Transportation and Marketing
Specialty Crop Block Grant Program

Fiscal Year 2015
Description of Funded Projects

The fifty States, the District of Columbia, and five U.S. Territories were awarded Fiscal Year 2015 funds to perform a total of 755 projects that benefit the specialty crop industry. All the eligible entities submitted their applications by the established deadline of July 8, 2015. The approved awards are listed alphabetically.

2015 Project Delivery Types

![Pie chart showing project delivery types]

<table>
<thead>
<tr>
<th>Type</th>
<th>Projects</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive Grants</td>
<td>638</td>
<td>85%</td>
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<tr>
<td>Other</td>
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</tr>
<tr>
<td>State Programs</td>
<td>23</td>
<td>3%</td>
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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.

2015 Project Types

![Pie chart showing project types]

<table>
<thead>
<tr>
<th>Type</th>
<th>Projects</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Education</td>
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<tr>
<td>Food Safety</td>
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<tr>
<td>Marketing &amp; Promotion</td>
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<tr>
<td>Pest &amp; Plant Health</td>
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<td>Production</td>
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<tr>
<td>Research</td>
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</tr>
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</table>
Alabama Department of Agriculture and Industries

Amount Awarded: $427,708.89  
Number of Projects: 19

- Partner with Food Bank of North Alabama to increase specialty crop producers’ competitive ability to access local, wholesale markets by institutionalizing the gains it has achieved in helping specialty crop producers meet required food safety standards and expanding the development of long-term, mutually beneficial business relationships between local buyers and specialty crop producers.

- Partner with Bay Area Food Bank to support and promote local farms and increase the health of underserved communities by purchasing seconds of specialty crops, distributing those crops to communities with low food access and educating families about those crops through community gardens and healthy cooking lessons.

- Partner with The Center for Family and Community Development to educate the community on the importance of growing local specialty crops, as well as to increase the production of specialty crop in the community, to promote local fresh foods and to sustain on the farm operations through increased sales.

- Partner with the Town of Epes Sumter County, Alabama to increase seasonal yield of their vegetable gardens as well as train young members of its community valuable food production skills.

- Partner with Healthy Living Gardens to improve students’ knowledge on the healthy benefits of eating vegetables while positively increasing a behavioral change in the consumption of new vegetables at home and school as well as, to introduce the aeroponic garden and its economic impact in the community.

- Partner with Druid City Garden Project to increase the availability of Alabama heritage seeds, as well as significantly improve student health and academic outcomes through the expanded deployment of our comprehensive Gardens 2 Schools program, as measured by an ongoing University of Alabama study.

- Partner with Bay Area Food Bank to support and promote local farms and increase the health of underserved communities by purchasing seconds of specialty crops, distributing those crops to communities with low food access and educating families about those crops through community gardens and healthy cooking lessons.

- Partner with Hope Here International Ministries to educate the future farmers in the local community on the benefits associated with the traditional backyard gardening and gardening using a greenhouse.

- Partner with Alabama Cooperative Extension System to continue strengthening the Alabama Extension Small Farm Program by providing basic pest monitoring and integrated pest management (IPM) information to small producers via direct field training and publications and also by developing the first unified electronic curriculum for specialty crop producers for self-paced learning.

- Partner with Auburn University at Montgomery to continue promoting the production and consumption of specialty crops throughout Alabama by developing and maintaining demonstration gardens to demonstrate plant culture, harvest, marketing, and consumption to growers, students, and consumers.

- Partner with Enrestoration, Inc. to give individuals with special needs the opportunity to increase their knowledge capacity to contribute to the quality of life of the communities where they reside through the medium of growing specialty crop. The job training skills which the program participants will acquire by growing vegetables and herbs will be leveraged in the job market by making them employable at stores which has an extensive garden section.

- Partner with the First Baptist Church Community Ministries to teach people of all ages how to garden; develop healthy eating habits through proper nutrition; bring people 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.

- Partner with Alabama Pecan Growers Association to offer new and beginner farmers the tools needed for successful farming and also hear from pecan specialists and seasoned farmers from all over the state share information on best management practices in the pecan industry.

