivars that are less susceptible to pest damage through creating an azalea evaluation standard, develop insect preference survey and planting growth regulators.
- Partner with the Georgia Blueberry Growers Association to determine the best management practice to minimized blueberry crop losses and increase profits by investigate the seasonal biology and ecology of spotted wing drosophila (SWD).
- Partner with the Georgia Olive Growers Association to determine the influence of environmental factors on plant nutrition, crop yield, and olive oil quality by identifying environmental factors that influence production and quality of olives and olive oil; developing an educational networking system; and creating larger customer awareness of domestic grown olives and olive oil.
- Partner with the Georgia Tech Research Institute to help peach growers to predict harvest dates more accurately by creating a software tool that will combine meteorological data from the counties where peach farms are located, with peach production and phenological data obtained from peach farms to create statistical regression-based models that will predict first and subsequent harvest dates.
- Partner with the University of Georgia to reduce fumigant exposure to vegetable field workers and individuals within the community, reduce production costs, and improve weed management and ultimately yields in a multitude of specialty crops by developing more effective cultural and fumigant application techniques.
- Partner with the University of Georgia to increase the economic and environmental sustainability of specialty crop (with a focus on commercial floriculture) producers by investigating precision irrigation systems to determine plant grow rate, quality and marketability; and the economic benefits and return on investments to the producer.
- Partner with the Georgia Tech Interactive Media Technology Center to increase pecan crop yields by integrating a wearable system which evaluates the needs of pecan farmers performing crop scouting.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Guam Department of Agriculture

Amount Awarded:	\$223,448.07	Number of Projects:	1	
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Partner with the University of Guam, Western Pacific Tropical Research Center to educate the public, students, and industry
how to produce disease-free banana plants via propagation by creating student apprenticeships, hosting field trips, and
fostering an advanced hands-on learning environment that will increase knowledge and produce an estimated 1,000 diseasefree banana plants per year.

## Hawaii Department of Agriculture

Amount Awarded:	\$471,145.05	Number of Projects:	12	

- Partner with The Kohala Center to encourage U.S. Department of Agriculture's Fresh Fruit and Vegetable Program (USDA FFVP) schools to spend more of their allocated funds to buy local instead of buying bulk quantities from wholesalers and to increase local farmers' knowledge on requirements to participate in the USDA FFVP which has the potential to impact the health of local children who eat fresher fruit and vegetables and will generate more dollars into the local economy.
- Partner with Waipio Valley Taro Products to increase knowledge and awareness of taro through a marketing effort by conducting workshops and setting up in store displays and demonstrations, anticipating an increase in sales and production.
- Partner with Hawaii Chocolate Association to create a sustainable on going marketing model for the cacao industry that provides support to the small farmers that might not have the marketing expertise to create meaningful programs allowing them to grow their business.

- Partner with Mililani Agricultural Park LLC to expand production on an existing breadfruit farm creating a demonstration
  model to test different methods of maintaining an established orchard, update a user guide to aid growers and conduct a
  field day to invite interested growers and the public to learn more about breadfruit and how it is grown with the intent of
  increasing the number of breadfruit farmers.
- Partner with University of Hawaii to develop new and improved varieties of taro, resistant to taro leaf blight, increasing food sufficiency by increasing yields and quality of taro in Hawaii.
- Partner with University of Hawaii to conduct research to discover new treatments to combat downy mildew on basil, which will improve production practices for growers.
- Partner with U.S. Department of Agriculture's Agricultural Research Service to collect and preserve existing anthurium that possess viable traits and improve these through breeding and biotechnology in order to provide clean material to growers and increase production because many cultivars were destroyed by bacterial blight.
- Partner with The Tea Chest to establish nurseries on four islands to root tea plant cuttings, establish 28,800 new tea plants, educate and support farmers and spur the development of "tea hubs", a co-operative, which would provide semi and fully automated processing equipment that is too expensive for individual farmers to afford.
- Partner with Hawaii Tropical Fruit Growers to develop a series of tropical fruit trees germplasm repositories throughout the state and procure the resulting exotic trees for planting and distributing to growers and nurseries which would pave the way for increased fruit production on all islands.
- Partner with Hawaii Agriculture Research Center to develop, in a dedicated greenhouse, a successful way of rooting starts
  of papaya plants duplicating the conditions that resulted in larger greener leaf plants to provide the growers and nurseries
  with clean stock rooted cuttings of various varieties and conduct workshops encouraging them to continue the rooting
  process on their own.
- Conduct field trial introductions of garbanzo beans to determine its potential to become a new pulse crop for Hawaii and determine the commercial potential for farmers and to promote better nutrition and food security for Hawaii.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Idaho State Department of Agriculture

Amount Awarded: \$1,925,387.59 Number of Projects: 20

- Partner with the Idaho Grape Growers and Wine Producers Commission to increase market share and quality of Idaho wine and awareness through marketing campaign that enhances the website and utilizes social media.
- Partner with the Idaho Nursery and Landscape Association to increase the production and awareness for specialty crop nursery products through the publication of the Idaho Wholesale Nursery Locator map and "Plant Something!" magazines.
- Partner with the Idaho Nursery and Landscape Association to increase the sales of Idaho nursery crops by using radio and television as the primary advertising media for the "Plant Something!" campaign.
- Partner with the Idaho Potato Commission to increase sales of Idaho potato products in international markets through promotional activities at the retail level, in-bound and out-bound trade missions, participation in trade shows, training workshops for end-consumers, and foodservice and wholesale distribution.
- Partner with the Idaho Preferred to continue to promote Idaho grown specialty crops through advertising and in-store retail promotions.
- Partner with the Idaho-Eastern Oregon Onion Committee to promote and develop awareness of Yellow Onions in Mexico
  and Central America through in-store promotions in 2014 in several Mexico cities as well as three trade missions--two 2014
  Western United States Agricultural Trade Association Trade Missions and a 2015 Trade Mission with Idaho's Governor.
- Partner with Northwest Nazarene University to widen the applications and capabilities of Crop Monitoring and Assessment Platform (C-MAP) for specialty crop management and to advance Precision Agriculture knowledge through workshops and high school educational visits.
- Partner with the University of Idaho to expand production and awareness of alternative fruit crops grown in Idaho through investigating new and existing alternative fruit and nut crops and providing interested growers educational workshops.

- Partner with USA Dry Pea & Lentil Council to increase awareness of how dry peas, lentils and chickpeas function as
  ingredients and enhance nutritional values of food through an educational, informative and hands-on product development
  course that will target and educate a specific audience in the food industry including product development specialists,
  nutritionists, and food marketing professionals.
- Partner with Boise State University to maximize the nutritional value, reduce incidence of unacceptable discoloration, maintain flavor integrity, and generate potato products of suitable texture during fryer operations using a Near Infrared Spectrophotometry.
- Partner with Boise State University to potentially attract large wineries to Idaho by studying vineyard soils in the Sunnyslope district of the Snake River Valley Apellation to establish baseline dataset to determine soil types more suited for wine grape production.
- Partner with the Idaho Apple Commission to increase yield and fruit quality and optimize mineral nutrient uptake through the use of various tree architectures in combination with new dwarf rootstocks and trunk girdling in high density orchards in 'Fuji' apple when trees are fully mature.
- Partner with the Idaho Bean Commission to develop effective integrated weed control strategies in sprinkler and furrow irrigated beans that will enable Idaho bean growers to improve their bean yield and quality by reducing losses due to hairy nightshade and other weed competition and their impact on crop quality.
- Partner with the Idaho Potato Commission to identify new N genes conferring hypersensitive resistance to recombinant strains of potato virus Y (PVY) and to develop molecular markers linked to these new N genes.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to increase the quantity and quality of wine grapes in Idaho by determining whether Neural Network modeling and infrared measurement of leaf temperature can be used to develop methods of monitoring and interpreting wine grape vine water status.
- Partner with the Idaho Bean Commission to demonstrate the value of investing in certified disease free Idaho seed by replicating Idaho grown Costa Rica red bean varieties, certifiable as disease free to be used at seed stock in Costa Rica, and to identify Idaho grown black bean varieties that will outperform similar to Costa Rican grown varieties.
- Partner with the University of Idaho to explore new approaches to generate resistant potato lines by cloning Lso virulence genes and using them to identify putative resistance genes in potatoes.
- Partner with the U.S. Department of Agriculture's Agricultural Research Service to establish quality components of Idaho wine grapes by identifying Grapevine leafroll virus-3 and its impact on grape wine quality.
- Partner with the Idaho Hop Commission to develop new public varieties of hops and increase Idaho's global market share through the establishment of a central test plot where new selections can be assessed prior to release, varieties can be compared and contrasted with Washington and Oregon varieties, aroma and oil content can be evaluated, and brewers can give input on quality of aroma and flavor.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Illinois Department of Agriculture

Amount Awarded:	\$657,641.84	Number of Projects:	16

- Partner with the Experimental Station to increase knowledge of nutritional benefits and consumption specialty crops through educational workshops and cooking classes utilizing specialty crops and pilot a program with the Carnegie School to provide gardening skills to grow vegetables in a local hoop house.
- Partner with Illinois Grape Growers and Vintners Association to increase the number of grape growers implementing new business practices through hosting Business Planning Workshops for the Illinois Grape Grower. These workshops will cover the essentials to run a vineyard like a business, to include marketing, contracts, financial practices, and customer service.
- Partner with WBBM TV, CBS Community Partnership Division, to continue the "Illinois Where Fresh Is" campaign with the addition of the mobile platform on cbschicago.com to encourage consumption of local specialty crops by educating the public on their nutritional value; promoting healthier eating habits; and profiling industry leaders to emphasize the personal and proud story of specialty crop farming.

- Continue with Phase Three of the Illinois specialty crop promotion campaign by promoting the existing awareness of the "Illinois Where Fresh Is..." campaign through a statewide paid advertising campaign, promoting the Buy Illinois Fruits and Vegetables Challenge to encourage consumers to dedicate at least \$10 of their existing grocery budget towards the purchase of Illinois grown fruits and vegetables, and expanding the campaign to promote fall specialty crops including pumpkins and apples.
- Partner with Stacy Pasoni, the Healthy Hippy Chef, to increase consumer awareness of Illinois specialty crops and how to incorporate those products into a healthy, affordable and tasty diet by utilizing a campaign that focuses on television and social media networks.
- Partner with the Illinois Stewardship Alliance to build relationships between chefs and specialty crop producers, educate
  consumers about the availability of specialty crops, and explore the potential of piloting an online ordering system for
  restaurants to procure locally grown specialty crops.
- Partner with the Illinois Specialty Growers Association to increase the training opportunities of Illinois specialty crop growers with focus on current food safety requirements through the facilitation of an educational conference.
- Partner with The Land Connection to provide Illinois specialty crop growers with the knowledge, experience and confidence to successfully implement appropriate season extension practices on their farms by hosting a three-day intensive training workshop and creating an online season extension guide and infographic.
- Partner with the University of Illinois at Urbana-Champaign to compare productivity of oyster mushrooms on various substrates, evaluate the economic feasibility of white button and portabella mushrooms during the winter in high tunnels in Southern Illinois, and increase specialty crop growers' knowledge about management practices and economic feasibility of mushroom production in Illinois.
- Partner with Illinois Agriculture in the Classroom to and highlight how and where the apples are grown to Illinois students
  by updating the Apple Ag Mag, which is a four page colorful agriculture magazine geared for the 4th grade level that will
  feature Illinois specialty crop growers.
- Partner with the University of Illinois at Urbana-Champaign to investigate the use of thiamine dilauryl sulfate as an effective, long-lasting, and environmentally friendly antifungal agent to control horseradish root discoloration.
- Partner with the University of Illinois to develop effective strategies for management of bacterial spot of pumpkin by investigating and identify resistant pumpkin cultivars and accessions to X. cucurbitae.
- Partner with the University of Illinois at Urbana-Champaign to determine the most productive vegetable crops and cultivars for farms in the Chicago metro region and to identify the environmental factors driving differences in yield among locations. Additionally, research will be conducted to determine the concentration and bioavailability of heavy metals in raised-bed soils across the Chicago metro region.
- Partner with Southern Illinois University to explore the market potential of Asian greens at Illinois farmers markets to better understand what compels customers to buy an unfamiliar green and how to best support the production and sales of this profitable and highly nutritious specialty crop.
- Partner with the Horseradish Growers of Illinois, in collaboration with Southern Illinois University, the University of Illinois, and the University of Illinois Extension, to diminish the severe problems of horseradish root discoloration by incorporating new genes into the limited genetic pool that we are currently using in the Illinois horseradish breeding program to improve future horseradish variety releases; developing and releasing new horseradish varieties; determining the usefulness of using leaf propagation for rapidly increasing newly selected variety to get the high clonal numbers required to initiate and establish commercial production; and transferring the results of this project to horseradish growers in Illinois at autumn twilight meeting as well as at the annual horseradish conference.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Indiana State Department of Agriculture

Amount Awarded:	\$454,727.91	Number of Projects:	7

Partner with Purdue University to improve growers access to markets and reduce the risk of foodborne illnesses by
providing Food Safety Modernization Act (FSMA) training to specialty crop producers that focuses on food safety
practices, writing and implementing food safety plans, facilitating successful food safety audits, and certification.

- Partner with Growing Places Indy to expand production at the Chase Legacy Center, growing specialty crops year round
  through season extension methods using existing greenhouses and construction of a high tunnel, low tunnel and raised beds
  to provide easy access to fresh fruits and vegetables and educational opportunities for the Indianapolis' Near East Side and
  community members.
- Partner with Nashville/Brown County Convention & Visitors Bureau to increase national awareness and sales of Indiana Maple sugar products by developing a two week promotional event exposing visitors to educational CD on maple tree farming while traveling from farm to farm.
- Partner with Purdue University to promote specialty crops by incorporating a farm to school curriculum in the classroom directly engaging school children and to evaluate changes in their behavior, train teachers who are participating in the curriculum and deliver a two hour training to food service directors on various topics to address their concerns on regulatory requirements for supplying specialty crops to schools.
- Partner with Purdue University to increase knowledge of the costs, supplies and equipment needed to establish and manage tall and dwarf trellis production systems in Indiana; identify insect pests and pathogens most problematic in Indiana hops; identify hops varieties best suited to the state; identify harvesting equipment that will facilitate a robust and profitable hop industry through identifying best management practices in Indiana's growing conditions.
- Partner with South Central Community Action Program to increase low income residents' and adults with developmental disabilities access to locally grown fruits and vegetables by equipping an existing greenhouse and grow specialty crops year round and providing workshops that increase knowledge about growing, preparing and cooking specialty crops.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Iowa Department of Agriculture and Land Stewardship

Amount Awarded: \$308,142.40 Number of Projects: 11

- Partner with Iowa State University to educate producers selling at farmers' markets about safe food practices by developing a three level food safety program targeted to farmers' market vendors and a new online Good Agricultural Practices (GAP) module targeted toward farmers' market managers to standardize the food safety practices at the farmers' market
- Partner with Practical Farmers of Iowa to improve fruit and vegetable growers' recordkeeping skills and profitability by holding two financial and recordkeeping skills workshops; conducting a Whole Farm Financial Project; conducting outreach; and establishing yield baselines for crop-specific fruit and vegetables.
- Partner with Lutheran Services in Iowa to increase the availability of specialty crops produced to the general public and low-income children and families by providing additional training to develop refugee farmers' their production and marketing practices and improve their business skills to increase the number of pounds of produce harvested and sold in the 2014-2015 growing season.
- Increase supply and demand for locally-grown specialty crops through education and food opportunities such as Farm to School initiatives that support growers selling to schools and school gardens that provide students with hands-on gardening experience.
- Partner with the Native Fruit Association to assess the adaptability of the dwarf sour cherry, the honeyberry, and the pawpaw to Iowan soil and climatic conditions by providing cultural information on how to grow these fruits in Iowa, educating the public on the economic viability of these fruits, and determining if dwarf sour cherry and honeyberry cultivars are well adapted to Iowa.
- Partner with Iowa State University Forestry Extension to identify new pines, spruce, and fir varieties that are winter hardy, drought tolerant, resistant to diseases and insects, and have characteristics desirable to the Christmas tree industry by cultivating, 35-38 plant hardiness zone 4 and 5 conifers species grown around the world that are currently not in commercial production in Iowa, evaluating them for germination, growth, survival, and overwinter survival for two years, then planting them in an on-campus study garden for future long term evaluation of disease, insect susceptibility, overall tree form, and maintenance requirements.
- Partner with Iowa State University to establish a standard of identity for jams and jellies made from Aronia berries by
  collecting jams and jellies produced by various Aronia berry growers throughout the Midwest and testing them to see if they
  meet composition and quality federal standards which would allow Aronia berry growers to utilize the Aronia berry name
  on jam and jelly product labels and making it acceptable to sell at farmers' markets without further testing.

- Partner with Prairie Rivers of Iowa Resource Conservation and Development to increase the market potential for aggregating and distributing locally grown specialty crops in Central Iowa by conducting a feasibility study for a Central Iowa nonprofit fresh produce food hub.
- Partner with Iowa State University to improve tomato production efficiency by conducting research investigating the effects of tomato grafting on plant health and productivity for high tunnel production, conducting participatory research with Iowa vegetable growers to facilitate grower adoption of novel production techniques, increasing grower understanding and knowledge of tomato grafting and its potential to improve production efficiency, and organizing state-wide hand-on advanced tomato grafting workshops and summer field days.
- Partner with Iowa State University Forestry Extension to measure stress on fine roots in retail garden centers by researching and identifying factors causing stress on woody nursery stock in production and retail settings.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Kansas Department of Agriculture

	<b>Amount Awarded:</b>	\$314,370.38	Number of Projects:	8
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- Partner with Kansas State University to improve the efficiency of storage and distribution of specialty crops by providing growers with access to coolers, developing the use of modified atmosphere packaging, and developing washing protocols using ozonated water.
- Collaborate with the Kansas Department of Wildlife, Parks and Tourism to highlight licensed farm wineries by updating and printing a beverage-industry focused brochure and creating a mobile and microsite.
- Identify and prioritize challenges faced by specialty crop producers in Kansas by investigating the challenges growers are facing, taking this information to determine what tools (education, outreach, cost-share, etc.) are pertinent to sustain and grow the specialty crop industry in Kansas, and developing a specialized action plan based on needs identified in the survey.
- Partner with Highland Community College, Viticulture and Encology Program to help the Kansas grape and wine industry to grow and improve fruit and wine quality through facilitating educational workshops, a wine evaluation event, and funding student interns to work on vineyards and wineries.
- Improve specialty crop production food safety practiced and increase the number of specialty crop producers seeking and attaining Good Agriculture Practices (GAP) certifications by expanding the current GAP certification cost share program and conduct GAP audits.
- Partner with The Harper County Fair Association to educate individuals on how to properly grow, safely prepare, and preserve fruits and vegetables by offering workshops and field tours, conducting courses on how to cook with fruits and vegetables, and assisting specialty crop producers in creating value-added products.
- Partner with Kansas State University to increase economic development of the specialty crop production in Kansas by developing and testing a survey instrument that assesses the economic impact of specialty crops growers by utilizing interviews, a preliminary survey, and post-survey focus groups.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Kentucky Department of Agriculture

Amount Awarded:	\$302,620.11	Number of Projects:	8	
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- Partner with the University of Kentucky to increase demand for Kentucky fruits, vegetables, nuts, and herbs by developing, disseminating, and demonstrating new recipes featuring local seasonal specialty crops to market Kentucky foods as part of a healthy lifestyle.
- Partner with Local Food for Everyone to promote and secure sales for local specialty crops producers by creating a promotional campaign targeting low income communities and a program to connect local specialty crop producers with local schools and other consumers.
- Partner with the Kentucky Alliance of Boys & Girls Clubs to increase learning about specialty crops in areas of Kentucky where they are not readily accessible and enhance youths' basic food knowledge about what produce is available by conducting field trips to local agriculture businesses and hosing guest speakers, integrating specialty crop activities into existing curricula, and facilitating hands-on gardening activities.