- Partner with the Alabama Green Industry Training Center to provide veterans and others with fundamental knowledge about specialty crop opportunities. Additionally, this program will introduce or enhance their understanding of specialty crop production operations and methods.
• Partner with the Alabama Cooperative Extension System and the Alabama Fruit and Vegetable Growers Association to enhance the competitiveness and sustainability of specialty crop producers in Alabama, especially new/beginning farmers, through increased training opportunities, adoption of improved crop production practices and the development of a new AFVGA website with enabling features like producer locator, blogs, social media, and educational videos so that customers can interact with us on a stable platform.

• Partner with the University of West Alabama to optimize a method to introduce Penicillium sp. and Ampelomyces sp. into tomato seeds via seed coating, hence make the discovered symbionts technology accessible to farmers.

• Partner with Local Appetite Growers LLC, Auburn University, and the Alabama Extension Agency to explore the viability of an alternative spinach crop as commercially viable for the Gulf Coast Region.

• Partner with Alabama Nursery & Landscape Association to investigate summer cooling strategies for specialty crops grown in protected agriculture structures in Alabama.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

Alaska Division of Agriculture

| Amount Awarded: | $220,896.26 | Number of Projects: | 6 |

• Partner with the Fairbanks Economic Development Corporation to raise awareness about the availability and nutritional value of locally grown specialty crops and facilitate ways for local specialty crop growers to increase their sales to area school districts in order to improve youth nutrition and create more markets for the specialty crop producers.

• Increase the marketability and sales of Alaska potatoes by studying and disseminating to the industry the postharvest qualities of the 185 varieties of Alaskan grown potatoes, which will allow the Alaska potato industry sell more high value potatoes and local food industries to source more potatoes from local producers.

• Ensure that Alaska continues to be a leader in the sale of tablestock and seed potatoes by identifying and developing strategies to combat the necrotic strains of Potato Virus Y which are threatening Alaskan potato industry and getting these new strategies into the hands of potato producers.

• Partner with the Alaska Peony Growers Association to mitigate against potentially devastating yield losses due to the spread of Botrytis gray mold through identifying which species of Botrytis are present in Alaska and working with peony growers on effective pathogen management strategies.

• Partner with the University of Alaska Fairbanks to increase yields and potential earnings in spite of the challenges of controlling weeds and a lygus bug infestation by performing a study to screen 6 herbicides and 4 insecticides in order to create and disseminate Alaska specific integrated pest management plans for Alaska peony growers.

• 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.

American Samoa Department of Agriculture

| Amount Awarded: | $250,040.65 | Number of Projects: | 1 |

• Develop a modern and standardized data collection and reporting system to be utilized in more precise tactical and strategic planning; increase agricultural productivity by identifying low-cost opportunities to produce value added specialty crop products; and improve sustainable specialty crop farming practices.

Arizona Department of Agriculture

| Amount Awarded: | $1,215,126.59 | Number of Projects: | 21 |

• Meet the demand for increased certification and verification of specialty crops by producers and produce handlers though a Good Handling Practices (GHP) and Good Agricultural Practices (GAP) training open to specialty crop growers and those in the specialty crop distribution supply chain.

• Partner with the University of Arizona to study how to ensure that all water used in the production of Arizona specialty crops is consistent with EPA water quality criteria in a way that is consistent with Arizona’s unique climate and growing season so that local stakeholders, specialty crop growers and food safety coordinators understand the best options available to them for the protection of public health and promotion of food safety.
• Partner with the University of Arizona to create techniques to make irrigation pipelines used in specialty crop production self-sterilizing, a process that will ensure that crops produced are consistent with food safety regulations in a way that does not damage produce but also is highly cost effective in relation to current pipeline cleaning processes.

• Partner with the University of Arizona to improve food safety by increasing the speed, accuracy, and affordability at which E. Coli can be detected, which is so vital as E. Coli is the most commonly suggested indicator of microbial water quality for irrigation waters.

• Partner with the University of Arizona to improve the safety of specialty crops by improving and updating the Quantitative Microbial Risk Assessment (QMRA) that is used throughout the leafy green industry, which will lead to increased yields.

• Increase the awareness of, and demand for, Arizona grown specialty crops through a multifaceted marketing effort that will promote the accessibility and nutrition of local specialty crops through Social Media, Google and YouTube ads, public advertising, and marketing research.

• Partner with the Arizona Nursery Association to increase the sale and use of Arizona grown landscape plants and trees through a marketing campaign that will directly target Arizona consumers through print ads, billboards, radio spots and PSAs encouraging Arizona-appropriate landscapes and how they can lead to lower utility bills, improved air quality, and improve the health of the landscape.