- Partner with the Kentucky Nursery and Landscape Association to increase the knowledge of our growers, retail operators, landscapers, and others involved in the green industry in Kentucky from topics such as nursery and greenhouse production, business management, disease & pest management, garden center/landscape maintenance, landscape installation and design, sustainability in the green industry, business management, and personnel training by offer industry education through an education conference.
- Partner with New Roots to increase knowledge and consumption of Kentucky specialty crops by families in Louisville's underinvested neighborhoods through direct marketing and leadership development.
- Partner with the University of Kentucky to increase specialty crop producer awareness and utilization of marketing
  programs, technical resources, and risk management resources by providing producers with trainings, workshops, and
  webinars.
- Partner with the University of Kentucky to identify the production potential of high quality apple cultivars that are currently grown in Kentucky by measuring sugar accumulation, Titratable Acidity, and juice pH to determine usefulness for the production of for hard apple cider.
- Partner with the Kentucky Blueberry Growers Association to introduce new blueberry value-added products into public schools and retail markets by increasing the capability of local blueberry producers to sort, wash, and dry blueberries that are marketed through the association.

#### Louisiana Department of Agriculture and Forestry

\$437,456.11

**Amount Awarded:** 

Partner with the Louisiana State University Agricultural Center to increase the marketability of Louisiana sweet potatoes by

**Number of Projects:** 

7

- studying the nutritional content of new sweet potato cultivars and providing this information to sweet potato producers for product labeling.
- Partner with the Louisiana State University Agricultural Center to increase marketability and sales of Louisiana specialty
  crops by providing specialty crop producers with training on using Good Agricultural Practices (GAP) and Good Handling
  Practices (GHP) with workshops which will give producers both the knowledge of these programs as well as the tools to
  implement them.
- Partner with the Louisiana State University Agricultural Center to promote the purchase of Louisiana specialty crops and improve youth nutrition by creating and promoting the Harvest of the Month program which will market the consumption of Louisiana specialty crops in schools and other institutions.
- Partner with the Louisiana Nursery and Landscape Association to increase the sale of specialty crops by providing nurseries with information that will increase their knowledge levels and help them adopt good agricultural practices.
- Partner with the Louisiana State University Agricultural Center to enable Louisiana specialty crop producers to increase sales and better market products by training growers them about Good Agricultural Practices (GAP) and Good Handling Practices (GHP) as well as how to use these good business practices to market their products through the Market Ready program.
- Partner with the Louisiana State University Agricultural Center to promote the production and sales of Louisiana olives by creating a demonstration olive orchard to study the varieties that will best grow in Louisiana and how best to nurture and raise them, followed by disseminating and promoting production with this knowledge.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Maine Department of Agriculture, Conservation, and Forestry

Amount Awarded: \$602,678.57 **Number of Projects:** 11

- Partner with AgMatters LLC to educate specialty crop growers about changes to produce safety rules as a result of the Food Safety Modernization Act and help them to successfully complete their specific Food Safety audit by providing technical assistance and food safety training for specialty crop producers.
- Partner with the Wild Blueberry Commission of Maine, in collaboration with the University of Maine, to reduce microbial loading on frozen processed wild blueberries by developing effective intervention technologies using chemical washing (chlorine, chlorine dioxide, lactic acid, and ozone).

- Partner with the Connecticut Department of Agriculture and Harvest New England Association, Inc. to break down the
  barriers to regional specialty crop purchases by educating producers at the Harvest New England Agricultural Marketing
  Conference and Trade Show, educating consumers at Harvest New England Days, and connecting wholesale buyers with
  wholesale specialty crop producers through five matchmaking meetings.
- Partner with the University of Maine to develop a successful hops industry by determining the best hops varieties for Maine and educating interested growers in sustainable hops production through workshops, fact sheets and videos posted online.
- Partner with the Maine Agriculture in the Classroom Council to increase consumption of specialty crops in the school cafeterias and purchases from local farmers' markets, farm stands and grocery stores by providing ready to use classroom lessons for teachers, hands-on experiential learning in the garden, and direct links to Maine's specialty crop producers.
- Partner with the Maine Maple Producers Association to develop a downloadable Hazard Analysis and Critical Control Points (HACCP) plan for maple producers; develop high quality promotional materials and customized displays for maple education and promotion through: improving the Maine Maple Producers website, integrating downloadable HACCP plan and conducting food safety workshops for Maine maple producers.
- Partner with the Maine Potato Board, in collaboration with the University of Maine, to ensure an adequate response to the pest-related hazards confronting potato growers by providing support for growers through field monitoring, disease forecasting, and distribution of educational materials associated with integrated pest management (IPM).
- Partner with the University of Maine to increase the amount of information on the effects of neonicotinoid insecticides and other pesticides on honeybees by developing a database of honeybee exposure, based upon pollen trapping, for six landscapes throughout Maine.
- Partner with the Maine Wild Blueberry Commission, in collaboration with the University of Maine, to decrease crop losses and increase revenues for wild blueberry growers by enhancing the integrated pest management (IPM) program for control of mummy berry and Botrytis blight through expansion of weather stations that provide forecasts on infection risk; developing a biological model of Monilinia vaccinii-corymbosi, the fungus which causes mummy berry disease; and investigating additional control materials to build fungicide resistance management into the mummy berry IPM system.
- Partner with the Maine Potato Board to enable potato growers to expand current rotation lengths while directly and indirectly improving potato yields by identifying potential crops that could be grown in conjunction with potatoes that would allow producers improved economic returns.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

# Maryland Department of Agriculture

Amount Awarded: \$504,518.56 Number of Projects: 7

- Collaborate with the Maryland Cut Flower Growers Association, Maryland Wineries Association, farmers' market masters,
  Mar-Del Watermelon Association, Maryland nursery producers, Apple Promotion Board of Maryland, and Christmas tree
  growers to strengthen consumer awareness of local specialty crops in Maryland and connect specialty crop farmers with
  markets by promoting Maryland specialty crops through mass media, direct partnership with Maryland specialty crops, and
  other strategic promotional avenues.
- Partner with the Maryland State Horticultural Association to increase consumer awareness of local and regionally produced peaches and their nutrient and dietary value by developing promotional materials, newsletters, and media pieces that feature Maryland's Best.
- Partner with Future Harvest Chesapeake Alliance for Sustainable Agriculture (CASA) to increase specialty crop producer awareness of land and water resources by conducting an educational programming track on fruit and vegetable production at an annual conference and offering workshops, tours, field days, and trainings.
- Stimulate interest in local specialty crop preparation, increase the quality of products available to school cafeterias, and provide Maryland youth the opportunity to make healthy choices and increase consumption of local fresh fruits and vegetables in their diets through the facilitation of a youth fruit and vegetable cooking challenge and other school promotional programs.
- Continue to mitigate specialty crop food safety risks by reducing barriers to implementing Good Agricultural Practices (GAP) programs though specialty crop producer technical assistance, training programs, one-on-one assistance on developing GAP programs, and U.S. Department of Agriculture GAP and USDA Harmonized GAP audit certification cost share assistance.

- Partner with the University of Maryland to increase the competitiveness of lettuce production in the Mid-Atlantic region by
  identifying heat-tolerant cultivars that could be used to extend the Mid-Atlantic growth season, by evaluating the
  performance of two vermicomposts that increase the yield and quality of lettuce crops, and by determining the food safety
  risks associated with using vermicomposts as soil amendments.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Massachusetts Department of Agricultural Resources

Amount Awarded: \$458,167.17 **Number of Projects:** 14

- Partner with the Massachusetts Association of Conservation Districts to reduce conflicts and accommodate Food Safety Modernization Act (FSMA) rules by providing education and outreach to row crop specialty crop producers.
- Improve maintenance and increase of specialty crop acreage in Massachusetts as well as the inclusion of best management practices at small to mid-sized farms by training Technical Support Consultants (TSCs) who will offer on-site technical assistance, practice consultation, and conduct preliminary audits.
- Partner with the University of Massachusetts Extension Food Safety Education Program to increase the number of specialty crop growers with Good Agricultural Practices and Good Handling Practices (GAP/GHP) certification and improve the knowledge of those who have already received certification by collecting and analyzing baseline data, and performing outreach to interested growers and currently certified growers.
- Partner with World Farmers, Inc. to build the capacity of immigrant and refugee farmers to grow and market their ethnic specialty crops in Massachusetts while also expanding the market for lalu, spider plant, and taro by providing hands-on food safety handling practices necessary to successfully market this produce and by establishing post-harvest handling practices.
- Partner with the Community Involved in Sustaining Agriculture, Inc. (CISA) to increase consumer knowledge and consumption of specialty crops by organizing four press/buyer events to showcase the diversity and attributes of local specialty crops.
- Increase knowledge and awareness of specialty crops in a new market of professionals by presenting information on specialty crops at conferences and consumer shows in the next year and increasing the number of professionals who are registered with the MassGrown website.
- Partner with the Massachusetts Nursery & Landscape Association and the Massachusetts Flower Growers Association to increase the sales of nursery, floriculture and horticulture crops by developing and implementing seasonally based, statewide, open house "Plant Something" Massachusetts events.
- Partner with the Sustainable Business Network (SBN) of Massachusetts to increase business opportunities and connections amongst the specialty crop community and local business owners by growing and enhancing the Specialty Crop Trade Show as the annual go-to Trade Show for local specialty crops in Massachusetts and New England.
- Partner with the Massachusetts Nursery & Landscape Association to improve knowledge of horticultural industry growers and consumer knowledge by updating the resource guide to include the newest Massachusetts regulations relative to nutrient management, water management and current pest problems.
- Partner with the Cape Cod Cranberry Growers' Association to improve cranberry grower nutrient management decision making by upgrading the BOGS Online Growers System to allow growers to come into and stay in regulatory compliance.
- Partner with the Connecticut Departments of Agriculture and Harvest New England Association, Inc. to break down the
  barriers to regional specialty crop purchases by educating producers at the Harvest New England Agricultural Marketing
  Conference and Trade Show, educating consumers at Harvest New England Days, and connecting wholesale buyers with
  wholesale specialty crop producers through five matchmaking meetings.
- Partner with the Northeast Organic Farming Association (NOFA) in Massachusetts, New Hampshire, and Vermont to increase the efficiency of production and profitability of specialty crops in Massachusetts, New Hampshire and Vermont by providing technical support for organic specialty crop farmers to complete crop-specific enterprise analyses; creating resources that will inform current and beginning farmers in their own business and management plans; and hosting workshops and field days for specialty crop producers.
- Partner with Nuestra Raices to teach kindergarteners the fundamentals of a healthy diet rich in fresh produce, learn to enjoy specialty crops that are popular and important to their culture, and bring these lessons home to their parents and caregivers by implementing in-classroom events, other school events, and field trips to local specialty crop farms.

• Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Michigan Department of Agriculture and Rural Development

Amount Awarded: \$1,992,661.51 Number of Projects: 30

- Partner with the Michigan Farm Bureau in Lansing, Michigan to increase asparagus farmer and laborer productivity and understanding of safety and food security by creating a video to train new and existing workers on the proper techniques of snap harvesting asparagus for each of our three market outlets; familiarize new and existing workers with OSHA, HACCP, and Good Agricultural Practices (GAP) rules and regulations as they relate to asparagus harvest; and distribute videos in both English and Spanish to MI asparagus farmers.
- Partner with Michigan Food and Farming Systems to increase understanding of the diverse food safety needs of Michigan specialty crop growers in various regions by performing a food safety needs assessment for Michigan specialty crop farmers, which focuses on the Food Safety Modernization Act (FSMA).
- Increase specialty crop producer understanding of compliance with laws rules governing septage hauling under NREPA Part 117, MIOSHA Field Sanitation rules under Part 500, and worker protection and food safety standards leading to enhanced market access by holding five training events with specialty crop producers and regulatory agencies in review and evaluation of potential risk reduction practices, including a PowerPoint presentation, poster board, and display panel each designed to train specialty crop producers on recommended practices and how to implement them, cumulatively reaching 100 specialty crop producers.
- Partner with the Michigan Christmas Tree Association to increase consumer interest in farm-grown Christmas trees by using social media to reach out to consumers encouraging them to purchase a Michigan-grown Christmas tree through providing visuals and written content that demonstrate the positive aspects of celebrating the holiday with a real Christmas tree.
- Partner with the Michigan Grape and Wine Industry Council to increase the Michigan wine industry's competitiveness as a recognized sustainable wine producing region by providing it with a detailed guide for the design, development, and implementation of a sustainability program for Michigan wineries and vineyards.
- Partner with the Commercial Maple Syrup Producers of Michigan to increase the competitiveness of Michigan's maple syrup industry on a national and international level and increase Michigan's market share due to the expanse of the untapped resources available by performing outreach, education, and market development activities.
- Partner with the Cherry Marketing Institute increase demand for tart cherries among fitness enthusiasts by conducting an online and print media campaign through fitness-focused publications.
- Partner with the Michigan Apple Committee to improve the competitiveness of fresh Michigan apples by using social media and in-store activities to develop consumer markets focusing on three strategic marketing priorities: leveraging the "locally-grown" movement; focusing consumer promotions on premium varieties; and promoting apples for health and nutrition benefits.
- Partner with the Michigan Apple Committee to increase demand for Michigan apples by implementing an advertising campaign in trade publications in order to reach retailers and other partners with information about the Michigan apple industry.
- Partner with the National Grape Cooperative Association, Inc. to produce a higher quality Niagara juice/concentrate than is currently being produced in Michigan by investigating two alternative methods to commercially prepare juices and concentrates: screw press that involves the use of paper and an extra heating process to extract remaining juice, and an alternate, more modern decanting process that utilizes centrifugation for juice extraction.
- Partner with the Michigan Floriculture Growers Council to increase consumer awareness that flowers, trees, and shrubs purchased in garden center are the best ways to protect pollinators in their yard and garden by conducting an informational campaign that includes best management practices, frequently asked questions, webinars, and other outreach activities.
- Partner with the Michigan Maple Syrup Association to increase public awareness and sales of maple syrup made in Michigan by implementing a media campaign that utilizes outdoor and print advertising materials and promotional events.
- Partner with the Michigan Potato Industry Commission to increase potato sales during winter months at participating Spartan Stores by educating the consumer through hosting a potato recipe competition.
- Partner with the Michigan Apple Committee, the Michigan Bean Commission and Cherry Marketing Institute to increase
  the sales and demand for Michigan specialty crops products in the export market by actively participating in foreign and
  domestic trade shows.

- Partner with Allen Neighborhood Center to increase the visibility of regionally grown specialty crops, particularly those produced by small and medium-sized growers, to consumers and institutional procurers by a general marketing campaign and the development of farm-specific materials.
- Partner with the Michigan Food and Farming Systems to reduce on-farm risks associated with water quality, environmental compliance, and food safety by connecting Spanish-speaking, U.S. citizen specialty crop farmers with existing resources through one-on-one technical assistance.
- Partner with the Institute for Sustainable Living, Art & Natural Design (ISLAND) to educate farmers about hops production, agroforestry and soil fertility by hosting conferences to increase awareness.
- Partner with the Michigan Vegetable Council to provide labor data to Michigan vegetable growers from the U.S. Department of Agriculture's National Agricultural Statistics Service survey through developing a questionnaire, sample lists and meeting with industry partners/growers.
- Partner with the Michigan Nursery & Landscape Association to improve the competitiveness of Michigan's nursery and floriculture industry by conducting a survey of nursery and floriculture growers.
- Partner with the Michigan Farm Bureau to facilitate long term planning for the Michigan fruit industry by developing and distributing data from a 2014 Fruit Inventory Survey.
- Partner with the Michigan State University Extension to develop recommendations for cost-effective and sustainable growing methods to produce high yields of high-quality winter squash grown using methods to minimize irrigation by testing no-till growing and harvesting systems for winter squash using control and experimental variables (till/no-till, cover crop, irrigation, and black plastic growing methods).
- Partner with Michigan State University to develop methods of hastening early growth of new blueberry fields by
  establishing field trials to determine whether Biochar (activated charcoal) or humic acid can hasten early growth of new
  plants.
- Partner with Michigan State University to encourage Michigan growers to transition from traditional low-density orchard systems to high-density tart cherry plantings that will optimize fruit quality, improve production efficiency, maximize land use, and increase farm profitability by investigating a new management system that will bring new plantings into production sooner, which will enable growers to see a quicker return on investment.
- Partner with the Lakeshore Environmental, Inc. and Peterson Farms to reduce the amount of freshwater used by fruit and vegetable processors and develop water repurposing information for stakeholders by conducting research and collecting data and conducting treatment technology testing.
- Partner with the Michigan Vegetable Council in collaboration with Michigan State University to increase yields, plant health, and to suppress insect pests of asparagus by building a long-term, economically and ecologically sustainable asparagus management strategy in the face of changing weather patterns and ongoing insect pest challenges.
- Partner with Michigan State University to increase the number of carrot growers using new disease management strategies to eliminate fungicide residues on the harvested root by testing alternatives for currently and newly-registered fungicides with emphasis on "soft" pesticides; testing the Tom-Cast forecasting system to time fungicide sprays using a wide range of active ingredients, and identifying processing carrot cultivars suitable for Michigan that are resistant to plant diseases.
- Partner with the Michigan Potato Industry Commission to reduce post-harvest losses of stored potatoes by conducting a laboratory analysis on four potato varieties to determine their susceptibility to and recovery capability from potentially damaging stress factors.
- Partner with the Michigan Bean Commission in collaboration with Michigan State University to improve dry edible bean yields by educating Michigan direct cut dry bean producers on preferred pre-harvest management strategies, identifying and publicizing preferred cultivars and teaching growers about pre-harvest "dry down" treatments.
- Partner with the Cherry Marketing Institute to provide vital and reliable weather information to Michigan fruit producers by replacing and modernizing existing weather station hardware at 16 heavily-used but aging station sites within Enviroweather's observing network.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Minnesota Department of Agriculture

Amount Awarded: \$1,396,923.43 Number of Projects: 16

- Increase sales of Minnesota specialty crops by creating innovative new promotional materials for wineries and vegetable growers, by creating new ads promoting apples, Christmas trees and berries, and by providing detailed information regarding apples, Christmas trees, pumpkins, berries and wineries in 170,000 copies of the Minnesota Grown Directory.
- Partner with the University of Minnesota to enhance economic and environmental sustainability of strawberry production by investigating innovative production systems that couple new strawberry cultivars with innovative organic production methods and educating specialty crop growers on using these systems to extend the season until October.
- Partner with the Minnesota Grape Growers Association to provide growers of cold hardy grapes information, techniques and best viticultural practices and methods of growing highest quality, cold hardy grapes for maximum economic gain and personal satisfaction by developing a publication and accompanying videos.
- Partner with the University of Minnesota Horticultural and local food researchers to encourage rural grocers to purchase
  locally grown specialty crops by developing a how-to guide for specialty crop farmers to sell their produce to rural grocers,
  developing a produce handling toolkit and deliver on-site training for rural grocers, and developing a local food buying
  guide.
- Partner with the Minnesota Fruit & Vegetable Growers Association to strengthen the specialty crop industry and local foods movement by providing comprehensive, individualized production and management instruction for beginning fruit and vegetable growers.
- Partner with Reviewing the Countryside to help specialty crop producers grow their businesses in a manner that leads to expanded specialty crop sales and increased profitability and sustainability by providing them with customized assistance.
- Partner with Farm Commons to increase stability and profitability of purchasing relationships by helping specialty crop farmers understand techniques for negotiating and drafting sales agreements that help all parties achieve their goals and comply with emerging regulations under the Food Safety Modernization Act.
- Partner with the University of Minnesota to create research-based management recommendations for leaf mold of high tunnel tomatoes by conducting research to characterize the biology and life cycle of the leaf mold pathogen, Passalora fulva, identify potential sources of the pathogen, and determine the ability of the pathogen to overwinter in Minnesota high tunnels.
- Partner with the University of Minnesota to reduce losses from downey mildew and sustain a viable hop industry by characterizing diseases of hops in Minnesota, evaluating management options for hop downy mildew control, and educating hop growers about viral and fungal diseases of hops and their management.
- Partner with the University of Minnesota to develop an in-field method of using spectral reflectance and chlorophyll content to determine potential infection of seed potato plants by Potato Virus Y (PVY), a viral disease of potatoes which, if present, precludes certification of seed potatoes, negatively impacting their commercial value.
- Partner with North Dakota State University to reduce lost profits and wasted food through the identification of blemish problems commonly found in tuber potatoes and develop agronomic practices.
- Partner with the University of Minnesota to promote potato production sustainability in the Midwest through validating biochemical markers to predict sugar end development under field condition for better storage management.
- Improve the competitiveness and sustainability of Minnesota fruit producers by determining the best Integrated Pest Management (IPM) practices for the economically damaging and invasive pest, the Spotted Winged Drosophila (SWD).
- Partner with Third Sector New England to research and test the market for cosmetically imperfect fruit and vegetables "seconds" grown by small and mid-size farmers in Minnesota through in-depth research with Minnesota fruit and vegetable growers and fresh-cut processors as well as market testing with area colleges and universities.
- Partner with Cooperative Development Services to increase specialty crop farmer knowledge of financial metrics pertinent
  to various food hub models by obtaining regional specialty crop-based food hub metrics, assessing the desires of Minnesotabased specialty crop participants, developing proforma templates for several types and scales of businesses, and
  disseminating the findings to specialty crop producers via web access and group seminars.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Mississippi Department of Agriculture and Commerce

Amount Awarded: \$481,130.08 Number of Projects: 18

• Create a Good Agricultural Practices and Good Handling Practices (GAP/GHP) cost share program to assist specialty crop producers receive certification as well as develop an educational video for producers to gain knowledge on what's involved with an audit.

- Partner with Mississippi State University to help avoid contamination when utilizing poultry litter on sweet potato fields by investigating the presence of pathogenic bacteria pre and post production to establish best practices.
- Partner with the Mississippi Association of Cooperatives and Alcorn State University to host a Specialty Crop Food Safety Conferences to educate specialty crop producers, students and consumers on the rules of the U.S. Food and Drug Administration (FDA) Food Safety Modernization Act.
- Partner with Farm Families of Mississippi (Mississippi Farm Bureau) to increase specialty crops sales by implementing a
  promotional campaign that educates the public about the benefits of buying and consuming locally grown and produced
  specialty crops.
- Continue the Mississippi Certified Farmers Market Program to identify and promote local farmer's markets in order to increase the sale of Mississippi grown fruits, vegetables, and plant materials processed in Mississippi.
- Partner with Mississippi State University to create awareness of Mississippi-grown sweet potatoes in order to facilitate an increase in demand and sales by attending the Produce Marketing Association Fresh Summit Trade Show.
- Partner with Mississippi State University to improve fruit production and sales by conducting heritage fruit tree grafting workshops and to promote the propagation and use of heritage fruit for homeowners.
- Partner with Mississippi Fruit and Vegetable Growers Association to enhance the growers' conference to better educate new and existing farmers on how to grow specialty crops, sharing with participants the latest techniques and relevant information to growing specialty crops in Mississippi.
- Partner with Mississippi State University to educate growers on how to begin growing specialty crops, develop successful farm businesses crop's best suited greenhouse agriculture, and train county agents on greenhouse crop production.
- Partner with Mississippi State University to increase the production and sale of local grapes by conducting grower workshops on of bunch grape production best practices.
- Partner with the Piney Woods School to educate student on the benefits and production practices of inter-planting specialty crops using a greenhouse and high tunnel systems.
- Partner with Mississippi State University to increase production of Mississippi grown strawberries by sharing the knowledge gained through field cultivar and timing trials and the hosting of a strawberry production field day.
- Partner with Mississippi State University to increase the sale of locally produces blueberries by performing research on the demand for alternative blueberry products as well as develop marketing strategies in order to maximize the sale of the blueberry products most in demand.
- Partner with Mississippi State University to increase the production of local blueberries by conducting research into potential for using high tunnel systems to grow organic.
- Partner with Mississippi State University to investigate the presence of Macrophomina phaseolina pathogens in sweet potatoes and then disseminate this information out to Mississippi sweat potatoe producers
- Partner with Mississippi State University and Mississippi Nursery and Landscaped Association to increase sales through the Mississippi Medallion "Deer Proof" Plant program by identifing "deer resistant" plants and by educating retinal garden centers and nurseries on their usage.
- Partner with Mississippi State University to increase sweet potato production by establishing which plastic mulch system has the most effective Photosynthetically Active Radiation (RAP) penetration to eliminate weed growth in sweet potato beds.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

# Missouri Department of Agriculture

Amount Awarded: \$459,255.77 Number of Projects: 15

- Increase the supply of Missouri grown fruits and vegetables in wholesale and commercial markets by increasing the number of Good Handling Practices (GHP) certified facilities and Good Agricultural Practices (GAP) certified producers.
- Partner with the University of Missouri to develop marketing options for Missouri wine and grapes by developing wine trails, wine passport programs, and a new appellation.
- Partner with the Webb City Farmers Market to address the need for fresh and processed fruits and vegetables for winter farmers' markets in southwest Missouri by offering specialty crop producers 2-day conferences and a 2-day Better Processing School.

- Partner with the Missouri Vegetable Growers Association to maximize the availability of honey bee colonies for commercial vegetable production by conducting beginning and advanced beekeeping workshops throughout the state.
- Partner with Kansas City Community Gardens, Inc. to assist low-income families and community groups grow fresh fruits, vegetables, and culinary herbs in order to improve community access to healthy foods by (1) increasing child and adult nutrition knowledge and consumption of specialty crops; (2) improving food access in underserved communities; and (3) promoting organic and sustainable production practices.
- Partner with Lincoln University to increase awareness of wild leeks and other native edible plants and their uses, protect natural populations, develop value-added products, examine nutrient content, and promote production and consumption by educating, conducting outreach, and establishing demonstration plots at Lincoln University campus and small farms in Central Missouri and the Bootheel region.
- Partner with the Columbia Farmers Market to improve youth education and consumer awareness of specialty crops by developing a youth education club that rewards learning about specialty crops and train consumers how to incorporate more specialty crops into their diets.
- Partner with the Missouri River Communities Network to expand the number of specialty crops growers and the amount of specialty crops grown in the Missouri River Valley by (1) developing and implementing a Specialty Crop Food Assessment inventory for specialty crop producers in the Missouri River Valley; (2) creating a database housing relevant specialty crop information; (3) conducting three training workshops demonstrating "How to Organize a Specialty Crop Local Food Festival in Your Community", and (4) developing and conducting two workshops: "How to Organize a Community Food Circle to Maximize Specialty Crops Marketing in Your Community" and "Planning a Food Hub to Enhance and Grow the Market or Specialty Crops in Your Area".
- Partner with EarthDance Organic Farm School to establish pawpaws as a viable specialty crop in Missouri by planting a pawpaw orchard and providing farmer training and consumer education.
- Partner with the University of Missouri to increase awareness of elderberry juice characteristics and flavor attributes using sensory analysis of six different cultivars by providing new information to elderberry producers, Extension personnel, and researchers.
- Partner with Missouri State University to increase knowledge of the genetic determinates of the complex agronomical trait (rooting ability) and any factor that promotes or constrains rooting ability; and to develop guidelines that allow the incorporation of rooting ability as a selection criterion in strategic or operational breeding plans by studying the vegetative propagation capacity of the Vitis aestivalis-derived "Norton" grape and by conducting genetic mapping of V. aestivalis grapes bred with V. vinifera populations.
- Partner with Lincoln University to enhance the production of many specialty crops (specifically small fruit crops) by improving the current monitoring systems for Spotted Wing Drosophila (SWD).
- Partner with Missouri State University to improve varietal grapes that are capable of producing quality wines by evaluating seven new grape varieties for viticulture traits, such as being disease resistant and tolerable to harsh climates.
- Establish an insecticide cost-share program for specialty crop producers that incorporates additional management practices that minimize damage from Spotted Wing Drosophila (SWD) on small fruits
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Montana Department of Agriculture

	Amount Awarded:	\$990,939.77	<b>Number of Projects:</b>	11
•	Partner with the Lake County Comm	• 1	1 2 1 1	C

- FSMA (Food Safety Modernization Act) and market opportunities for local food hub specialty crop producers to access institutional markets by implementing Group GAP (Good Agricultural Practices) and QMS (Quality Management Systems) programs, training additional RIV (regional independent verifier) auditors, and providing information via meetings, radio, and print articles.
- Partner with Headwaters RC&D Area, Inc. to increase Montana's specialty crop producers' and processors' ability to compete in a changing market environment where food safety compliance (with the Food Safety Modernization Act) is paramount by providing educational programs, technical assistance, and building an online library of affordable remote training and reference resources.

- Partner with the Montana Nursery & Landscape Association to increase sales of Montana-grown, regionally adapted landscape plant material by implementing a "Plant Something" campaign educating the public about proper plant choices, planting, and placement of nursery stock through a consumer-awareness campaign consisting of a website, social media, a printed buyer's guide, and certified plant professionals at retail nurseries.
- Partner with Montana State University to provide pulse crop (lentil, chickpea, dry pea) growers with more information about disease management by developing a molecular detection technique to discriminate between isolates that are tolerant and susceptible to strobilurin fungicides.
- Partner with Montana State University to provide Montana seed potato growers with information via seminars and publications regarding potato virus Y (PVY) resistance in later generational potatoes by determining generational and variety susceptibility of potato to PVY, evaluating commercial biological control agents and known plant defense inducing compounds, and identifying mechanisms of PVY resistance in later generation potatoes.
- Partner with Montana State University to perpetuate the genetic of heritage orchard trees by sampling, analyzing, identifying, preserving, and propagating the heritage trees and selling them to the public, as well as creating a website and smart phone application to locate heritage orchard trees.
- Partner with Montana State University to provide information regarding the potential to expand Montana strawberry production by conducting field trials evaluating three varieties in three production systems (annual high tunnel, annual field, and conventional matted row) at six locations across Montana, and disseminating the research results to the specialty crop industry via Extension Bulletins, field days, and an online blog.
- Partner with Montana State University to increase yield and quality of Montana-grown vegetables by increasing knowledge
  of varietal trait differences and increasing adoption of better-adapted varieties by conducting variety field trials and sharing
  the results with specialty crop stakeholders via site tours, a journal article, social media, presentation at the 2016 Northern
  Plains Sustainable Agriculture Society and other consumer and producer outreach events.
- Partner with Montana State University to increase the understanding of virus transmission routes adversely affecting honey bee pollinators by determining which virus strains are present and prevalent in Montana and investigating the mechanisms of virus transmission using molecular biology techniques.
- Partner with Montana State University to identify productive and profitable novel fruits that diversify Montana's agricultural base by conducting field trials at 4 locations and disseminating the results via their website, yearly field tours, workshops, an extension Mont-guide and a peer-reviewed journal article.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Nebraska State Department of Agriculture

Amount Awarded: \$599,691.19 Number of Projects: 17

- Partner with Old Cheney Road Farmers' Market to conduct educational workshops to specialty crop producers and consumers to increase supply and demand of specialty crops at the Holiday Harvest Farmers' Market.
- Conduct a survey to establish that Nebraska potatoes production in free from Columbia Root Knot Nematode to facilitate international marketing opportunities.
- Partner with the Douglas County Health Department to increase access to locally grown fruits and vegetables to Douglas County residents in identified food deserts by implementing farm-to-institution practices that include featuring locally grown produce will be conducted across the four participating stores by a nutrition educator; developing and providing training materials, promotional tools, and toolkits to store owners to increase their knowledge on the range of farm-to-store implementation strategies for fruits and vegetables; and helping them to incorporate strategies of farm-to store practices into their business models.
- Conduct a survey to identify the presence of Japanese Beetle among Nebraska Specialty Crop production areas and to maintain a Category 2 status (partially infested) under Japanese beetle Harmonization Plan.
- Partner with the University of Nebraska to increase farmer awareness of temperature inversions and herbicide drift by designing, installing, and monitoring the effects of temperature inversion has on herbicide drift and educate them about its effects.
- Partner with the University of Nebraska-Lincoln to increase the consumption of dry edible beans by investigating
  extrusion—a processing technique that involves pressure, shear, and heat—to create a ready-to-eat snack and a pasta
  product from beans that contain increased in vitro magnesium bioaccessibility, which is an indicator of bioavailaibility in
  vivo.

- Partner with BeeHaven Farm Roadside Market to increase production and revenue for specialty crops by determining a set of best management practices and using forced air geothermal greenhouse technology.
- Conduct a survey to identify and monitor the presence of Thousand Cankers disease (TCD) with in the Nebraska walnut stands, to maintain a pest free status.
- Partner with Potato Certification Association of Nebraska (PCAN) to establish a Potato Psyllid monitoring system to determine a pest management program to control the pest and the diseases caused by the pest.
- Partner with McFarland Family Farms to enhance quality of fruit by elimination harmful contaminants by developing application procedures of ozone spray in vineyard and orchard and determining the levels of ozone required to be effective to eliminate fruit diseases.
- Partner with the Potato Certification Association of Nebraska to establish an aphid monitoring network, using several trapping methods to better inform potato producers of the presentence of aphids, to allow produces opportunities to implement the proper pest management process to control the pest.
- Conduct a survey to identify and monitor the presence or absence of Potato Cyst Nematode with in the Nebraska potato fields to maintain a pest free status so Nebraska grown potatoes can continue to be sold into international markets.
- Partner with the University of Nebraska's Lincoln Panhandle Research and Extension Center to identify the various diseases that could be encountered during the production process of growing dry yellow peas; and to increase growers' awareness of the potential diseases and how to manage dry yellow peas in the case of an outbreak.
- Partner with the University of Nebraska Lincoln's Panhandle Research and Extension Center to identify production parameters for fenugreek for optimal seed yield in Nebraska's Panhandle by investigating the optimal irrigation level in fenugreek.
- Partner with the University of Nebraska's Lincoln Panhandle Research and Extension Center to develop the technology and determine the economic feasibility to grow high yielding potato crop with high dry matter under dryland conditions using sustainable agriculture practices using potatoes varieties that are high in starch.
- Partner with the Nebraska Hop Growers Association to enhance producer knowledge of hops grown in Nebraska through training and providing consultation to hops growers and implementing electronic and print marketing strategies.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Nevada Department of Agriculture

Amount Awarded: \$301,441.48 Number of Projects: 14

- Partner with the University of Nevada Cooperative Extension to inform specialty crop producers about economically viable food safety practices giving them a realistic estimate for farm planning and marketing activities by quantifying the costs associated with implementing food safety practices and assessing the levels of adoption.
- Partner with the Great Basin Community Food Cooperative to increase consumer awareness, appreciation, and demand for Nevada grown specialty crops by using a mobile app that provides an engaging platform for the people of Northern Nevada to directly connect with their specialty crop producers and their products.
- Elevate the presence and awareness of Nevada's specialty crops online by producing and airing videos featuring Nevada specialty crop producers, growers, and retailers.
- Partner with the Greenhouse Project to increase student awareness of Good Agricultural Practices and Good Handling Practices (GAP/GHP) and sustainable field production techniques for specialty crops by developing a student-run community supported agriculture (CSA) program in which students, Nevada's future specialty crop farmers, learn about growing vegetables, food safety procedures, marketing products and farm production business skills.
- Partner with the Main Street Gardnerville Program Corporation to increase nutrition knowledge and consumption of specialty crops by facilitating a nutrition workshop and community garden where parents of participating families will learn the value of freshly harvested fruits and vegetables.
- Partner with the Academy of Arts, Careers and Technology and Urban Roots to increase interest in and demand for specialty crops in the Washoe County School communities by developing and implementing a curriculum focused on educating educate children in the K-12 system about the variety of crops that are available to them and how to grow, harvest, eat and sell their own healthy produce.

- Partner with the Lincoln Communities Action Team to enhance the economic viability of Nevada specialty crop producers and entrepreneurs by introducing business concepts, and specific expertise in creating and marketing simple value-added products through a series of workshops.
- Partner with Urban Roots to promote an economically sustainable beekeeping network in northern Nevada by providing general guidelines to the overall farming and gardening community to identify beekeeping techniques that are unique to our high-altitude, dry climate and relevant to season extension farming in Nevada.
- Partner with the High Desert Farming Initiative to increase Nevada farmers' agricultural and economic knowledge to successfully grow raspberries in hoop houses by creating a document outlining the best practices for growing raspberries in hoop houses in the harsh Nevada climate.
- Partner with Lazy P Adventure Farm to increase pumpkin production in Nevada by conducting a study to identify viable
  varieties of pumpkins and cultural practices that will prosper in our local climate, soil conditions, growing season and offer
  resistance to pests and diseases.
- Partner with Urban Roots to encourage and guide producers to grow hops successfully by conducting variety trials to identify hop varieties that will thrive in Nevada's high desert ecology and yield highly desirable qualities for Nevada brewers.
- Partner with the Tea House Gardens to identify, restore, and return local heritage apple groves back into production by soliciting heritage apple grove owners to participate in a multiyear renewable agreement to receive volunteer horticultural services in exchange for a portion of their crop; recruiting, managing, and training community volunteers to learn and practice horticultural restorative care, pest control, and maintenance of enrolled apple groves; and presenting an annual community cider-making event that promotes the project while engaging community members in making and sharing fresh cider.
- Partner with the High Desert Farming Initiative to increase cost-savings for specialty crop producers in Nevada by offering farmers an organic propagation service in Reno, Nevada at a limited cost to farmers.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### New Hampshire Department of Agriculture, Markets and Food

Amount Awarded: \$273,101.12 Number of Projects: 10

- Partner with Small & Beginner Farmers of New Hampshire to increase knowledge on the part of specialty crop growers of food safety issues inherent in greens and root vegetable production from field to market by preparing small and beginning specialty crop growers in New Hampshire for anticipated changes in food safety regulations through focused workshops and improving their food handling practices in a safe, timely and economical manner by provide access to expensive, otherwise unattainable equipment.
- Partner with the University of New Hampshire Cooperative Extension to enhance resource tools available to specialty crop producers by becoming more aware of their food safety knowledge, information and resource needs through a needs assessment survey and then developing a Farm Food Safety Toolbox based on the results from the assessment survey.
- Partner with the New Hampshire Farmers Market Association to increase public awareness by targeting a group of consumers who potentially understand the importance of buying locally grown vegetables, blueberries, peaches, and many of the specialty fruits grown in New Hampshire, along with other specialty crops such as local honey, local wines and maple syrup through on-air radio messages and a web banner on the local radio station website.
- Increase awareness and sales of New Hampshire specialty crops by developing and implementing a multi-media advertising campaign (TV, internet, print, social media) centered on the established New Hampshire's Own brand and with a specialty crop emphasis.
- Partner with Merrimack County Conservation District (MCCD) to increase customer base at winter farmers' markets through greater outreach and education to the public by improving promoting the use of Supplemental Nutrition Assistance Program (SNAP) benefits for fruit and vegetable purchases and offering educational workshops at winter farmers' markets and social service agencies to help families learn how to prepare and cook fun, nutritious, and tasty fruits and vegetables that can be purchased locally.