• Partner with Arizona State University to increase the demand for Arizona grown Medjool dates in response to the doubling of production of this crop over the past four years through the creating of a demand model and determining the key drivers of demand and the consumers’ willingness to pay for this crop; this information will then be shared to those current and future date farmers to best market their Medjool dates.

• Partner with the University of Arizona to increase the supply of commercially in demand mushroom varieties to meet the dramatic increase in interest and demand for locally grown mushrooms by studying optimal growing strategies specific to Arizona’s environment through research and extensive outreach.

• Partner with the Yuma Fresh Vegetable Association to improve specialty crop production and income by bringing together scientists, specialists and governments to provide the latest research findings, technological advances and emerging challenges in the specialty crop industry at an educational forum open to all specialty crop farmers.

• Partner with Arizona Department of Education, Health and Nutrition Services to improve the nutrition of school lunches and increase sales for specialty crop producers by preparing producers to market directly to schools through supply chain support, training and assistance in food safety, industry needs and specifications, procurements guidance, connections to school food purchasers, and a marketing campaign.

• Partner with the Western Growers Foundation to meet the challenge of youth obesity in the state that is exacerbated by a lack of knowledge about, and access to fresh fruits and vegetables, by working with schools to create edible school gardens in the state where students can learn about how important nutrition is in an interactive way, and the schools getting access to high quality fresh specialty crops.

• Partner with the University of Arizona to share proven management tools to combat Fusarium wilt, which is dramatically effecting the lettuce industry in Arizona, at an International symposium that will share current knowledge and be a venue for the presentation of new research efforts, passing on new management tools to the grower community, better understanding by researchers of field-level disease impacts, and increase awareness of resistant varieties.

• Partner with the University of Arizona Cooperative Extension to improve pecan yields by identifying crop management strategies for this crop that reflect the lack of nitrogen in the soil, which is vital for leaf and shoot expansion each season examining a variety of pecan cultivars and a variety of current and experimental treatments.

• Partner with the University of Arizona to perform an economic analysis of the specialty crop industry in Arizona, focusing on vegetable and melon production, and distribute their findings to industry stakeholders so that they may understand where to devote crop investments as well as labor requirements and availability.

• Partner with the University of Arizona to create an enhanced Integrated Pest Management system for Arizona Vegetables through an extension outreach program that emphasizes the development, validation, and delivery of timely and relevant information and technologies to growers for managing pests in Arizona’s vegetable and melon crops.

• Partner with the University of Arizona to address the threat of Fusarium wilt by identifying cultivars that are highly resistant to this disease by studying currently planted iceberg lettuce cultivars as well as promising lines in development by lettuce breeders and disseminate this research out to the Arizona lettuce industry.

• Partner with the University of Arizona to provide specialty crops farmers with comprehensive pesticide data in order to more quickly and fully identify potential insecticide resistance in order to help inform specialty crop growers’ decisions regarding which pest management strategies to pursue, and thus ensure greater yields.
• Partner with the University of Arizona to increase the demand for Arizona Strawberries by moving their growing season to come ripe during a window when other regions of the country are not coming due, this research will then be communicated to the strawberry industry through updated crop management practice guides and workshops.

• Partner with the University of Arizona to improve Arizona Pecan crop yields through a comprehensive water use study in order to improve and refine irrigation strategies, this information will be conveyed to growers through the development of an easily accessible online tool.

• 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

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<th>Amount Awarded:</th>
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<td>Number of Projects:</td>
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• Partner with the Arkansas Children’s Hospital Research Institute to provide Arkansas specialty crop farmers with the marketing and technical training to sell their produce directly to their local food districts and to help local school districts provide both healthier meals and effective nutrition education.

• Promote the sale of Arkansas specialty crops by marketing to potential produce purchasers at the annual PMA Fresh Summit in Atlanta, one of America’s largest gathering of food vendors, where they will exhibit the different specialty crop products Arkansas has to offer.

• Promote Arkansas Grown specialty crops through the use of a multimedia campaign that will educate consumers, retailers and restaurants about the nutrition, availability and wide variety of Arkansas specialty crops through print, web and radio messaging.

• Partner with the University of Arkansas to increase the sale of Arkansas blackberries by studying which physiochemical and sensory properties of the fruit have the ability to increase their marketability, and thus, the demand for them.