- Partner with the Northeast Organic Farming Association (NOFA) in Massachusetts, New Hampshire, and Vermont to
  increase the efficiency of production and profitability of specialty crops in Massachusetts, New Hampshire and Vermont by
  providing technical support for organic specialty crop farmers to complete crop-specific enterprise analyses; creating
  resources that will inform current and beginning farmers in their own business and management plans; and hosting
  workshops and field days for specialty crop producers.
- Partner with the Connecticut Department of Agriculture and Harvest New England Association to increase the purchases
  and sales of New England grown specialty crops by improving the marketing skills of New England farmers, increasing the
  demand of New England grown produce by New England consumers, and enabling direct buying opportunities through oneon-one meetings between buyers and wholesalers.
- Partner with the University of New Hampshire Cooperative Extension to increase knowledge on which table grape cultivars are best adapted to New Hampshire and which training systems that are best suited (most effective, least laborious) for use with these cultivars by evaluating eight table grape cultivars under three training systems: vertical-shoot positioning, top-wire cordon and modified Munson, and this information will be disseminated through workshops to growers and on-farm twilight meetings throughout the region.
- Partner with the University of New Hampshire Cooperative Extension to establish fertility recommendations for basil, dill, parsley, and cilantro in order to meet and increasing demand for year-round access to locally-grown culinary herbs in New Hampshire by investigating the nutritional needs of hydroponically produced culinary herbs and to establish fertility recommendations for basil, dill, parsley, and cilantro.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### New Jersey Department of Agriculture

Amount Awarded:	\$813,342.55	Number of Projects:	13	
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- Partner with the Cumberland County Board of Agriculture to increase awareness of New Jersey grown specialty crops by
  offering a workshop in direct marketing skills to Cumberland County specialty crop producers, staffing a booth at the
  Cumberland Country Fair to distribute brochures and promote specialty crops, purchasing billboard space that promote
  specialty crops on major highways in the county, and creating a Facebook page and Twitter account dedicated solely to
  specialty crops.
- Increase the sale of Jersey Fresh specialty crop products by marketing Jersey Fresh in print and television advertisements which will culminate in an increased awareness of Jersey Fresh products.
- Partner with the New Jersey Nursery & Landscape Association, Inc. to increase New Jersey plant sales by implementing a "Plant Something" marketing campaign, which will include the development of a traditional, electronic and social media messaging campaign.
- Partner with the New Jersey Peach Promotion Council to increase awareness and maintain sales of New Jersey peaches by implementing a marketing campaign that promotes them through print media and various promotional events.
- Partner with the New Jersey White Potato Association to increase consumer awareness and therefore also increase sales of New Jersey potatoes by photographing local potato farmers at their own farms and designing promotional signs with these photos that will be distributed to approximately 750 retail locations over a period of two years.
- Partner with the Cape May County Beach Plum Association, Inc. to increase the knowledge and awareness of the beach
  plum through hands-on courses on hydroponic growing of beach plums, determining which variety will be the best product
  to introduce to the market, marketing and promotion of the beach plum, and educating members of the community on the
  beach plum during meetings.
- Partner with the New Jersey Agricultural Society to increase the knowledge of specialty crop production among agricultural professionals by creating a course which includes tours to specialty crop farms (cranberry, nursery crops, wine, honey and other specialty crops) and workshops related to specific specialty crop commodities.
- Partner with the New Jersey Farm Bureau to increase the knowledge of urban specialty crop growers with food production practices through training, education and utilization of high tunnel/small urban greenhouse structures.
- Partner with Rutgers New Jersey Agricultural Experiment Station to increase the use of low-tunnels to extend the growing season for specialty crops (strawberries, kale, collards and mustard greens) through analysis of the effectiveness of low-tunnels with these specific specialty crops and then using educational videos to improve the knowledge of specialty crop farmers in using low-tunnels.

- Partner with the New Jersey Beekeepers Association to increase knowledge on the location, quantity, and number of
  pesticides to which honey bee colonies are exposed by analyzing fresh pollen from five colonies in each of the five land use
  areas in New Jersey to obtain scientific data that will demonstrate areas of the state in which honey bees are less exposed to
  pesticide contaminated pollen.
- Partner with the New Jersey Blueberry Growers Association to minimize crop and economic losses resulting from invasive and other pests, improve the effectiveness of the pesticide resistance program, and increase public understanding of Integrated Pest Management (IPM) systems by collecting data from traps set within selected crops, training growers on fruit evaluation methods and providing them with treatment and resistance management plans, and distributing IPM information cards to farm markets.
- Partner with the Outer Coastal Plain Vineyard Association to mitigate the severity of insect pest damage to wine grapes in New Jersey through collection and analysis of soil and leaf surveys and culminating with the identification of the key insect pests impacting the New Jersey wine industry.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### New Mexico Department of Agriculture

Amount Awarded: \$550,749.99 Number of Projects: 9

- Increase New Mexico specialty crop sales and consumer awareness by enhancing the exposure and awareness of New Mexico specialty crop food and beverage products to at least 40 New Mexico companies involved with specialty crops through in-state promotions.
- Partner with the New Mexico Dry Onion Commission to increase sales of New Mexico specialty crops through participation in 2014 and 2015 trade shows.
- Increase the market share of New Mexico Green Chiles by identifying new markets, stores in each market and volume sold with focus on regional and national expansion during the 2015/2016 harvest through: webinars, roasting programs, technical seminars, in-store demonstrations and educational outreach regarding heat levels.
- Partner with the New Mexico Farmers' Marketing Association to increase sales of specialty crops among low-income Supplemental Nutrition Assistance Program (SNAP) recipients in four low-income/low-access counties (Rio Arriba, San Miguel, Dona Ana and Hidalgo) by developing and hosting trainings, providing seminars, and implementing a targeted multi-media advertising campaign for locally grown specialty crops.
- Partner with Not Forgotten Outreach to increase sales of specialty crops grown by new specialty crop (veteran) farmers through the implementation of a military veteran training program that that prepares them to grow and profit from specialty crop production.
- Partner with Rio Puerco Alliance to increase economic opportunities for Zia, Laguna, and Tri-chapter area of Eastern Navajo tribes through developing sustainable nurseries that will provide local culturally appropriate jobs by growing native plants that can be sold locally to larger nurseries.
- Partner with New Mexico State University to expand weed control options available to chile pepper growers in New Mexico by determining crop injury to post-direct, shielded applications of flumioxazin in direct-seeded chile pepper.
- Partner with New Mexico State University to demonstrate the potential of organic apple high density planting and to evaluate its possible challenges in New Mexico by evaluating rootstocks and recommend suitable rootstocks for high density organic apple production in New Mexico; employing the tall spindle system and examine the challenges of using this system in organic high density apple production in New Mexico; and disseminating the results to growers through publications, field days, and presentations at conferences.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### New York State Department of Agriculture and Markets

Amount Awarded: \$1,417,712.46 Number of Projects: 15

- Partner with the New York Apple Association to increase awareness of and the competiveness of New York apples and apple products by implementing a marketing campaign that engages an influential cross-section of the downstate public through sampling, education, and agritourism promotion at high-visibility transportation and marketing hubs and utilizes in videos, e-blasts, online advertising and in social media.
- Partner with Cornell University Cooperative Extension of Broome County to increase sales of New York State specialty crops produce in the Broome-Tioga BOCES institutional food service lunch program through a targeted messaging campaign combined with taste-testing and surveys with students.
- Partner with Rensselaer County to increase the number of New York's Capital Region specialty crop producers and their sales by implementing a regional marketing campaign that educates consumers about the availability of locally grown specialty crops via regional website and social media and develops a how-to guide for social media that assists specialty crop farmers' produce in conveying their message to consumers.
- Promote the Good Agricultural Practices (GAP) audit as the best way to prepare for new regulatory programs and standards to be implemented under the Food Safety Modernization Act (FSMA) by developing a website and videos that introduce GAP to farms who currently are not participating.
- Partner with Cornell University to reduce onion producers growing losses due to bacterial decay by identifying when plants
  are initially colonized and how the disease develops as well as testing materials that might reduce losses from bacterial
  disease.
- Partner with Cornell University to control late blight, early blight, and Septoria leaf spot on New York tomatoes by creating lines and hybrids that have genetic control of these diseases, produce higher quality, larger fruit on better clusters, and are adapted to New York conditions and growing practices.
- Partner with Cornell University to reduce winegrape management costs by determining the impact of seven competitive annual cover crops planted directly under Noiret vines on production costs, vine size, and wine quality.
- Partner with Cornell University to protect oaks for nursery crop growers from damage caused by Ceratocystis fagacearum, an exotic oak wilt pathogen, by determining the extent of the pathogen's presence in New York's red oak population and understanding its potential for spreading or reintroduction.
- Partner with Cornell University to increase vineyard profitability, reduce production uncertainties, and enhance the competitiveness of the New York grape and wine industry by determining the effect that GRBaV (grapevine red blotch-associated virus) has on vine vigor, fruit yield and fruit quality, understanding how the virus spreads, developing crop budgets to assess the cost of red blotch disease management, and raising awareness in the grape and wine industry.
- Partner with Cornell University to reduce production costs and provide consistent plant stands by developing effective vermicompost seed treatments specifically aimed at reducing crop mortality rates due to damping-off fungi and allow for direct seeding as opposed to transplanting that can be used for organic sweet corn production.
- Partner with Cornell University to develop and implement an environmentally and economically sound strategy for managing thrips (the major pest to New York onions) by comparing the effectiveness of the novel integrated pest management (IPM) program with the standard thrips management program.
- Partner with Cornell University to establish effective programs to protect hops from the threats posed by powdery and downy mildews by establishing the quantitative susceptibility of major varieties to powdery and downy mildew, essential details of pathogen survival, reproduction, and dissemination, and an integrated and effective program to manage the foregoing diseases under New York conditions.
- Partner with Cornell University to mitigate sour rot in vineyards by establishing the microbial causes of Sour Rot, the role fruit flies play in its development and spread, and designing and implementing a management program based upon these biological findings.
- Partner with New York State Integrated Pest Management (IPM) Program to increase producer knowledge of the most up-todate, legally allowed IPM protocols for certified organic producers of specialty crops by updating 12 existing production guides for organic specialty crops.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### North Carolina Department of Agriculture and Consumer Services

Amount Awarded:	\$1,175,219.50	Number of Projects:	15	
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- Partner with Carolina Farm Stewardship Association to increase specialty crop farmers' access to markets by meeting buyer's requirements through the development of a food safety consultation and support program and the establishment a model for community-based, sustainable farmer-friendly food safety quality management systems (QMS).
- Maintain the participation in Good Agricultural Pactices (GAP) certification in North Carolina by reducing the extra cost of certification for growers by providing assistance certification assistance. This certification is a requirement of major retail stores and this certification will open the door for these growers to increase sales.
- Partner with Farmer Foodshareto increase the capacity to support specialty crops farmers by developing and implementing online software and upgrading the website to handle it in order to streamline sales and record keeping required to track transactions of farmers who agree to supply their grade 2 and 3 fruits and vegetables to hunger relief organizations and people who have little access to local produce.
- Partner with North Carolina Christmas Tree Association to address the declining prices and sales of Frasier Fir Christmas trees grown in North Carolina by launching a marketing campaign to promote the industry.
- Partner with North Carolina Nursery & Landscape Association to increase awareness of professional certifications and enhance knowledge, skill and experience of the North Carolina nursery and landscape industry by developing a social media marketing campaign to promote certifications and through introducing a Certified Young Plant Professional (CYPP) a new high school level certification.
- Partner with North Carolina State University (CENTERE) to support and expand the reach of NC SPA's "Sod For Success" and "Go Green Buy Local" campaigns through a major television station's (WRAL)'s website. This site will be created for NC SPA to promote a new online educational feature focusing on lawn improvement to enhance the educational promotional campaign of North Carolina Turfgrass Sod.
- Partner with the North Carolina Vegetable Growers Association to increase awareness of North Carolina produce and flowers by launching an advertising campaign to draw attention to the industry.
- Partner with Carolina Farm Stewardship Association to improve the competitiveness of North Carolina specialty crop producers seeking to take advantage of the high-value market for organic produce by providing farmers with the tools they need to transition to certified organic production.
- Partner with North Carolina State University to revise and update the blueberry production guide, and to produce updated budgets for both large farms and small farms due to so many changes in the cultivar, supply and equipment costs this upfront knowledge is critical to the growers success.
- Partner with North Carolina State University to evaluate the stability of butternut varieties in different North Carolina production conditions and publish this information in a manner tailored to growers and potential growers in order to obtain best economic returns, as well as conduct a two day in-service workshop for 20 county extension agents
- Partner with Appalachian State University to conduct a study to identify apple varieties that grow well in the region and produce high quality apple cider, to provide guidelines for low-input cultivation of apples through Integrated Pest Management (IPM) practices, evaluate the cold storage potential of such apple varieties, and provide access to cuttings for grafting and information on cultivation practices.
- Partner with North Carolina State University to identify, collect, virus-test and propagate old and new cultivars, in order to provide growers with a reliable source of true-to-type productive muscadine grape plants and sell them to nurserymen who wish to establish vines.
- Partner with North Carolina State University to identify practical and cost effective methods to ensure seedlings are inoculated with the proper fungus and to measure the extent of colonization of the black Perigord truffle fungus in the orchard soil to assure faster orchard production.
- Collect the biological information necessary to establish the baselines in order to implement an integrated pest management program for the eradication of sweet potato weevil (Cylas formicarius) (SPW) populations in North Carolina.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### North Dakota Department of Agriculture

Amount Awarded:	\$3,153,470.64	<b>Number of Projects:</b>	37	
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- Partner with the Entrepreneurial Center for Horticulture at Dakota College at Bottineau to increase the number of small to
  mid-sized vegetable and fruit growers trained in farm food safety and beginning direct to consumer sales venues by
  providing farm food safety classes including training on Good Agricultural Practices and Good Handling Practices
  (GAP/GHP), preparation of farm food safety plans, farm business management, marketing, crop production, season
  extension and more.
- Increase awareness of specialty crop production that builds the local foods movement and connects a community of supporters through social media outreach, restaurant program, radio promotion, and photo library.
- Partner with the North Dakota Trade Office to increase sales of peas, beans, lentils, and confectionary sunflowers by conducting three outbound trade missions to Italy-Croatia, Colombia, and Israel, conducting one inbound trade mission for top prospects from each country to North Dakota, meeting prospective buyers in each of the four targeted countries, and increasing the U.S. and North Dakota market share in each country.
- Promote and increase sales for North Dakota's specialty crops internationally by connecting specialty crop exporters, commodity groups, and producers with foreign buyers through food export trade/buyers missions.
- Partner with the Northern Pulse Growers Association to increase the usage of the region's peas, lentils and chickpeas in consumer's diets and to provide strong evidence of glycemic index (GI) of pulse in food items, by developing new low GI products with pulse flours including pasta, cookies, muffins, bread, crackers, quick bread, and extruded snack and snack bars, providing in vivo evidence showing the benefit of pulse flour to glycemic response, and promoting the benefit of pulse flours to the food industry.
- Partner with the Dakota Prairies Resource Conservation & Development Council to grow and strengthen the Helping Hands Community Garden in Fort Yates and create the new Garden to Table Greenhouses in Cannon Ball by increasing child and adult nutrition knowledge, increasing the consumption of locally-grown specialty crops to improve residents' health, and providing freshly dehydrated and vacuum sealed fresh fruits and vegetables to the reservation's residents that will be easy to store and consume during the winter when access to fresh food is difficult and expensive.
- Partner with North Dakota State University Williston Research Extension Center to educate the public about growing hops in the Upper Midwest by providing research results and disseminating the information with hop production management and variety recommendations to interested parties.
- Partner with North Dakota State University to provide specialty crop beneficiaries with essential updated and current information on cultivar selection, root stock selection, best management practices and culinary uses by providing best management practices based on organic vs. conventional apple orchard production, determining disease pressures on apple (ornamental and edible) across North Dakota affecting commercial and residential plantings, conducting varietal trials of edible and ornamental apple cultivars that are potentially suitable for use in North Dakota, conducting rootstock trials that are potentially suitable for orchard (commercially and residential) and landscape use, and understanding how to balance weed control and soil quality for optimal tree performance, fruit yield and quality in a new apple orchard in North Dakota.
- Partner with the National Sunflower Association to develop super confection sunflower germplasms with down mildew
  (DM) resistance combined with rust resistance by incorporating DM resistance identified in oil-type sunflower into
  confection sunflower, molecular mapping of DM resistance genes, and pyramiding DM and rust resistance genes in a single
  genetic background.
- Partner with North Dakota State University to assess whether any herbicides commonly used in a wheat/field pea crop rotation are associated with increased severity of Fusarium root rot of peas by conducting field experiments on land with a history of the disease to empirically test the impact of common herbicides on it.
- Partner with North Dakota State University to identify optimal fungicide application strategies for control of Sclerotinia on dry beans relative to environmental conditions, plant architecture, and timing of canopy closure by conducting field studies on four dry edible bean varieties: two varieties each of pinto and navy beans, one with upright vine plant architecture and one with upright short vine architecture.
- Partner with North Dakota State University to aid potato producers and the industry in the northern plains in identifying potato genotypes suitable for innovative nutritional and diet products, bioplastics and other industrial applications, pharmaceutical uses, and novel food stuffs by evaluating diverse germplasm for starch attributes including total starch, resistant starch, and determinations of the amylase/amylpectin ratio.
- Partner with North Dakota State University to identify at least one or more lentil cultivars with acceptable tolerance to
  sulfentrazone to aid in the development of additional cultivars by identifying lentil cultivars from different market classes
  and ancestry that are more tolerant to sulfentrazone using field, lab, and greenhouse methods, developing lab and
  greenhouse methods for cultivar screening that agree with field results, thus providing a fast, cost-effective technique to
  determine cultivar sensitivity, and developing tolerant lentil cultivars through mutagenic techniques.

- Partner with North Dakota State University to evaluate predictive biochemical markers in potatoes and explore novel proteins associated with major post-harvest problems (SED and CIS) that will reduce economic losses and enhance the competitiveness of the Midwest potato industry in and across the US by evaluating known potato varieties for levels of A-II protein, associating levels of A-II proteins with various parameters, and validating markers for SED under field conditions.
- Partner with North Dakota State University to help the growers of the newly emerging greenhouse vegetable industry with technical know-how by selecting the best performing cultivars of leaf lettuce including bib and Romaine lettuces for hydroponic culture, solving the occurrence of physiological disorder symptoms such as leaf margin burns and distortion on new growth in lettuce grown in the greenhouse, and optimizing nutrient solution for growing lettuce, tomato, and other vegetables in the greenhouse.
- Partner with North Dakota State University to assess the potential for remotely sensing potato virus Y (PVY) in seed and commercial potato fields by determining the wavelengths of reflected light that are associated with PVY of seed potato plants, determining if these wavelengths are discernible in the greenhouse and field for new cultivar releases, advanced selections, and commonly grown cultivars by North Dakota certified seed potato producers, determining if PVY strains are discernible from one another in the greenhouse and field using spectral data, and determining if PVY infection can be differentiated from nutrient deficiency (specifically nitrogen) in the greenhouse and field using spectral data.
- Partner with North Dakota State University to increase farm profitability and sustainability by expanding crop rotation options for Midwest growers to include fall-sown winter peas by developing a genetic map of two F7-derived mapping populations and identifying quantitative tati loci responsible for component traits of winter hardiness.
- Partner with the Williston Ag Diversification Group to develop, evaluate, and advance newly bred and improved "niche" market potato varieties by developing an additional 350+ lbs. of mini-tubers of MonDak Gold that meets state regulatory seed status for subsequent distribution to seed and commercial growers to meet the Mon-Dak Gold variety production demands from 2015 and beyond and by growing-out MonDak Gold mini-tubers in 2015 to produce Generation 1 seed for both reinvestment as seed and for commercial potato growers for large scale production and marketing within the next three years.
- Partner with North Dakota State University to reduce the loss of fresh market potatoes, primarily red- and yellow-skinned, to blemish problems that make them unmarketable by determining the blemish complex, surveying the types of blemishes that are currently causing loss, determining what agronomic management methods are available for controlling these blemishes which include growth regulators, fungicide treatments, biological control agents, spent lime, and the use of fumigants and screening multiple cultivars in the field for blemish-free tubers.
- Partner with North Dakota State University to identify the pathogenic organism causing the uncharacterized dry pea disease by completing initial serological testing to identify potential viral candidates, testing for phytoplasm DNA, a secondary method for confirmation of the pathogen and modified Koch's postulates for non-culturable organisms.
- Partner with North Dakota State University to determine the powdery scab and potato mop top virus (PMTV) induced tuber necrosis susceptibility of every potato cultivar used in the table, chip, and French fry market sector grown in the state of North Dakota by securing and quantifying susceptibility to PMTV-induced tuber necrosis against the known susceptibility of the cultivars assessed to date.
- Partner with North Dakota State University to identify a group of at least 10 dry bean genotypes that will be more resilient or tolerant to waterlogging, especially at the early growth stages (germination, emergence, and vegetative growth) by evaluating a diverse group of approximately 700 dry bean genotypes for their tolerance to waterlogging under greenhouse conditions, testing tolerant genotypes in field condition, initiating crosses using the identified sources of waterlogging tolerance, and identifying the genomic regions associated with waterlogging tolerance.
- Partner with North Dakota State University to establish a correlation between observed crop injury ratings and lab-tested glyphosate and dicamba levels in leaf samples by treating plants with three rates of glyphosate and dicamba alone or in combination, recording visible injury (along with pictures), harvesting plots, measuring yield/quality, and comparing observed values and lab-tested values.
- Partner with North Dakota State University to increase the breeding efforts and germplasm collections for ornamental woody plants suited for the harsh North Dakota landscapes by developing a strong ornamental breeding program to include improvements with magnolia, maple and lilac germplasm, while also developing new ornamental cultivars suited for use in North Dakota and the Northern Great Plains.
- Partner with North Dakota State University to determine those accessions capable of advancing to secondary screening and ultimately the release of a cold-hardy red/white wine grape for the entire state by evaluating over 200 fruiting accessions enological characteristics and identifying parental V. riparia biotypes with stable early acclimation characteristics.

- Partner with North Dakota State University to increase access to superior native juneberry biotypes and fruit availability by comparing growth and yield attributes of native accessions to Canadian commercial standards and to select those accessions that should proceed on the path to variety release.
- Partner with North Dakota State University to increase potato yield and nitrogenous fertilizer use efficiency through fertilizer nitrogen (N) application rate, timing and additions of nitrification and urease inhibitor by determining the best fertilizer N management practices to enhance tuber yield, petiole N and N use efficiency of two popular potato cultivars, determining the soil nitrogen availability or inorganic N mineralization rate as influenced by N management, comparing soil N leaching loss under different N management treatments as measured by suction lysimeters installed at 3 feet, estimating ammonia (NH3) volatilization loss from fertilizer-N managed plots as measured by acid trap, determining the control of N-management on denitrification-N loss (N2O-N), and determining root morphological and dry matter accumulation differences between the two cultivars with various N treatments.
- Partner with Glendon Philbrick to test five varieties of hops rhizomes to determine where a variety of hops will yield, how much will the variety yield, winter survival rate, and quality of the crop produced by assessing the climate viability of each rhizome variety and assessing the quality of the yield.
- Partner with North Dakota State University to identify nematode species in association with pea roots by utilizing molecular
  procedures, to quantify six Fusarium species from pea roots using previously developed real-time PCR assays, and to
  determine associations between soil properties, nematode populations, Fusarium species, and root rot of peas.
- Partner with North Dakota State University to develop soybean cyst nematode resistant dry bean cultivars by determining the genetics of resistance through classical breeding and then the resistance quantitative trait loci (QTL's), and identifying markers linked to the QTL's for use in marker assisted selection when screening for resistance in dry bean breeding programs.
- Partner with North Dakota State University to increase knowledge of integrated pest management (IPM) and beneficial
  arthropods associated with grapes and improve awareness of how management practices can impact these arthropods by
  documenting the grape arthropod fauna in North Dakota and investigating how relevant species are affected by crop
  management practices, including chemical application and plant diversity.
- Eradicate Japanese beetles in North Dakota by determining the extent of interceptions of Japanese beetle in North Dakota, locating possible sources of the beetles, determining if there is a overwintering population of Japanese beetles in North Dakota, performing delimiting surveys and eradication work, and using the outcomes to best establish a pest response and/or quarantine to protect the nursery industry of North Dakota.
- Partner with the Northern Plains Sustainable Agriculture Society to increase yields and quality of North Dakota-grown vegetables, create networks for sharing and collaborating on vegetable variety improvement, and increase knowledge of varietal differences through the identification of vegetable varieties that meet local climatic and environment challenges with highly marketable qualities.
- Partner with North Dakota State University to demonstrate an important way to plant sweet corn earlier, harvest earlier, increase its market value, and yield a higher income by evaluating sweet corn growth and fresh yield differences with four different type mulches (black, clear, biodegradable, and no mulch treatments) that will be planted at four different planting dates for three hybrids with maturity dates of 65, 75 and 85 days.
- Partner with North Dakota State University to optimize the milling of edible beans into different flour types by developing a dry milling system capable of grinding dry bean into a whole grain flour, producing baked products, snack products, and extruded products from different types of bean flours obtained during milling while assessing the sensory properties of these products, and increasing the knowledge of dry bean utilization at professional trade organizations and two workshops on dry bean milling and the application of bean flours in non-traditional food applications.
- Partner with the Aneta Specialty Crop Group to expand the Aneta Community Orchard and Gardens by increasing production and consumption of specialty crops through garden plots, specialty crop tours, and outreach trainings.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## ommonwealth of the Northern Mariana Islands Department of Lands and Natural Resource

5

Amount Awarded: \$223,009.98 Number of Projects:

Promote good nutrition and impart agricultural knowledge to Northern Mariana youth by creating gardens in schools
throughout the islands as well as providing schools with teaching guidance and materials for specialty crop production and
consumption.

- Increase the safety of local specialty crops and decrease the use of harmful chemicals in food production by training farmers on safe pesticide use and training local agencies and farmers on how to manage good residue testing practices.
- Support the planning and support of specialty crop activities and enhance their competitiveness by studying the specialty crop industry at large in the Northern Mariana Islands, developing research on the best outlets for sales, and disseminating this information to specialty crop stakeholders throughout the islands.
- Educate local specialty crop producers about the effectiveness of using hydroponic growing techniques and teach them how to implement this training on their own farms by continuing hydroponic projects on one farm plot and one public school, then sharing hydroponic techniques through demonstrations utilizing scientifically proven methodology.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

### Ohio Department of Agriculture

**Number of Projects:** 

13

• Partner with the Center for Innovative Food Technology to provide growers with the technical information necessary to

\$612,861.15

**Amount Awarded:** 

- Partner with the Center for Innovative Food Technology to provide growers with the technical information necessary to make business decisions when evaluating production of edamame by evaluating the entire edamame supply chain starting with seed to production, harvesting, processing, marketing, and consumption.
- Partner with the Center for Innovative Food Technology to increase specialty crop producer knowledge of dehydration practices in creating processed products by evaluating the dehydration market; exploring equipment, procedures, and packaging; and promoting the practice to growers as a means of diversifying and expanding their production of processed products.
- Partner with the Ohio Maple Producers Association to increase awareness of Ohio's maple heritage and industry by implementing a marketing campaign that brands Ohio maple products and encourages statewide maple agritourism.
- Partner with the Ohio Nursery and Landscape Association to increasing consumer traffic to Ohio's garden center retailers during the critical spring retail season by implementing the "Plant Something" campaign, which will include promotional newspaper inserts and other print materials in major markets.
- Partner with the Center for Innovative Food Technology to increase Ohio specialty crop growers' knowledge about the availability, cost effectiveness, and time savings that various food safety recordkeeping methods can provide through demonstrations, presentations, webinars, and one-on-one interactions.
- Partner with the Midwest Apple Foundation to facilitate both increased profitability and resilience for current growers and a realistic opportunity for apple growing expansion in Ohio by identifying a mid-season consumer-preferred apple which is resilient against environmental uncertainties such as extreme cold and late spring frosts, and incorporates natural resistances to diseases such as apple scab.
- Partner with Ohio State University to increase commercial hop production in Ohio by providing the necessary research based information for Ohio nursery growers interested in diversifying their current nursery production to include propagation of hop rhizomes and plants to meet the \$20 million demand for high quality disease free hop plant material
- Partner with Ohio State University to increase winterberry fruit yields through investigating the biology and epidemiology of fungal pathogens associated with this fruit rot in order to identify appropriate, well-timed, cost effective management strategies to prevent/control this disease by identifying the disease-causing pathogen(s), and determining the seasonal spore abundance and the environmental factors that favor spore release and resulting infections.
- Partner with Ohio State University to increase profits for nursery crop producers by investigating synthetic fertilizer use in nursery container production to determine less expensive yet effective application timings and formulations and various nutrient components and their impact on root hardiness.
- Partner with Ohio State University to enhance growers' understanding of the requirements for water quality, proper water sampling techniques and the available resources for testing by developing and delivering the Agricultural Water Quality and Testing workshop and actively connecting fruit and vegetable farmers with water testing laboratories.
- Partner with Ohio State University to establish scientifically-validated intervals for application of untreated manure on Ohio specialty crop farms by determining the survival rate of pathogens in Ohio soils that have been amended with manure.
- Partner with Ohio State University to identify new super berry crops and market opportunities for fruit growers by determining the adaptability, yield potential, and methods of propagation of Aronia berries, elderberries, goji berries, expanding the acreage of new and traditional super berry production in Ohio, and increasing the production and marketing skills of berry growers.

• Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Oklahoma Department of Agriculture, Food, and Forestry

Amount Awarded: \$657,370.85 Number of Projects: 16

- Partner with Oklahoma State University to increase knowledge of which vegetables varieties are best suited for hoop house growing, which fertilizer and pesticides to use, and establish guidelines for farmers on suitable practices to avoid food safety hazards and increase productivity by conducting trials on these items and testing the growers through surveys.
- Partner with Oklahoma State University to enhance the profitability of Oklahoma green industries by evaluating and promoting landscape plants suited to Oklahoma which will benefit the commercial producer, wholesaler and retailer and consumers.
- Build consumer awareness about OK Grown fresh fruits and vegetables by continuing a statewide promotional campaign including local promotional grants, and advertisements to increase awareness of Oklahoma's specialty crops.
- Increase awareness of Oklahoma U-pick operations, which will lead to an increase in the number of visitors and therefore also increase specialty crop sales at Oklahoma U-Pick operations by launching a seasonal marketing campaign to educate consumers at the U-Pick farms about the rules and best tips and tricks of how to pick the fruit and how to navigate the gardens and orchards.
- Collaborate with the Oklahoma Ag in the Classroom to increase knowledge and consumption of local specialty crops by promoting and using Ag in the Classroom specialty crop educational, story-telling video demonstrations, such as Oklahoma's Bountiful Harvest, Harvest of the Month I and II poster sets, specialty crop SmartBoard lessons, Fruit and Vegetable lesson booklets (Pumpkins, Squash and Other Cucurbits; Oklahoma's Roots and Leafy Greens; Oklahoma's Berry Best; A Field of Beans; Marvelous Melons; and The Nightshades).
- Collaborate with the Oklahoma Ag in the Classroom to increase knowledge and awareness of specialty crops and their nutritional values for both students and teachers by providing a meaningful hands-on resource and connection to specialty crop resources and lessons that can be taken back to the classroom for use in educating students.
- Collaborate with the Oklahoma Ag in the Classroom to increase educators' knowledge of Oklahoma grown specialty crops through workshops, farm visits, farmers' market tours, and orchard visits and providing hands-on instruction and connection to specialty crop resources and lessons that can be taken back to the classroom to educate students on local specialty crops and healthy eating habits.
- Increase awareness and knowledge of specialty crops for school foodservice professionals by offering a hands-on educational workshop complete with knowledgeable specialty crop speakers and child nutrition directors who effectively use specialty crops in their school foodservice operations.
- Partner with Redlands Community College to reduce the negative impact by high temperature and larger amounts of direct solar radiation on tomato production and fruit quality by determining the impact of gradient levels of shading on tomato production, quality, growth, water and nutrient utilization and adding production data from Oklahoma to help develop a national database and monitor what the economic impact might be.
- Partner with Oklahoma State University to decrease production time and improve plant quality on several important cut flower and nursery crops by evaluating LED lighting and silica supplementation on cut flower and ornamental plants grown in nurseries or greenhouses as a means to address current problems in production.
- Partner with Oklahoma State University to improve bermudagrass cultivars and increase the profitability for Oklahoma sod producers through the planting, cultivating, and growing of bermudagrass cultivars which will enable them to identify and select sod-type bermudagrass cultivars with improved field drought performance and cold tolerance for Oklahoma.
- Partner with the Samuel Roberts Noble Foundation to reduce pecan crop loss due to pecan scab by researching the genetic basis for tolerance to pecan scab using molecular DNA technologies, gain knowledge about the response of pecan cultivars to pecan scab, and develop education programs for pecan growers to increase their awareness of pecan scab.
- Partner with Oklahoma State University to reduce the costs for an expanding germplasm screening program by improving diagnostic testing through the production of clean canna rhizomes and conducting field trials of rhizomes to identify conditions that result in virus transmission, and the outcome will enable providing growers with recommendations, along with clean rhizomes to keep their growing systems healthy so they can improve their reputation in the market and a local supply of healthy rhizomes.
- Partner with Kingdom Creations to optimize growing, harvesting, drying, and storing Echinacea by establishing a protocol for this, which will maintain high levels of medicinal activity in the dried plants, resulting in a sustainable cash crop.

- Increase access of season extension technology to limited resource farmers raising specialty crops by continuing to fund participation in a plasticulture program, assisting in the installation of up to one acre of plasticulture, and funding irrigation systems and plastic installation to expand the selection of fruits and vegetables grown in Oklahoma.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Oregon Department of Agriculture

Amount Awarded: \$1,960,412.83 Number of Projects: 30

- Partner with Oregon State University to improve food safety associated with hazelnuts by investigating and validating a commercial propylene oxide (PPO) process that reduces >5 log CFU/g of Salmonella on in-shell hazelnuts and kernels.
- Partner with Oregon State University to enable the U.S. Food and Drug Administration to recognize that dry bulb onions can be produced with a low risk to human health, using current practices with little or no modification by determining the impact of contaminated irrigation water on the relative safety of dry bulb onions produced using drip and furrow irrigation and evaluating potential solutions that could mitigate any risk associated with contaminated irrigation water.
- Partner with the Center for Produce Safety Foundation, in collaboration with the University of California, Davis and the University of Arizona, to develop data to support collective expert evaluations for the replacement of quantitative irrigation water standards based on generic E. coli with a semi-quantitative threshold based on a designed risk-assumption Limit of Detection based on either E. coli and/or Bacteroides as an improved indicator system for acute and chronic fecal contamination.
- Increase awareness and knowledge of Oregon specialty crop products, including berries, wine, cider, and hazelnuts, in Northern Europe and Japan by facilitating expert panels, tabletop showcases, food preparation demonstrations, and handson farm experiences.
- Increase the amount of Oregon specialty crops that parents and caregivers of school aged children buy, prepare and eat by using media and relevant hands-on experiences to enhance parents' awareness of and attitudes towards Oregon grown fruits, vegetables, nuts, and nursery crops.
- Partner with the Friends of Zenger Farms to connect more Oregon vegetable farmers to consumers through direct marketing and distribution by creating a training program and toolkit to facilitate the replication of partnerships between institutions and vegetable farmers who operate a Community Supported Agriculture (CSA) program.
- Partner with Gorge Grown Food Network's to increase direct-to-consumer channels for vegetable and berry producers in Hood River, Wasco, and Sherman counties in Oregon by developing and launching a cohesive, regionally focused marketing plan focused on increasing direct-to-consumer sales of locally grown vegetables and berries; connecting producers that want to collaborate on coordinated production planning as a way to more efficiently meet demand for directto-consumer products; and hosting four vegetable and berry focused agritourism events.
- Partner with the Mid-Columbia Economic Development District to increase recognition of the Mid-Columbia region as a premier cider-producing area with unique, local inputs, and experiences to support increased cider production by creating a blueprint that can be used as a foundation by regions both in Oregon and throughout the country to identify the most useful strategies for their areas in terms of cider marketing activities and events as well as organization formation.
- Partner with the Oregon Hop Commission to increase the production (acreage) of public hop varieties in the United States by promoting them to large and small brewers by building a searchable web based database that hop growers and breeders will be able to navigate easily and evaluating some public variety advanced selections that have the potential of being released as a new variety.
- Partner with the Oregon Potato Commission to increase Oregon potato export sales to Vietnam by conducting a retail potato promotion through a chain of grocery stores in Ho Chi Minh City and Hanoi.
- Partner with the Oregon Raspberry and Blackberry Commission to increase sales of Oregon raspberries and blackberries to the Hong Kong market through hosting a series of seminars promoting the use of raspberries and blackberries as ingredients for the baking industry in Hong Kong.
- Partner with Oregon State University to increase awareness of Oregon's native plant specialty crops by developing educational material that promotes understanding and appreciation of the ecological benefits of planting natives and supports their successful incorporation into gardens and landscapes.
- Partner with the Oregon Wine Board to increase awareness and therefore sales of Oregon wine through target wholesalers, retailers, and restaurants by providing a convenient, interactive and accessible tool to communicate the story of why Oregon is one of the world's premier wine regions.

- Partner with the Pacific Northwest Christmas Tree Association to raise consumer awareness of choose and cut farms and
  retail lots supplying Pacific Northwest-grown Christmas trees while generating a positive message about real Christmas
  trees by developing a strategic marketing plan; promoting a positive message of family farms and real Christmas trees; and
  exploring alternative markets for small growers of Christmas trees.
- Partner with the Pear Bureau Northwest in collaboration with the Washington State Department of Agriculture to increase overall Northwest pear sales by increasing foodservice sales to national, multi-unit restaurants through a multi-state marketing campaign that will perform a qualitative research study; participate in three annual foodservice gatherings; and conduct an event for foodservice chefs featuring classroom time with a leading post-harvest ripening and handling expert, orchard tours with local growers, and visits to packing and shipping facilities.
- Increase market demand for Oregon grown fruits, vegetables, and tree nuts by large-scale food buyers, primarily foodservice operators (i.e., hospitals, universities, corporate cafes and event venues), multi-location restaurant chains, and regional retailers in Oregon and southwestern Washington by facilitating networking and best-practice sharing and providing education and support for overcoming known barriers.
- Partner with the Oregon Museum of Science and Industry to increase the public's awareness of and interest in Oregon's vibrant specialty crop industry, which will promote increased sales of selected specialty crops by developing, implementing, and sustaining community engagement workshops, trainings, and educational experiences.
- Partner with Oregon State University Extension Small Farms to increase the number of successful specialty crop farms in southern Oregon by providing comprehensive training and education for beginning specialty crop growers that integrates classroom experience, hands-on mentoring, farm business planning, and marketing support.
- Partner with the Oregon Strawberry Commission to encourage and assist present and future Oregon strawberry growers to profitably produce fresh strawberries by providing growers specific guidance concerning production and marketing fresh strawberries through workshops and demonstrations of growing techniques as well as a bi-monthly bulletin to growers that will help them make better informed decisions about fresh strawberry varieties, market trends, and pest management.
- Partner with Oregon Tilth to help Oregon specialty crop producers obtain a larger share of the market for organic produce characterizing unmet wholesale demand for eight to 12 Oregon-grown organic and transitional specialty crops by conducting a detailed gaps analysis with major buyers; informing and educating Oregon growers about wholesale market opportunities for these crops and strategies and resources for accessing this market; and identifying purchasing strategies and transactions for buyers and lenders to increase supply by investing in organic and transitioning specialty crop growers to successfully transition and expand.
- Partner with the Corvallis Environmental Center to increase the number of small and beginning fruit and vegetable farmers in Benton and Linn counties selling to local institutions by identifying barriers to institutional markets, detailing steps to overcome these barriers, providing comprehensive and intensive training to specialty crop farmers, and creating a "Steps to Success: Institutional Marketing Guide for Oregon's Produce Farms" for use in future trainings and programs.
- Partner with Willamette Farm and Food Coalition to increase purchases of Oregon-grown specialty crops by Oregon
  schools by providing trainings on finding, buying and promoting Oregon-grown fruits and vegetables in diverse geographic
  regions around the state including eastern Oregon, southern Oregon, central Willamette Valley, and the northern Oregon
- Partner with the Northwest Cider Association to increase the competitiveness, quality, sales, and value of Northwest apples, pears, juice, cider and perry by creating a set of standards will serve as a prerequisite to educating consumers and provide a framework to explain what is special and unique about each type of cider.
- Partner with the Oregon Cherry Growers, Inc. to expand existing markets with viable new opportunities for sweet cherries that benefit growers Oregon by investigating market opportunities and determining types of new value-added sweet cherry products, not currently offered, that appeal to consumers.
- Partner with Oregon State University to develop value-added utilizations of specially crop fruit pomace and wine grape pomace as functional food ingredients by developing economically feasible drying method for preserving wet pomace; evaluating fruit pomace as functional food ingredients (rich source of dietary fiber and phenolics) in different food systems; developing fully biodegradable pomace bio composites and study their functionalities; and examining industrial scale applications of developed pomace bio composites as biodegradable packaging containers.
- Re-establish market access for Malheur County onions to Australia by conducting a three year survey of Malheur County onion fields to determine if onion smut is actually present.
- Increase sales of Oregon Christmas trees and to initiate sales of fresh cut ornamental greens to buyers and distributers in Asia and Central America by introducing plant health officials in export destination countries to industry-wide best management practices or a systems approach to control quarantine pests in Oregon Christmas trees.