• Partner with the University of Arkansas to increase the sale of Arkansas edamame’s by developing novel, value added and wellness promoting edamame products as well as which cultivars of the crop will be best suited for these new edamame uses.

• 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.

California Department of Food and Agriculture

<table>
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<th>Amount Awarded:</th>
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<td>Number of Projects:</td>
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• Partner with The Regents of the University of California, Davis to ensure the viability of California specialty crops by investing in the next generation of operators by reducing the likelihood of costly spoilage events, improving product quality, and enhancing marketability.

• Partner with The Regents of the University of California, Davis to improve food safety integration in almond trees by testing the nutrient value of organic matter impacting tree nutrition and soil health, verifying that food safe practices such as the use of composted organic matter amendments and minimum exclusion periods of 120 days limit human pathogen presence on fruit at harvest, and monitoring perceptions through surveying of grower participants.

• Partner with Center for Produce Safety to identify more appropriate microorganisms that may be used as novel indicators of the presence of pathogens in irrigation waters by: (1) examining irrigation water samples to determine the levels of indicator species by existing cultural and molecular methods; (2) examining irrigation water samples to determine the levels of viruses known to be found in high concentrations in fecally-contaminated waters; (3) determining the composition of the entire prokaryotic (bacterial) and eukaryotic (e.g., protozoan, fungal, algal) microbial communities found in irrigation water samples; and (4) identifying groups of organisms or specific species whose presence correlate well (both presence/absence and relative abundance) with the occurrence of foodborne pathogens in irrigation waters.

• Partner with Center for Produce Safety to reduce the likelihood of cross-contamination events from harvest through to consumers by identifying improved sanitation practices for cantaloupe field-harvesting and field-packing operations and providing scientific data on which to base field-packed melon specific "Best Practice" guidance.

• Partner with Center for Produce Safety to evaluate and improve sanitizing treatments for sizer carriers in stone fruit packinghouses by evaluating: (1) natural microbial loads on the fruit-contact surfaces of sizer carriers; (2) the growth potential of selected foodborne pathogens (Salmonella and Listeria) on fruit sizer carriers; and (3) potential clean-in-place (CIP) sanitizing treatments for fruit sizer carriers.
- Partner with Center for Produce Safety to evaluate the food safety risks of using tail water for irrigating lettuce and leafy green crops using conventional irrigation and production practices such as quantifying microbial survival during simulated application to soils used to grow leafy greens.

- Partner with Center for Produce Safety to assess the genetic and physiological differences among Salmonella strains relevant to produce safety by developing and validating genetic strategies for the construction of stable, avirulent variants of human pathogens for use as surrogates in controlled greenhouse and open-field research trials.

- Partner with Center for Produce Safety to optimize methods to detect protozoan pathogen (oo) cysts on produce by developing a simple one-step procedure for routine screening of protozoan (oo) cysts on produce (i.e., raw salads), and comparing novel molecular techniques and established microscopy methods for further quantification of viable protozoan pathogens. Protozoan pathogens are rarely tested for in fresh produce.

- Partner with Center for Produce Safety to reduce the microbiological risks associated with the use of raw poultry litter as a soil amendment or organic fertilizer by inactivating pathogenic microorganisms, such as Salmonella, and reducing the microbiological risks associated with the use of poultry litter as a soil amendment or organic fertilizer for specialty crops by increasing the moisture level in chicken litter or applying a two-step heat treatment (wet heat followed by dry heat).

- Partner with Center for Produce Safety to develop and characterize a produce-specific pathogen strain collection by assembling a collection of relevant pathogen, surrogate, indicator, and index strains of produce relevance, evaluate their behavior under relevant conditions, and develop and standardize protocols for strain growth and use.

- Collaborate with the Buy California Marketing Agreement (BCMA) and the California Travel and Tourism Commission to increase the exposure, affinity, and sales of California grown specialty crops through the BCMA public relations and social media campaign, heightened consumer interest in the food supply (where it grows, how it grows and who grows it), and providing the opportunity for California agricultural marketing orders/commissions to independently leverage the media messaging/campaigns.

- Partner with Paso Robles Wine Country Alliance to increase sales and market share for California wine in Texas by increasing consumer awareness, boosting on/off-premise tastings and direct sales, securing media attention, strengthening trade relationships, and boosting agritourism.