- Partner with Oregon State University to increase awareness about risks to pollinators and best management practices for promoting their health by evaluating impacts on honeybees and native bumble bees, of pesticide residues in specialty crop pollen and nectar and determining if the negative consequences are further confounded by other factors such as plant stress.
- Partner with Clackamas County, in collaboration with Ecotrust and FCS Group, to increase the service delivery efficiency
  of ONEStop partners to specialty crop food growers participating in the regional food system by building a virtual farm gate
  or "go to" resource for specialty crop growers to access technical assistance, education, marketing and other services they
  need to be a more successful operation.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Pennsylvania Department of Agriculture

Number of Projects:

21

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•	Increase the number of U.S. Departr	ment of Agriculture Good A	griculture's Good Agricultural Prac	tices (GAP)/and Good
	Handling Practices (GAP/GHP), Mu	shroom Good Agricultural	Practices (MGAP), and Harmonized	d GAP audit requests to

• Partner with the American Mushroom Institute to increase mushroom safety for the public by increasing farmworker, supervisor and mushroom producer knowledge of best practices programs in the areas of food and farmworker safety.

\$1 044 976 80

be performed through conducting outreach activities and workshops.

Amount Awarded:

- Partner with the Chester County Economic Development Foundation to have mushroom industry employees within southeastern Pennsylvania participate in workplace safety training through scheduling and implementation of updated trainings and distribution of updated resources
- Partner with the National Peach Council to reduce grower loss and increase consumption and awareness among consumers by enhancing the local/regional market, promoting peaches, and providing marketing and promotional tools.
- Partner with the Pennsylvania Wine Association to increase awareness of and visitation to the Pennsylvania wine trails by creating new, up-to-date, accessible wine trail itineraries, increase web visitation.
- Partner with Strategic Culinary Connection to encourage citizens to select fresh, locally grown specialty crops through highlighting specialty crops at the PA Preferred Culinary Connection cooking demonstrations at the Pennsylvania Farm Show.
- Partner with Fay-Penn Economic Development Council to increase the number of consumers purchasing locally grown
  fruits and vegetables, educate consumers about the health benefits of eating locally grown fruits and vegetables, and
  increase sales of locally produced fruits and vegetables through: monitoring the number of people attending Fayette County
  farmers' markets that are purchasing fruits and vegetables; developing a marketing plan to encourage the consumption of
  locally grown fruits and vegetables; and developing a brochure on health benefits of eating locally grown fruits and
  vegetables.
- Partner with the Food Trust to increase purchasing and serving of Pennsylvania specialty crops in Upper Moreland School District (UMSD) by enhancing farm-to-school purchasing practices for cost-efficiency and menu variety at UMSD; exposing more K-12 children to healthy, delicious Pennsylvania specialty crops through the school meal program; providing farmers with a new market for cosmetically imperfect fruit and vegetable specialty crops for waste reduction and the recouping of input costs; and evaluating best practices and share the model with other farmers and school food buyers in Pennsylvania and the Mid-Atlantic region.
- Partner with Pennsylvania Vegetable Growers Association (PVGA) and Pennsylvania Vegetable Marketing and Research Program (PVMRP) to enhance the future viability of Pennsylvania's vegetable industry by increasing participation in PVGA-sponsored education and outreach activities, increasing visit counts on web-based media platforms, increasing sales in volume for PVMRP growers, developing a work crisis management plan, facilitating certification of non-Good Agricultural Practices (GAP) certified growers, and supporting group-GAP certification efforts.
- Partner with Pennsylvania Farm Link, Inc. to increase the number of specialty crop farmers in western Pennsylvania that have farm succession plans in place by holding two succession workshops and providing follow up facilitation to specialty crop farm families.
- Increase attendance at and access to educational opportunities and increase knowledge and application of relevant skill areas
  through promotion and provision of assistance for specialty crop growers to attend educational opportunities that will allow
  them to increase productivity, respond to changing market needs, address regulatory issues, and increase skills in finance
  and business economics.

- Partner with Pennsylvania State University to determine whether or not specific foliarly applied nutrients benefit plant and fruit growth through foliar treatments, plant analysis and evaluation of fruit for quality and yield.
- Partner with the Pennsylvania Apple Marketing Program (PAMP) to increase demand for Pennsylvania processing apples
  by conducting market research that identifies, qualifies, and quantifies new consumer product innovation ideas/opportunities
  for processed apples and making the research available to apple processors in Pennsylvania for product development and
  marketing.
- Change the control habits of commercial greenhouse and high tunnel vegetable Amish and Mennonite growers to balanced and sustainable integrated pest management (IPM) methods that will lead to reduction in pesticides in York County through mentorship on the farm from transplant until harvest.
- Partner with Pennsylvania State University to increase the supply of local food and increase crop value to the local economy through teaching young specialty crop family members and Latino horticulturists in targeting local niche and value-added markets, increasing environmental and socio-economic sustainability, and developing pest control strategies to safeguard the environment.
- Partner with Pennsylvania State University to develop and test a natural product seed treatment that will protect tomato/pepper plants from insect pests throughout the growth cycle by treating seeds with jasmonic acid or jasmonic oil and monitoring growth.
- Partner with Pennsylvania State University to increase the number of integrated and targeted research-based management
  tools available to growers for managing bacterial diseases of onion through evaluating efficacy of using treatments to
  manage bacterial pathogens, evaluating application timing and reduced nitrogen rates on marketable yield, evaluating
  susceptibility of onion cultivars, developing scouting guidelines and establishing visual disease thresholds.
- Partner with Pennsylvania State University to improve data and tools that support the rapid identification and detection of
  pathogens by identifying Phytophthora and Pythium isolates cultured from clinical samples analyzed; developing
  comprehensive diagnostic resources for Phytophthora and Pythium, including versatile identification keys based on a
  combination of morphologies, genetic markers, and hosts and molecular diagnostic tools; and providing new services for
  Phytophthora and Pythium species identification in plant and irrigation water samples, as well as, testing services for
  fungicide resistance in these isolates.
- Partner with the Pennsylvania Co-Operative Potato Growers, Inc. to increase the yield of local par-frying potato varieties through collecting data on potential par-fry varieties, evaluating germplasm for par-frying, and recommending potato varieties.
- Partner with Pennsylvania State University to improve the understanding of the effects of pesticide applications on honey
  bees and other pollinators in fruit crops by investigating the link between pesticide applications in commercial tree fruit
  orchards in Pennsylvania and pesticide exposure to honey bees and other pollinators.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

# Departamento de Agricultura de Puerto Rico

Amount Awarded: \$524,511.15 Number of Projects: 9

- Increase sales of Puerto Rico's specialty crops and increases exposure of its specialty crop products by participating in local and international trade shows and fairs, which allows access into the United States, Europe, and other international markets.
- Increase exposure of local specialty crop products by implementing an advertising campaign (Delpais) that will use advertisements via television, radio, newspapers, and magazines.
- Partner with Finca el Sol de Joaquin, Inc.-Café Nativo to increase competitiveness of coffee farmers and expand their opportunities in the south region of Jayuya and nearby cities by demonstrating coffee drying technology.
- Partner with Centro de Adiestramiento para Personas con Impedimentos, Inc. to strengthen the production and marketing of lettuce and strawberries by providing business training with specialized knowledge, individual counseling, and support in hydroponics.
- Partner with Agroempresas Ke'Verde, Inc. to provide new and better varieties of seeds of tomato to hydroponic farmers in the mountainous region, assist small farmers in Puerto Rico with training on cultivation practices, the selection and effective use of nutrients, and the selection and adequate use of pesticides for the control of pests and diseases in hydroponic crops of tomatoes under an organic approach.

- Partner with FSCC, Inc. (Organia Farms) to improve the competitiveness of farmers through the use and application of vermicomposting by reducing the uncertainty faced by producers of specialty crops in Puerto Rico, who depend entirely on imported fertilizers which have high price volatility in the market and are often scarce.
- Partner with the Beekeeper Nucleus of Puerto Rico, Inc. to enhance the pollination of specialty crops and create an industry of honey based in good quality to ensure the health of the citizens by establishing new European bee colonies and keeping their characteristics pure and separated from Africanized bee characteristic genes, and to protect the bees from all the different acari and viruses that affect the bee.
- Increase sales and awareness of Puerto Rican specialty crops providing support for specialty crop producers at the Plaza Las Americas and the Plaza del Caribe farmers' markets.
- Increase the number of hives in active production and yield in volume of honey produced through the construction and management of at least 500 hive boxes in a collaborative effort among Commonwealth of Puerto Rico governmental agencies, while also training apiarists, agronomists, and prison inmates in apicultural practices.

## Rhode Island Division of Agriculture

Amount Awarded: \$255,752.76 Number of Projects: 8	
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- Partner with the University of Rhode Island to improve food safety by providing growers with food safety resources, onfarm consultations and Rhode Island Good Agricultural Practices (GAP) certification and recertification opportunities.
- Partner with the New Urban Farmers and the Pawtucket Housing Authority to promote the use of specialty crops and help address the epidemic of obesity amongst Latinos by providing hands-on demonstrations and workshops, a mobile market and community gardens.
- Increase sales of Rhode Island specialty crops by expanding marketing efforts of specialty crops at farmers' markets, including produce preparation demonstrations.
- Partner with the Connecticut Department of Agriculture and Harvest New England Association, Inc. to break down the barriers to regional specialty crop purchases by educating producers at the Harvest New England Agricultural Marketing Conference and Trade Show, educating consumers at Harvest New England Days, and connecting wholesale buyers with wholesale specialty crop producers through five matchmaking meetings.
- Partner with the Northeast Organic Farming Association of Rhode Island to increase the number of specialty crop producers who are certified organic and increase the efficiency and profitability of farms that produce specialty crops using certified organic methods by providing organic advisors to assist producers in the certification process.
- Partner with Farm Fresh Rhode Island to increase the sales of Rhode Island grown specialty crops in cafeterias by educating food service buyers and chefs on specialty crop availability, conducting a "Harvest of the Month" print marketing campaign to promote the crops, and enhancing the Market Mobile program to serve more institutional purchasers.
- Partner with Rhode Island College to increase the size of the bee population in Rhode Island by protecting honey bees from the small hive beetle (SHB) through a rigorous survey of the health and size of the state's honeybee populations, outreach to the public to promote beekeeping and bolster bee populations, and the development of mitigation strategies to reduce the impact of the SHB.
- Partner with the University of Rhode Island to prevent bird damage to sweet corn by studying the efficacy of removing the tassel from sweet corn plants after pollination as compared to the use of bird cannons.

## South Carolina Department of Agriculture

Amount Awarded:	\$601,985.83	Number of Projects:	20	
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- Partner with the South Carolina Fruit, Vegetable and Specialty Crop Association to increase the visibility of South Carolina specialty crops by rebranding the association and focusing its media presence thereby clearly representing the state's specialty crop producers.
- Partner with Lowcountry Local First to increase the number of consumers eating specialty crops and increase the number of specialty crop growers by undertaking a strategic marketing campaign promoting the "Growing New Farmers" program.
- Partner with the Catawba Indian Nation to help small specialty crop farmers expand their business and improve the nutrition of this community by using a portable cooking demonstration station that encourages customers to cook the fresh produce available at the farmers' market.

- Partner with the Freewoods Foundation to promote the sale and consumption of fresh locally grown vegetables, provide information on the health value of eating more vegetables, and provide information on how to cook and grow them in one's own yard by holding three events that promote the use of vegetables that bring diverse groups together to discuss these benefits of vegetables.
- Partner with the South Carolina Watermelon Association to increase the consumption of watermelon while providing education regarding its health benefits by promoting the South Carolina watermelon industry to retailers, wholesalers, and to the consuming public via an extensive industry spokesperson program.
- Promote and facilitate the increased sale of South Carolina fruits and vegetables by marketing to industry decision makers who will be key to generating an increase in specialty crop purchases and provide South Carolina specialty crop producers with improved awareness of new consumer trends and opportunities.
- Increase the sales of locally grown ornamental plants and flowers by attracting more customers to plant and flower festivals through new ad materials -- including radio, print media, and outdoor boards -- that showcase the six events.
- Increase the sale of South Carolina specialty crops for local producer through the development of a marketing campaign for the Certified SC Grown brand on outdoor boards, in store merchandising signage, and point of purchase materials.
- Partner with the Palmetto AgriBusiness Council increase sales for specialty crop producers within local food retail outlets by providing information to the agricultural community about the benefits and potential markets for specialty crops that could result from participating in a local food system.
- Partner with the South Carolina Watermelon Association to improve watermelon grower production management skills by sponsoring specialty crop research and generating unbiased science based information, promoting watermelon production through watermelon field days open to the public, and providing educational events for growers and consumers
- Partner with the South Carolina Nursery and Landscape Association to provide the nursery and greenhouse growers' information on current trends and problems within the industry by providing a variety of programs that offer valuable information on these topics to the industry.
- Partner with Carolina Farm Stewardship to increase the number of South Carolina producers transitioning to organic
  production in order to take advantage of new markets for organic specialty crops by retaining a Natural Resource
  Conservation Services certified Technical Service Provider on staff to write Conservation Activity Plans, provide direct
  consulting to producers who are seeking USDA Organic Certification, and provide workshops on organic production
  practices.
- Partner with the People's Farmer Cooperative to increase the sale of South Carolina asparagus by holding workshops throughout the area educating producers as well as the general public at large about the health benefits of this produce.
- Increase the number of produce farms that have been through the Good Agricultural Practices (GAP) Food Certification program and received certification in this area by assisting to farms to go through the certification process and as well as helping them test their farm's water quality.
- Partner with Clemson University to reduce the number of diseased plants lost to Southern blight and increase by 50% the fruit produced on plants grown in infested fields by comparing 7 fungicides currently labeled to control Southern blight on tomato, finding out when fungicides must be applied to work the best, and developing one or more spray programs for Southern blight that follow the label requirements for rotation of active ingredients.
- Partner with Clemson University to develop a larger peach by using a wide and diverse set of germplasm to accumulate many traits together into a single cultivar and distribute these findings to producers in order to potentially bring this new product to market.
- Partner with Clemson University to design new and effective fungicide-based control options by determining the genetic basis of resistance, identifying effective chemical classes of fungicides, and designing new and effective spray strategies for Alternaria fruit rot (AltFR) disease prevention.
- Partner with Hub City Farmers Market to create better access to healthy and local food, particularly for people in food deserts, increase sales of specialty crops to Supplemental Nutrition Assistance Program (SNAP) recipient, and provide a steady outlet for local farmers by enhancing the capacity and resources of the Mobile Market.
- Partner with the Coastal Conservation League to increase the competitiveness of small-scale specialty crop production and help create a stronger rural economy by managing the increased volume of specialty crops being distributed through the local food hub and managing the greater number of specialty crop farmers participating in the food hub.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### South Dakota Department of Agriculture

Amount Awarded: \$292,393.96 Number of Projects: 15

• Increase the awareness of South Dakota wines among consumers by hosting a Wine Pavilion at the South Dakota State Fair.

- Partner with Dakota Hops, LLC to increase awareness of hop preservation through freeze drying by investigating the preservation and utilization of brewing hops and testing the market frozen hops in South Dakota and Colorado.
- Partner with Buy Fresh Buy Local South Dakota to increase access to fresh fruits and vegetables in rural South Dakota and on reservation communities by training and providing resources for small specialty crop producers that promote locally produced specialty crops, provide workshops for specialty crop producers, and start up specialty crop only farmers' markets.
- Partner with Dakota Rural Action to build specialty crop producer capacity working towards simplified ordering, delivery, and strategy plans for growers desiring to produce greater quantities of specialty crops to meet the demand at schools and other institutions by facilitating regional meetings held in schools for food service, Parent-Teacher Organizations, administration, school board, and specialty crop farmers.
- Partner with Black Hills State University to increase the number of local specialty crop producers and expand consumption of locally grown specialty crops by educating and engaging university and K-8 students and the greater community about how a greenhouse is used to extend the growing season and grow warmer-climate specialty crops.
- Partner with the South Dakota Department of Health to increase the consumption of fruits and vegetables through enhanced marketing strategies including the statewide marketing efforts of the YUM! social media campaign, Healthy Concessions campaign, and Harvest of the Month education materials and community partnerships.
- Partner with South Dakota State University Cheyenne River Extension to revitalize the chokecherry among native youth on the Cheyenne River Indian reservation in South Dakota by developing and implementing a well-rounded curriculum that is scientifically based, addressing areas such as soil and plant health, geographic location significance, seasonal growth patterns, and nutritional value of chokecherries.
- Partner with South Dakota State University Pine Ridge Extension to determine whether a high-tunnel will extend the growing season and volume of native specialty crops by building a high tunnel to cultivate a selection of traditional foods of indigenous tribes of South Dakota to train perspective native specialty crop producers, compare the success of producing these crops in the high tunnel versus outside, and establish baseline communication to create a native growers association on the reservation.
- Partner with Cheyenne River Youth Project to help youth re-connect to the land, improve overall health and wellness for the Cheyenne River community, and advance efforts to strengthen the specialty crop food system on the Cheyenne River Sioux reservation by establishing a 2 acre community garden that incorporates its produce into existing social enterprises.
- Increase information available for specialty crop producers and industry partners about pricing for fruits and vegetables by adding pricing information to the South Dakota Department of Agriculture's website, which will be collected and published by local farmers' markets.
- Partner with South Dakota State University to evaluate the impact of combined trap crops/conservation strips on the presence and functions of beneficial insects and insect pests on cucurbit crops (pumpkins) in South Dakota.
- Partner with South Dakota Specialty Producers Association to increase specialty crop farmer knowledge of issues related to
  their farm-enterprises by initiating a networking and learning event at the South Dakota State Fair dedicated to topics
  specialty crop growers would be interested in such as soil management, irrigation practices, integrated pest management
  (IPM), weed management, plant disease management, variety selection, successful farmers' market practices, food safety
  practices, U.S. Department of Agriculture produce grading standards and high tunnel management practices, value added
  processing, and marketing.
- Partner with Piedmont Valley Vineyard and Farm to hone irrigation methodology for grape production in the relatively arid
  western Great Plains by developing a "smart" irrigation system integrated into a novel off-grid water-harvesting system that
  will be run entirely by solar power, embedded into a water-harvesting structure to offset the need for an external water
  supply.
- Partner with Stewart's Aronia Acres Farm to determine the potential for the profitable production of current available haskaps varieties in South Dakota by documenting the methods and costs of establishment, management, and fruit production of six promising varieties of haskaps in southeastern South Dakota.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Tennessee Department of Agriculture

Amount Awarded: \$519,064.90 Number of Projects: 14

- Partner with the Tennessee Tomato Initiative to assist Tennessee tomato growers with product movement by creating a marketing infrastructure that includes tradeshows, a marketing website, and business tools.
- Partner with the Tennessee Nursery and Landscape Association to enhance the sale of nursery stock and provide educational opportunities for the green industry by facilitating the 2015 Tennessee Green Industry Expo.
- Partner with the University of Tennessee to aid beginning Christmas tree growers and better ensure their success by developing and publishing a Tennessee Christmas Tree Manual as a production and marketing guide for all potential and current Tennessee Christmas tree growers, which will be complemented by educational workshops.
- Partner with Seven Springs Winery and Vineyard to increase awareness and recognition of the wine grape industry in Tennessee and also benefit beginning and socially-disadvantaged farmers by establishing the White Lightning Wine Trail to connect local wineries and creating a state-of-the-art website and logo.
- Partner with the Appalachian Resource Conservation and Development Council to accelerate the process of local buyers such as restaurants, schools, distributors, and grocery stores meeting and doing business with local specialty crop producers by hosting networking events and publishing a regional directory.
- Partner with Bring It Food Hub to design and implement a local fruit and vegetable marketing strategy that significantly
  increases demand for locally grown fruits and vegetables and other farm products across demographics in Memphis through
  advertising to 60,000 targeted consumers, upgrading Bring It's e-commerce platform, and expanding Bring It's farmer
  network.
- Partner with Second Harvest Food Bank of Northeast Tennessee to foster partnerships with local growers and cover harvest, packing and distribution costs by developing a distribution system for otherwise unmarketable produce to a food bank warehouse.
- Partner with the Tennessee Nursery and Landscape Association (TNLA) to increase the visibility of Tennessee grown plants and provide marketing opportunities to growers, landscapers, and garden centers by updating the Tennessee Nursery Buyer's Guide and the TNLA website as well as participating in the "Plant Something" campaign, which encourages people to be active in their yards and provides information about the benefits of plants.
- Partner with the West Tennessee Wine Trail to increase the need for wine grape vineyard acreage in Western Tennessee by establishing a marketing campaign that increases awareness of the West Tennessee wine industry, wine grape production, and the quality of Tennessee wines.
- Continue into Phase II of the Tennessee Local Sourcing Foodservice Industry Program to foster relationships between Tennessee's food service operations and agricultural producers and enhance the visibility of locally grown specialty crop markets through trade shows, trainings, and networking events.
- Increase specialty crop producer knowledge of direct marketing by sending them to the 2015 North American Farmers Direct Marketing Association Conference and Bus Tour.
- Partner with the Landmark Training Development Company to increase consumption of specialty crops among Supplemental Nutrition Assistance Program (SNAP) recipients, as well as continue its Youth Urban Farm Training Program, by building dual high wind tunnels to extend the growing season of its specialty crop production, thereby making fresh fruits and vegetables readily available in food desert communities.
- Partner with the Community Food Advocates to build access to Tennessee grown specialty crops in Metropolitan Nashville Public Schools (MNPS) by assisting specialty crop farmers in learning the bid submission process for MNPS as well as the opportunities to grow products to meet MNPS's menu needs.
- Partner with Tennessee State University to improve the practicality of the existing Federal IFA quarantine post-harvest balled and burlapped root ball drench protocol by developing methods to reduce the number of drenches and lower both labor and chemical costs.