- Partner with California Fig Advisory Board to increase purchase intent and usage of California fig and fig ingredients in a comprehensive ingredient development program, educating target audiences on the value of domestically grown- and produced-figs and fig ingredients.

- Partner with Center for Ecoliteracy to increase the market share of specialty crop stakeholders as it simultaneously improves the health of students by expanding the use of fruits and vegetables in school meals.

- Partner with Apricot Producers of California to enhance the marketability and competitiveness of apricots through the development of markets for all California producers to leverage the work and commitment of a diversity of stakeholders by creating economic opportunities for California apricot producers through innovative marketing and promotional activities.

- Partner with Sunsweet Growers, Incorporated to create market opportunities, enhance competitiveness, and increase returns for California's prune growers by promoting prune products as ingredient substitutes and enhancements to food manufacturers, with an emphasis towards manufacturers of sauces and seasonings.

- Partner with Lake County Winegrape Commission to increase demand in a crowded marketplace, which will drive an increase in the average per ton return on winegrapes by $50 per ton by harvest 2016, through the development of an educational course about the Lake County wine region, targeted outreach events, and focused advertising.

- Partner with American Pistachio Growers to increase consumption of California grown pistachios and dried plums in China through demonstration of their use at culinary and baking seminars targeted towards high-end hotel restaurant chefs and professional bakers.

- Partner with California Association of Nurseries and Garden Centers to increase sales of nursery stock by 10 percent by enhancing the ability of the nursery industry producers to market their product through creation of an online marketplace where growers and buyers can easily and effectively communicate both plant availability and buyer preferences.

- Partner with California WIC Association to increase demand for and access to fresh, locally grown fruits and vegetables by bringing more farmers/farmers' markets into the WIC Fruit and Vegetable Checks program and aggressively promoting the farmers’ market option to WIC clients.

- Partner with Organic Seed Alliance to increase the quality, quantity, and diversity of organic specialty seed available in California by providing instruction for organic specialty seed producers in seed quality and seed business; increasing availability of the specialized tools required for efficient seed production, harvest, and processing; increasing market demand for California organically produced seed; and increasing information sharing between organic specialty crop seed producers.
Partner with CalAgJobs to simplify the process by which the specialty crop industry attracts interns by providing free internship listings that are easy for employers to upload and to encourage all agriculture majors to consider specialty crop internships by providing a comprehensive and easy-to-access internship listing resource that is free to students.

To increase specialty crop consumption and marketability among school age-children and the general public by engaging students with specialty crop awareness and nutrition education and improving access to specialty crops for children through the meals they receive at school.

Partner with School Garden Network of Sonoma County to increase knowledge of, access to and consumption of California specialty crops by creating new markets and revenue streams for local specialty crop growers, increasing student awareness and consumption of specialty crops through the Harvest of the Month program, school garden programs, and garden nutrition classes and increasing community awareness of and access to local specialty crops and growers.

Partner with Sierra Harvest to reduce childhood obesity and food insecurity by expanding access to and improving nutritional awareness of California specialty crops in schools.

Partner with Sustainable Economic Enterprises of Los Angeles to increase consumption of fruit and vegetables by continuing and applying ongoing education of specialty crops via Bring the Farmer to Your School in Los Angeles Unified School District Title I classrooms.

Partner with Pacific Coast Farmers' Market Association to increase demand for specialty crops by providing Women, Infants, and Children Farmers' Market Nutrition Program recipients with information on the benefits of eating fresh fruits and vegetables, thereby improving access to and consumption of specialty crops in underserved communities.

Partner with National Hmong American Farmers, Inc. to increase the knowledge about safe handling and agricultural practices as well as how to market to schools among 100 farmers of Southeast Asian descent in the Fresno area through workshops on using safe agricultural and/or handling practices that will ultimately build the capacity of Southeast Asian farmers of effectively marketing their specialty crops to consumers and institutions and to build markets for their crops.

Partner with Sonoma County Agricultural Commissioner to educate operators about practical methods for minimizing pollution runoff into streams, by developing an instructional manual that provides narrative explanations and diagrams of methods operators can adopt to prevent water pollution within the context of the new regulations and offering a series of at least five seminars where operators can learn about proper implementation of practices to prevent soil erosion, manage stormwater runoff, maximize pesticide and fertilizer efficiency, and properly maintain drainage infrastructure, thereby increasing their abilities to comply with the new regulations.