### Texas Department of Agriculture

Amount Awarded: \$1,915,387.71 Number of Projects: 18

- Partner with Texas Vegetable Association to increase awareness and sales of specialty crops by utilizing increased media
  exposure and in-store demonstrations to educate consumers on the health benefits, availability and freshness of GO TEXAN
  vegetables.
- Partner with the Texas Watermelon Association to increase awareness and sales of Texas grown watermelons by launching a nationwide media and in-store campaigns promoting the product.
- Partner with the Texas Olive Oil Council to increase awareness of Texas olive oil production through in store demonstrations and new media on a national scale as well as the establishment of an online Texas Olive Store that offers all Texas producers a new venue to sell and promote their products.
- Increase awareness of Texas specialty crops and tree nuts among international buyers by creating new opportunities for small businesses to gain exposure for their products, building stronger relationships between small pecan producers and international buyers and traders, and coordinating opportunities for international pecan buyers to meet one on one with producers to discuss price, availability, contract and general trade issues.
- Increase sales of Texas florist and landscape nurseries by producing and distributing promotional materials, by conducting retail promotions to educate consumers on seasonal produce, plant selection and tips for caring for landscape and floriculture plants, and by implementing a retail grant program that will assist in the showcasing of products and enhancement of competitiveness in the market place.
- Partner with the Texas Wine and Grape Growers Association, High Plains Winegrowers Association, and Botanical Research Institute of Texas to increase the production of wine grapes and the quality of Texas wine by developing and hosting educational venues, upgrading and launching the Association's website, and defining and implementing a sustainable winegrowing program in Texas.
- Partner with the Texas Pecan Growers Association and Texas A&M AgriLife Extension Service to continue to increase
  knowledge of growers about the most susceptible rootstocks and potential for new resistant rootstocks to cotton root rot by
  informing pecan growers at the Pecan Growers Convention of the results of the cotton root rot evaluation among pecan
  germplasm being assessed.
- Partner with Texas Citrus Mutual and Texas Citrus Pest & Disease Management Corporation to decrease the spread of citrus greening disease or Huanglongbing(HLB) in the Rio Grande Valley by hiring an area wide specialist dedicated to educating citrus growers who do not have access or will not access the internet to obtain information to control the spread of HLB.
- Partner with Texas Hill Country Wineries and Texas A&M AgriLife Extension Service to reduce the risk of financial loss, improve grower incomes, and expand rural economic development potential by identifying high quality Pierce Disease resistant varieties of grapes and rootstock.
- Partner with Uvalde County Underground Water Conservation District (UC-UWCD) and Texas A&M AgriLife Research and Extension Center-Uvalde to determine the economic feasibility of efficient irrigation technologies and management of primarily leafy vegetables by evaluating and comparing water use efficiency and growth of leafy greens (emphasis on lettuce) grown in hydroponic culture systems versus those in open field, then conducting educational programs in all aspects of production, water conserving technologies, and marketing of specialty leafy green vegetables.
- Partner with J & D Produce and Texas A & M (TAMU) AgriLife Research to increase production of tomatoes in Texas with TAMU cultivars by expanding seed production of new hybrids and lines from the TAMU project and producing field trials to continue selection for superior quality (tunnels) for early spring production or winter production.
- Partner with L&L Farms and Texas A&M AgriLife Research & Extension Center to increase the number of conventional
  and organic growers adopting best production strategies and varieties of specialty melons and artichokes and to increase the
  number of acres grown for these specialty crops by evaluating commercial varieties of artichoke and specialty melons under
  conventional and organic production practices, comparing benefits of biodegradable polymer products and irrigation,
  determining water use efficiency, and conducting workshops and use discrete consumer eye tracking technology
  experiments.
- Partner with Dennison Development Alliance, Texas Wine Growers Association, Grayson College, and Texas A&M AgriLife Extension Service to increase production yields of high quality wine grapes by adopting a cultivar/rootstock combination identified as superior for North Texas through evaluation of the performance of eight wine grape and two rootstock cultivars, analyzing data on vine growth, yield, pest and disease tolerance, and producing an instructional video to serve as a guide for grape growers.
- Partner with Texas A&M University to mitigate the effect of Cotton Root Rot by addressing issues needed before flutriafol can be registered for the treatment of Cotton Root Rot on grapes including application methods, residues of the compound in the vine and fruits, and interactions with grape and rootstock varieties, as well as evaluating a new technique to reduce the time needed to test Cotton Root Rot treatments under controlled experimental conditions.

- Partner with the Texas Olive Oil Council, Texas AgriLife Extension, Texas Tech University, Texas AgriLife Research to
  increase producer access and knowledge of best management practices for olive trees by determining which varieties of
  olive trees are best suited to be grown in different areas of Texas through the evaluation of soil conditions, weather
  conditions, and what fertilization practices accelerate the establishment of early canopy and root growth of newly planted
  olive trees.
- Partner with the Texas International Produce Association, Paramount Citrus, and Texas A&M AgriLife extension to
  improve irrigation practices by exploring and exposing water use inefficiencies in current accepted industry standards,
  defining specific protocols for under-utilized irrigation methodologies, and developing an accepted industry consensus on
  how to effectively and efficiently irrigate Texas citrus.
- Partner with the Turf Grass Producers of Texas and Texas A&M Agrilife Extension to reduce damage to turf grass and
  address the need by turf grass producers to more effectively and cost-efficiently apply insecticides by conducting statewide
  monitoring of destructive turf grass beetles and moths and developing a list serve for producers so pest alerts can be
  distributed allowing them to responsibly manage insect pests.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Utah Department of Agriculture and Food

Amount Awarded: \$340,043.46 Number of Projects: 16

- Partner with the City of South Salt Lake Department of Urban Livability to increase consumption of fruits and vegetables by creating a farm stand, connecting residents interested in producing fruits and vegetables with existing resources, and organizing and recruiting fruit and vegetable growers to participate in the South Salt Lake Farmers' Market.
- Partner with Wasatch Community Gardens to increase child nutrition knowledge and consumption of specialty crops among low-income youth by providing a Youth Gardening Program to empower youth with the skills, awareness, and knowledge to grow and harvest food locally, to taste and prepare new fruits and vegetables, and to make healthy choices for themselves and the environment.
- Partner with Slow Food Utah to increase the purchase of local specialty crops in Utah through a marketing campaign centered on marketing and education events throughout the state as well as the development of local specialty crop promotional materials.
- Partner with Utah State University to provide cucurbit growers with information regarding the use of border rows to help control watermelon mosaic virus by conducting field test plot studies and sharing the results with growers via meetings, presentations, a peer-reviewed journal article, field days, and the Utah State University Urban and Small Farms conferences.
- Partner with Utah State University to provide stone fruit growers with information regarding management practices to
  control brown rot caused by Monilinia species by collecting samples from various growers, testing for the presence of
  Monilinia and fungicide resistance, and sharing the results with growers at the Utah State Horticulture Association
  meetings, Small Farms Conference, Master Gardener classes, fact sheets online and in hard copy, and also through the Utah
  State University Extension service.
- Partner with Utah State University to provide the specialty crop industry with information regarding the degree to which wild and feral hosts within specialty crop environments and surrounding areas act as alternative hosts for spotted wing drosophila and brown marmorated stink bug by placing traps and surveying non-crop hosts, recording the surrounding environment, analyzing data and disseminating the results via specialty crop meeting presentations, newsletter articles, a peer-reviewed journal article and its website.
- Partner with Utah State University to facilitate increased sourcing of local small-scale and specialty crop food items through Utah-owned restaurants by training restaurant owners and chefs on effective communication and web marketing techniques in working with local farmers, training farmers on best practices in direct marketing and collaboration with restaurants, and hosting local restaurant tours through which farmers and chefs can network with one another.
- Inform specialty crop producers about improvements in effective trap and lure protocol, the development of Integrated Pest Management (IPM) strategies, and any potential state-led mitigation or eradication efforts by determining where the velvet longhorn beetle is established in Utah and how widespread it has become.
- Partner with Youth Garden Project to promote the knowledge of good nutrition and interest in growing specialty crops through a school garden program in schools across Utah by training school officials, providing them with curriculum developed through this project, and providing schools with supplies to begin their school gardens.

- Establish a baseline infection level of the devastating pathogen American foulbrood (AFB; Paenibacillus larvae) in survey areas and contain the outbreaks when discovered by documenting which diseases, parasites, and pests of honeybees are present or absent in Utah.
- Partner with Utah State University to investigate whether modern fruit tree rootstocks show altered water relations in an irrigated production system under high transpiration demand by comparing water uptake and use efficiency among new and emerging rootstocks of apple and cherry, both through controlled-environment studies and a line-source field experiment.
- Partner with Utah State University to develop improved nutrition for dry bulb onions by confirming the observations from a grower's field on the effect potassium has on Iris yellow spot virus incidence.
- Partner with Utah State University to increase fruit production and decrease pesticide use through the development and distribution of a weather mobile application to give fruit farmers access to vital meteorological information pertinent to their operations.
- Partner with Utah State University to provide all relevant information that commercial and non-commercial fruit producers in the state need to accurately identify, monitor, and manage invasive pests should they arrive at their farm or garden by developing a comprehensive guide for invasive fruit insect and disease pests of Utah.
- Partner with New Roots to open new avenues for the development of a resilient specialty crop industry, increase the diversity of Utah's vegetable offerings, and give local farmers a competitive edge by researching the production and marketing of specialty ethnic crops, with the ultimate goal of making production and marketing information on these crops, as well as information on seed sources, more available to producers in the state of Utah and in Salt Lake County.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Vermont Agency of Agriculture

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- Partner with SW Consulting to facilitate the adoption of produce traceability solutions by researching digital technology
  constraints, requirements and solutions, and pilot testing the digital traceability solutions before offering a program of
  training and technical assistance for produce growers.
- Partner with the University of Vermont to provide Vermont vegetable and berry farmers with a consistent approach to addressing food safety concerns by developing a standard set of food safety practices, educating growers about the standards, and enrolling growers in a system that credibly documents compliance with their food safety plan.
- Partner with Vermont Agency of Agriculture to develop a safety program that encompasses education, training, and technical assistance to achieve compliance prior to regulatory enforcement by creating and filling a Food Safety Modernization Act liaison position responsible for building in-state relationships, forming federal partnerships, and engaging at the national level with the U.S. Food and Drug Administration and the National Association of State Departments of Agriculture.
- Partner with Zach Woods Herb Farm to support market stability, increase sales, and provide technical assistance for existing and new herb growers by establishing a Vermont Herb Growers Cooperative.
- Partner with the Northeast Organic Farming Association (NOFA) in Massachusetts, New Hampshire, and Vermont to
  increase the efficiency of production and profitability of specialty crops in Massachusetts, New Hampshire and Vermont by
  providing technical support for organic specialty crop farmers to complete crop-specific enterprise analyses; creating
  resources that will inform current and beginning farmers in their own business and management plans; and hosting
  workshops and field days for specialty crop producers.
- Partner with the University of Vermont to promote management education, supply chain stability, and capital flow by completing a detailed cost of production analysis and management questionnaire and providing a cost of production analysis program to commercial maple producers.
- Partner with the University of Vermont Proctor Maple Research Center to increase the productivity and income of maple operations by developing a set of standards for implementing a sap collection system in existing regenerating maple stands.
- Partner with the University of Vermont and State Agricultural College to develop agronomic practices to improve the efficiency of HGM cover crops in reducing pests and improving soil health by conducting field trials over the course of two growing seasons using potatoes and dry beans.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

#### Virginia Department of Agriculture and Consumer Services

Amount Awarded: \$566,944.59 Number of Projects: 16

Partner with Virginia Tech to increase capacity of Virginia Cooperative Extension to meet fresh produce food safety
education and training needs of agents, growers, and consumers by developing multiple educational resources for a
comprehensive website, which will house several other new resources including a blog, a Good Agricultural Practices
(GAP) decision-making tool, U.S. Department of Agriculture and Harmonized GAP Plan of Action manual templates,
webinars, on-farm factsheets pertaining to pre- and post-harvest handling practices, YouTube videos showing footage of
farms incorporating GAPs around Virginia, and a consumer-oriented section.

- Partner with Appalachian Sustainable Development to increase Virginian farmers' knowledge of Good Agricultural
  Practices (GAP) certification and the number of Virginian U.S. Department of Agriculture's (USDA) GAP and Harmonized
  GAP certified farmers by providing training and consultation to farmers to prepare them to be USDA GAP or Harmonized
  GAP certification-ready and expanding the training to include direct-market farmers who may need the certification to sell
  to restaurants and institutions.
- Partner with Mount Rogers Area Christmas Tree Growers Association to improve the commercial production of Christmas
  tree plantations in the Mount Rogers Highland region by selecting, studying, and grafting a minimum of 25 superior Fraser
  fir families in the Old Flat Fir seed orchard.
- Partner with Virginia Food System Council to enhance the sales and consumption of specialty crops by expanding Virginia's \$10 a Week Challenge to include a broader 10% Campaign to encourage organizations, institutions, and businesses to pledge 10 percent of their annual food budget to buy Virginia specialty crops in support of local farmers, local food startups/distributors/entrepreneurs, and communities; providing educational resources and community support to help consumers and institutions connect and build relationships with local producers of Virginia's specialty crops; and assisting and collaborating with consumers, businesses, and institutions to efficiently communicate their commitment to Virginia's specialty crops, farms and local food businesses.
- Partner with Virginia Wineries Association to expand Virginia wine sales regionally, nationally, and internationally by
  conducting a media campaign that educates consumers to equate the Commonwealth Quality Alliance (CQA) Seal with
  quality, well-priced Virginia wines; educates wine producers about CQA participation and the benefits of submitting wines
  for CQA approval; and educates wine sellers, particularly restaurants, retailers and wholesalers, on the CQA brand and its
  certification of quality Virginia wines at appropriate price points.
- Partner with Virginia Tech to improve Virginia cider producers' knowledge of how to prevent common pitfalls in cider
  fermentation by surveying yeast assimilable nitrogen concentration in Virginia cider apples; determining pre-fermentation
  amino acid profiles in juice from apple cultivars used for cider production; establishing research-based, optimized
  fermentation strategies for cider production from Virginia-grown apples; publishing an Extension fact sheet on the role of
  yeast assimilable nitrogen in cider fermentation; and communicating the results of this research within a framework of cider
  fermentation best-practices to Virginia cider makers.
- Partner with Virginia Tech to develop soybean varieties for sprouts as a profitable vegetable crop by establishing breeding criteria of soybean seeds' sprout characteristics and releasing sprouting soybean cultivars adapted to Virginia.
- Partner with Virginia Foundation for Agriculture, Innovation and Rural Sustainability (VA FAIRS) to create an
  environment where more producers might grow chestnuts and lenders loan money to develop chestnut-based business
  propositions by conducting an evaluation of the potential market for Virginia grown chestnuts, assessing whether Virginia
  chestnuts can be produced and delivered to market profitably, providing growers the basic understanding of the market and
  confidence to invest in a long-term business opportunity, and compiling technical information for potential and current
  producers about chestnut production in Virginia.
- Partner with Virginia Tech, Eastern Shore Agricultural Research and Extension Center to increase sweet corn and tomato
  yields and improved soil health and tilth by determining appropriate nitrogen fertilizer application rates for sweet corn and
  tomatoes in systems that utilize high residue cover crops and quantifying soil health improvement from conversion of
  conventional tilled vegetable land to land with incorporation of cover crops and conversation tillage.
- Partner with Virginia Tech, Winchester Agricultural Research and Extension Center (AREC) to increase the use of bloom thinning and reduce the number of fungicide sprays needed in organic apple orchards by developing reliable crop load and disease management practices and identifying rootstocks that are productive and disease resistant in organic systems.

- Partner with the Institute for Advanced Learning and Research to increase the health and yields of grapevines while reducing the use of synthetic fertilizers by establishing beneficial bacterial endophyte (Burkholderia phytofirmans strain PsJN) populations in grapevine plantlets in the lab and greenhouse with two commercial cultivars and test plant performance versus non-inoculated plantlets on five vineyards in Southern Virginia.
- Reduce hive and productivity loss and direct exposure to pesticides by developing low cost portable methods for confining bees in a hive.
- Partner with Virginia Tech, Hampton Roads Agricultural Research and Extension Center (AREC) to replace the use of fumigants as a pest management technique for annual strawberry production with non-chemical alternatives by investigating soil solarization and microwave treatments for their effects on pest-control and microwaves in strawberry production.
- Partner with Virginia Tech, Hampton Roads Agricultural Research and Extension Center (AREC) to replace the use of fumigants with non-chemical alternatives as a pest management technique for annual strawberry production by investigating soil solarization and microwave treatments for their effects on pest-control and microwaves in strawberry production.
- Partner with Virginia Food Works to increase the number of farmers and food producers creating foods from Virginia
  grown specialty crops and the number of value-added food products in the commercial marketplace that use specialty crops
  by developing new recipes incorporating Virginia specialty crops.
- Partner with Local Food Hub to increase sales opportunities for specialty crop growers in the institutional marketplace by implementing an internal management system that will provide expanded food safety assurances to buyers in the institutional marketplace and help small specialty crop producers move more quickly and cost-effectively toward full Good Agricultural Practices (GAP) certification.

## Washington State Department of Agriculture

Amount Awarded: \$4,284,561.35 Number of Projects: 28

- Partner with the Center for Produce Safety Foundation, in collaboration with the University of California, Davis and the University of Arizona, to develop data to support collective expert evaluations for the replacement of quantitative irrigation water standards based on generic E. coli with a semi-quantitative threshold based on a designed risk-assumption Limit of Detection based on either E. coli and/or Bacteroides as an improved indicator system for acute and chronic fecal contamination.
- Partner with Washington Apple Commission to increase consumer awareness in three key markets (Mexico, Indonesia and Thailand) of the health benefits, varieties, and uses of Washington apples updating a consumer website (www.bestapples.com) to make it mobile device-enabled, highlight the connection between Washington apples and a healthy lifestyle, and translate it into key foreign market languages Spanish, Chinese, Bahasa Indonesia, Russian, Thai, Arabic and Vietnamese.
- Partner with Washington State Wine Commission to increase the number of Washington wineries exporting by conducting an advertising campaign for Washington wines in Ontario and Quebec.
- Partner with Pear Bureau Northwest in collaboration with the Oregon Department of Agriculture to increase overall Northwest pear sales by increasing foodservice sales to national, multi-unit restaurants through a multi-state marketing campaign that will perform a qualitative research study; participate in three annual foodservice gatherings; and conduct an event for foodservice chefs featuring classroom time with a leading post-harvest ripening and handling expert, orchard tours with local growers, and visits to packing and shipping facilities.
- Partner with Washington State University Small Farms Program to increase the sales of direct marketed, specialty crop farmers in Washington by developing a marketing campaign that uses new, professional, and creative visual marketing tools that are distributed to local farmers' markets.
- Increase access to direct markets (retail grocery, restaurant, farmers' market, and community supported agriculture) for small-scale specialty crop growers/processors by bringing together specialty crop buyers and growers through local buying missions.
- Increase the use of Washington-grown specialty crops in institutions by developing and delivering training and networking sessions for specialty crop growers, state agencies, food processors, distributors and other institutional buyers.
- Partner with Neighborhood Farmers Market Alliance to increase sales of specialty crops by conducting a marketing campaign toward low-income shoppers highlighting the use of Supplemental Nutrition Assistance Program (SNAP) Fresh Bucks for the purchase of fruits and vegetables at farmers' markets.

- Partner with Washington State Farmers Market Association to will increase specialty crop farmer direct marketing skills and knowledge as well as enhance their success and sales by providing targeted, off-season training to direct marketing specialty crop farmers to build their marketing capacity and skills; providing direct farmer services and support with marketing questions; and creating and coordinating a specialty crop promotional campaign at farmers' markets statewide in conjunction with Farmers' Market Week.
- Partner with Community Agriculture Development Center to enhance farmer production of specialty crops and consumer
  consumption of specialty crop value-added products by conducting a feasibility study to research and define a small-scale
  processing facility to be used by local berry, fruit, and vegetable growers to enhance access to year-round local markets for
  their crops.
- Partner with Washington Hop Commission to increase the amount of hops sold to international markets, especially in Australia, Korea, Hong Kong, China, and Taiwan, by establishing new pesticide maximum residue levels (MRLs) for hops in these new and expanding export markets.
- Partner with Washington State University to reduce the risk of postharvest needle loss on cut Pacific Northwest Christmas trees by testing and developing a protocol to inhibit ethylene-induced needle loss, project results will be shared in publications and at four grower meetings.
- Partner with Snoqualmie Valley Preservation Alliance to increase specialty crop production capacity in the lower Snoqualmie Valley by developing an irrigation water strategy and identifying reliable mechanisms to move irrigation water to where specialty crop growers can access it.
- Partner with Eltopia Communications, LLC to increase quality and yield of specialty crop by evaluating the effectiveness of bistatic ground penetrating radar (BGPR) to provide an accurate 3-D shallow hydrology model in cherry orchards; investigating the influence of the Decision Making Tool using BGPR on management decisions and subsequent impacts on optimal soil moisture levels (BGPR), water usage, yield, quality, and levels of mildew; and raising awareness of BGPR as a new, practical tool to optimize irrigation for cherry production.
- Partner with Washington State University to determine honey bee subspecies foraging differences in Washington during wet and/or cool pollination conditions by measuring and comparing pollinating propensity, temperature parameters of foraging, colony growth rates and foraging behavior in tree fruit orchards and small fruit plantings; evaluating these breeding lines for comparative resistance/tolerance to pests and pathogens; and conducting large-scale "real world" field experiments with these breeding lines in a commercial migratory operation.
- Partner with Washington State University to improve potato input-use efficiency and grower income by quantifying the tolerance of advanced clones and cultivars from the Pacific Northwest Variety Development Program to nutrient, water, heat and plant population stress; developing innovative planting designs to optimize plant population, inter-plant competition and land use efficiency for selected traditional and newly developed cultivars; and testing and developing techniques for altering length to width ratios (tuber shape) of round but otherwise superior russet selections from the Northwest Variety Development Program.
- Partner with Washington State University to reduce in-field crop losses of apples by developing rapid non-contact apple bitter pit detection technique(s) for identifying the disorder during early to asymptomatic stages.
- Partner with Washington State University to help grape industry stakeholders and regulatory agencies to improve sanitary status of vineyards and nurseries for enhanced competitiveness of the grape and wine industry in domestic and global markets and strengthen clean plant and grapevine certification programs for preventing the introduction and subsequent dissemination of nepoviruses and the nepoviruses vectors in Washington vineyards by identifying virus(es) associated with 'fanleaf-like' symptoms, developing reliable methods for the detection of virus(es) associated with 'fanleaf-like' symptoms, monitoring affected vineyard blocks for nematode vector(s), and studying the vineyard's ability to transmit virus(es).
- Partner with the Washington State University and the University of Alaska Fairbanks to study a sampling of Alaska grower
  fields of peonies to verify species identification and the biology and pathogenicity of Botrytis gray mold, which is the single
  most important disease of Alaska field-grown peonies and cut stems in storage. The research findings will be used to
  develop grower integrated Botrytis disease management guides for peonies.
- Partner with Washington State University develop an effective strategy to manage Verticillium wilt on watermelon by identifying watermelon-compatible rootstocks that are resistant to different strains of V. dahliae commonly found in Washington; validating disease tolerance, yield and fruit quality of grafted watermelon in field trials; and training commercial transplant producers and watermelon growers to graft watermelon.
- Partner with Washington State University to augment the ability of organic and conventional apple growers in Washington State to produce high yields of premium quality fruit by evaluating the relationships between pesticide management intensity, pest pressure, and soil quality in both organic and conventional orchards and developing specific management recommendations.

- Partner with Washington Hop Commission to increase hop producer awareness and adoption of integrated pest management (IPM) tactics, and ultimately the application of IPM tactics to hop yards where the pathogen is most likely to survive by identifying and quantifying risk factors for seasonal survival of the pathogen, clarify if the pathogen persists in a limited number of chronically affected fields, evaluate sustainable means to disrupt overwintering, communicate and extend findings to industry stakeholders and partners.
- Partner with Washington State University to improve the understanding of transmission, cultural practices that impact, and options to manage novel strains of potato virus (PVY) in specialty potato varieties by investigating whether new strains of PVY can be differentially transmitted via mechanical means, determining if PVY strains exist on crops and weeds common to western Washington, demonstrating use of cover crops as spray rows to provide stylet "cleaning-sites" for aphids, studying whether certain cultural practices affect PVY symptom expression in potato tubers, compare novel approaches for detecting PVY strains in plants and tubers during winter grow-out tests, continuing monitoring for new/exotic PVY strains and assess reactions of specialty potatoes to them, and developing educational programs on PVY for seed and commercial potato growers.
- Partner with Washington State University to reduce or eliminate mealybug populations in sweet cherry orchards and stop or slow the spread of little cherry disease (LCD) by developing a comprehensive management plan for LCD, which determines optimal control strategies for apple and grape mealybugs, vectors of LCD, and provides growers with decision making tools to aid in the elimination of LCD from infected orchards.
- Partner with North Yakima Conservation District to determine the effects of removal of Black Hawthorne tree in close proximity to apple orchards as a way of implementing a host reduction program to demonstrate an effective management strategy of maintaining a 'Pest Free Area' or 'Areas of Low Pest Prevalence.'
- Partner with Washington State University to increase the stability of repeat flowering and powdery mildew resistance in adapted day-neutral cultivars of strawberries by conducting foundational pre-breeding work for assessing repeat flowering and powdery mildew resistance in 80-100 accessions of day-neutral breeding material over two field seasons.
- Improve soil quality and increase crop yield for Whatcom County raspberry producers by developing a model for a datadriven, collaborative, non-regulatory approach to help red raspberry growers maintain environmentally friendly, viable agricultural practices.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## West Virginia Department of Agriculture

Amount Awarded: \$270,171.22 Number of Projects: 15

- Collaborate with Potomac State University and West Virginia University Research Corporation to increase the production of root crops by fabricating a mobile, post-harvest wash station that will support food safety through the cleansing of root crops using suitable water, which is otherwise not available in many rural communities.
- Increase specialty crop farmers knowledge of how to reduce the risk of food borne illnesses by providing training opportunities on Good Handling Practices/Good Agricultural Practices (GHP/GAP), Recall/HACCP, Food Safety Investigation, Risk Management, etc.
- Increase syrup production of West Virginia maple syrup through the formal organization of the West Virginia Maple Syrup Producers Association who will provide maple growers and processors information, resources, and support collaborative marketing efforts.
- Partner with West Virginia State University Research and Development Corporation to increase the knowledge of pecan production and increase the growth of pecan tree groves in a commercial setting by designing and implementing workshops and demonstration sites on pecan production and attracting new participants to the pecan industry.
- Partner with CADCO Foundation dba Charleston Area Alliance to increase knowledge of perennial specialty crops in Sustainable Agriculture Entrepreneurs (SAGE) participants and increase appreciation and purchase of perennial specialty crops by consumers through educational, hands-on workshops on and planting of perennial specialty crops.
- Partner with Grow Ohio Valley, Inc. to increase the production of local specialty crops across the Upper Ohio Valley by planting a demonstration plot of apple trees and berries in Wheeling, West Virginia, conducting workshops and seminars associated with the demonstration plot, and establishing direct sales contacts with adjoining school districts.
- Partner with West Virginia Veterans to Agriculture to increase the number of honey producers operating viable businesses and increase honey production in West Virginia by enrolling and training new honey producers and increasing the knowledge of current registered beekeepers.

- Partner with West Virginia University Research Cooperation to expand maple syrup production in West Virginia by conducting an analysis of the use of under-utilized mine lands for growing maple saplings for syrup production by comparing sap content from maple trees growing on forest sites to maples growing on mine land sites.
- Partner with West Virginia Queen Producers Association to increase honey production of the West Virginia beekeepers by
  investigating cryopreservation of honey bee germplasm, which will be disseminated to apiarists through workshops and
  seminars.
- Partner with Kanawha Institute for Social Research & Action, Inc. (KISRA) to determine the economic potential of raised beds, hydroponic vertical ports, and vertical towers in the production of specialty crops through scientific evaluation of inputs and outputs, including cost of production, efficiency, yields, and consumer satisfaction/sales.
- Partner with West Virginia State University (WVSU) and Research Development Corporation to improve profitability and productivity in high tunnel vegetables production by small farm growers in West Virginia through the development of production schedules based on research and data collection from growers near to WVSU campus.
- Partner with Ritchie County Farmers Market Association to increase small fruit and other specialty crop production and profit in Ritchie County and surrounding areas of West Virginia by utilizing shared implements (bed shaper/mulch layer, transplanter, and mulch lifter) which will increase the output of specialty crop production.
- Partner with Eastern West Virginia Community Action Agency, Inc. to increase the amount of specialty crops grown so that they can be sold to institutional buyers such as Farm to School, restaurants, stores, and to specialty niche type markets through an increase in the row feet grown, increasing the number of farmers who are implementing season extension techniques, and increasing the supply of in-demand items during off-season times.
- Partner with West Central Beekeepers Association to increase the quantity of honey production by expanding the natural food source of wildflowers available to the local honey bee population.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Wisconsin Department of Agriculture, Trade and Consumer Protection

Amount Awarded: \$1,411,241.16 Number of Projects: 25

- Provide third-party food safety audits available to small and medium-size Wisconsin producers by continuing a cost-share arrangement for Good Agricultural Practices/Good Handling Practices (GAP/GHP) audits or Harmonized certification and providing pre-audit educational opportunities.
- Improve the knowledge and implementation of culturally appropriate risk management practices and Good Agricultural Practices (GAP) record keeping among Hmong ginseng growers by conducting training workshops in their native language.
- Increase the number of cranberry companies shipping into the Indian market and year-on-year sales growth of Wisconsin frozen and/or dried cranberries by facilitating technical seminars to educate local manufacturers about using cranberries as an ingredient.
- Partner with Wisconsin Grocers Association and Wisconsin Local Food Network to increase hospital administration, staff and patients' awareness of, and access to, Wisconsin-grown specialty crops and to increase sales of Wisconsin-grown specialty crops to hospitals through marketing and education to hospitals and specialty crop producers.
- Partner with Wisconsin Grape Growers Association to increase the quality of Wisconsin's wines, ciders, and hops/hop pellets by developing a comprehensive outreach program to coordinate with the University of Wisconsin Extension faculty working with specialty crop growers and to work directly with the craft fermenters in the state.
- Partner with Cooperative Educational Service Agency to increase the amount of Wisconsin grown specialty crops sold to
  Wisconsin schools by developing specialty crop culinary training videos that increase culinary skills of the school food
  service staff and creating greater opportunities for Wisconsin producers to market specialty crops through the Farm to
  School program.
- Partner with Wisconsin Apple Growers Association to increase the production of specialized cider apples by educating growers about hard cider apple varieties and cultivation, developing a template for a grower contract, implementing an economic viability formula, and establishing a cider apple test plot at University of Wisconsin's Peninsular Agriculture Research Station where heirloom and new cider apple varieties appropriate for Wisconsin can be developed and verified for best cider production.

- Partner with Midwest Organic and Sustainable Education Service (MOSES) to increase sales of certified organic specialty crops sold at Wisconsin farmers' markets and decrease occurrences of mislabeling by developing tools to educate specialty crop producers on organic labeling laws and production practices.
- Partner with the University of Wisconsin to increase the capacity of small acreage vegetable crop producers to meet the
  demand for sustainably produced vegetables by developing entry level assessment tools to engage a majority of growers;
  documenting sustainability for individual crops in a whole-farm context; conducting modified baseline Frontiers of
  Sustainability analyses to identify key drivers; working with the industry to improve in these targeted areas by promoting
  needed changes to production; and working with the industry to collaboratively help growers promote and market the
  achievements that they have already made.
- Increase Wisconsin specialty crop producer and agribusiness knowledge about growing practices and state specialty crop
  trends by conducting producer outreach and training sessions on production and diversification practices and sharing
  specialty crop research results.
- Partner with Farm Commons to increase specialty crop producer knowledge of the basics of contract law including creating, fulfilling, and modifying a contract; advanced contract law and regulations specific to fruit and vegetable sales, food safety liability, and risk management overall by providing specialty crop producers with a comprehensive guide to writing a sales agreement; leading farmers through an interactive online workshop designed to move farmers forward and promote collaboration; and providing individual attorney follow up with one-on-one attention to strengthen individual buyer-seller relationships.
- Partner with the University of Wisconsin to generate new and increased knowledge about horticultural import traits, inheritance, and genomic location for Wisconsin cranberries by developing an integrated approach incorporating both classical breeding and molecular tools, which will be essential to increasing breeding efficiency and reducing the generation interval for selection (currently 30-50 years) and the field space needed.
- Partner with the University of Wisconsin to increase the marketable tuber yield in the best integrated treatments by identifying and implementing potato desiccation strategies that will allow Wisconsin potato producers to market tubers earlier without negative impacts to quality and yield.
- Partner with Wisconsin Grape Growers Association to increase production of and demand for fresh, locally grown seedless table grapes in Wisconsin by identifying and characterizing the best cold-hardy cultivars for the different regions in Wisconsin and conducting grower workshops and educational outreach events.
- Partner with Midwest Food Processors Association to determine the impact of chronic, low-dose pesticide exposure to bees directly or through the pollen and nectaries of flowering plants by characterizing the temporal patterns of insecticide residues in plants treated with seed treatments and determining the pollinator species present in selected processing crops including succulent snap bean, sweet corn, and peas at different times during crop development.
- Improve pollinator heath and habitat by developing a statewide Pollinator Plan and establishing best management practices that will mitigate negative impacts on pollinators.
- Partner with Ginseng Board of Wisconsin to increase exports of Wisconsin ginseng and enhance profitability and expansion of this specialty crop by monitoring Maximum Residue Limits among international ginseng markets, testing seed treatments and biologically active mulch as a means to exclude pests, and developing pesticide recommendations for growers that protect the crop and allow it to be exported with minimal or no chemical residues.
- Partner with Wisconsin Potato Industry Board to increase sustainability of muck vegetable crop production in Wisconsin by optimizing pest and disease control practices in onion and carrot crops through the adoption of best management practices and weather-based forecasting tools to inform the application of pesticides.
- Partner with the University of Wisconsin to support the growth of the Wisconsin hop industry by increasing the number of
  pathogen-free hop rhizomes through the establishment of a clean production system and development of a production
  system conducive to identifying hop varieties adaptable to producing high-yielding hop cones of excellent quality in
  Wisconsin.
- Partner with the University of Wisconsin to provide a reliable solution to the persistent flea beetle problem in Wisconsin cranberries by screening a variety of insecticides and a Bacillus thuringiensis formulation, applied as post-bloom soil-drenches, in collaboration with Wisconsin growers; isolating and screening a variety of nematode species for their pathogenicity to flea beetles; propagating and applying nematodes pre-bloom to commercial acreage; and disseminating findings as widely as possible within the cranberry industry.
- Partner with the University of Wisconsin to decrease the occurrence of disfigurement and scarring in cranberry fruit by
  developing research-based management strategies to control tobacco streak virus (TSV) and blueberry shock virus (BlShV)
  in Wisconsin grown cranberries.

- Partner with the University of Wisconsin to increase specialty crop producer knowledge on monitoring and management of spotted wing drosophila (SWD) and on its seasonal phenology by evaluating the seasonal phenology of SWD, determining whether a winter morph is found in Wisconsin, describing when in the growing season the winter and summer morphs are present, and determining the reproductive output of females early in the season, as they first occur in crops, and then later in the season, as they prepare to enter winter.
- Partner with University of Wisconsin, Stevens Point to increase the number of decision-making tools for ginseng growers
  by investigating the benefits of using vermicompost and vermicompost tea in ginseng production, determining the impact
  vermicompost and tea has on field production, and providing educational workshops to ginseng growers on the best
  alternative farming practices to enhance production.
- Partner with the University of Wisconsin, River Falls to enhance the sustainability and profitability of regional beekeepers
  by minimizing their reliance on package bees outside the region, limiting the importation of bee diseases and pests into
  Wisconsin beekeeping operations, and investigating how efficiently healthy, small, honey bee nucleus colonies can
  overwinter in Wisconsin.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.

## Wyoming Department of Agriculture

Amount Awarded: \$290,985.61 Number of Projects: 14

• Partner with the University of Wyoming Extension to raise specialty crop awareness by producing articles in the Barnyards

- Partner with the University of Wyoming Extension to raise specialty crop awareness by producing articles in the Barnyards
   & Backyards magazine on a variety of specialty crop issues including pest and disease control, weed control, pollinator support, and honey production; additionally, a separate pollinator guide will be produced.
- Increase marketing opportunities of pulse growers interested in production and sale of pulses to gluten free processors by developing a manual for a set of procedures for pulse crop gluten free verification and by providing trainings to assist local pulse farmers on how to produce for and market to the gluten-free market.
- Increase awareness of specialty crop opportunities, promote the Specialty Crop Block Grant Program, and promote Wyoming producers and processors by providing information at conferences and workshops, publications, and trade events.
- Partner with Wyoming Community Network to increase individuals' knowledge on specialty crop production through the support of such projects as community gardens and hoop houses by providing small grants (6) to non-profits, colleges, and K-12 schools.
- Partner with the University of Wyoming to educate producers and the general public about Wyoming's pollinators through annual educational opportunities (Bee College), evaluation of commercially available pollinator seed mixes, and the annual survey and document of pollinators at test plots.
- Partner with Wyoming Farmers Marketing Association to offer information on specialty crop food areas by providing
  expert speakers on specialty crop issues at the Wyoming Farmers Marketing Association Annual conference and increasing
  the specialty crop marketing efforts for the WY Buy Fresh Buy Local Program through cooking demonstrations.
- Partner with the University of Wyoming Extension to teach the Junior Master Gardener Program to 40 Extension educators, Master Gardeners, and teachers from Wyoming who will then take this training to schools throughout the state to teach at least 1000 students appropriate horticulture and gardening lessons.
- Partner with the University of Wyoming to improve grapevine growth and development, yield, and berry quality in Wyoming vineyards by studying the water requirements of Frontenac and La Crescent grapevines at various phenology stages and discovering possible approaches for efficient water utilization.
- Partner with the University of Wyoming to increase knowledge of heritage apple varieties in Wyoming by identifying 75-120 year old heirloom and historic apple trees to cultivar, or to establish parentage in novel cultivars, in apple trees from Wyoming through molecular techniques.
- Partner with the University of Wyoming to evaluate five of the most promising genotypes/accessions of fenugreek in varying Wyoming environments to increase knowledge on the phenotypic adaptability and stability for growth, seed yield, and quality, then to disseminate this information.
- Partner with Northwest College to study whether hops can produce well in Bighorn Basin by establishing a hops variety trial at two locations, publishing the data, then establishing a workgroup of interested growers and brewers to facilitate a hop growing workshop for the public.

- Partner with the University of Wyoming to continue to gather information on heritage orchards or orchard remnants and wild trees representing "novel" varieties throughout Wyoming in the hopes of increasing general awareness of sweet apple producers, orchards, and varieties of heritage apples, while also increasing the knowledge of specialty crop producers about grafting and growing sweet apples.
- Partner with Wyoming Community Network to continue the Producer Season Extension program, which will not only increase the production of climate sensitive specialty crops by extending the season through the use of high tunnels, low tunnels, and row covers, but also increase awareness and knowledge of these methods.
- Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing preaward and post-award activities to administer Specialty Crop Block Grant Program funding.