Partner with AgSafe to improve the technical knowledge of nut workers in the safe operating practices associated with pruning, harvesting, and year-round maintenance of almonds, walnuts, pistachios, and pecans by creating the Nut Safety School, a three-part training series in English and Spanish addressing critical worker safety issues.

Partner with Manteca Unified School District to recruit and train a new generation in apiculture with an emphasis in pollination by supplying vocational training to students, exposing students to the apiculture industry (the concerns, benefits, and value of pollination), demonstrating the business opportunities within apiculture, training students to be advocates for pollinators, which will also lead to an increase of the local honey supply.

Partner with County of San Joaquin to increase the consumption of California specialty crops by expanding access to healthy and locally grown specialty crops and improving nutritional awareness of children and adults.

Partner with The Regents of the University of California, Davis to train and equip the current and next generation of beginning farmers in specialty crop production, assist with the development and implementation of good agricultural practices, and encourage the sustainability of environmental stewardship skills through an educational program in English and Spanish, including topics such as general fruit and nut tree biology, updated commodity production, harvesting techniques, food safety, and environmental conservation implemented through a series of interactive, user-friendly online modules incorporated into an online certificate program.

Partner with Soil Born Farms to reducing failure rates for first generation farmers by preparing beginning farmers for the unique challenges of small-scale specialty crop farming, mitigating the trials of farm start up and developing an accredited apprenticeship program that would ensure farmer trainees are placed at for-profit farms in a manner that is compliant with labor standards.

Partner with Ag Innovations Network to increase the knowledge of more than 200 new and aspiring specialty crop farmers through intensive workshops during the off-season that will provide an introduction to the entrepreneurial tools required to succeed, from bookkeeping to marketing, business plan creation to regulations, all taught by local farmers, agricultural advocates, and experts from statewide organizations.

Partner with Cal Poly Corporation to train the next generation of leaders for the California strawberry industry by developing an internship program for undergraduate students at Cal Poly San Luis Obispo.
• Partner with California Land Stewardship Institute to maintain farm viability and environmental quality by developing the monitoring and assessments needed for growers to protect their crops (wine grapes and pears) from frost while reducing water use and avoiding effects to listed species.

• Partner with the Almond Board of California to increase awareness and knowledge of best practices which have the largest potential to reduce greenhouse gas emissions by developing a cost-benefit tool that will help growers understand the short-term opportunity costs of implementing the practices to reduce greenhouse gas emissions, minimizing the time and effort needed to make an informed decision.

• Partner with California State University, Fresno to improve the current forecasting capacity and the knowledge of crop-environment relationships for pistachio crop production that will result in better harvesting plans and marketing decisions of pistachio producers and related industries by creating a website and database through collection and analysis of historical crop and agronomic conditions (e.g. yields, acreages, pests, diseases) in all major counties.

• Partner with The Regents of the University of California, Davis to improve the post-storage quality of walnuts by establishing the relationship between walnut moisture content and water activity and determine how it is influenced by oil content, oil composition and storage conditions; determining the effects of temperature and relative humidity on the rate of quality loss (rancidity, kernel color, taste) of each variety during storage; recommending optimal storage conditions to reduce the rate of quality deterioration, tailored to variety and harvest time; and establishing water activity as a standard measure used by walnut storage operators to optimize post-storage quality.

• Partner with The Regents of the University of California, Davis to evaluate the effects of dried plum intake on measures of vascular function and markers of bone health in postmenopausal women by testing the consumption of dried plums within a treatment group as compared to a control group.

• Partner with USDA, Agricultural Research Service to decrease waste, improve distribution efficiency, and decrease monetary losses in the lettuce industry by identifying accessions, genes, and gene combinations that extend shelf life and increase yield stability; determining the correlation between shelf life and nutrient quality of salad-cut lettuce; and determining the genetic variation for nutrient retention after processing.

• Partner with The Regents of the University of California, Davis to decrease costs and improve accessibility of blueberries in the local markets by eliminating soil acidification and adopting a system of grafting blueberries onto high pH tolerant rootstock.

• Partner with The Regents of the University of California, Davis to develop salt tolerant almond varieties breeders and nurseries through the characterization of rootstock and cultivar salt tolerance and the development of irrigation strategies that achieve adequate salt leaching, minimal nitrate leaching and maximal crop productivity under diverse soil and environmental conditions.

• Partner with Ventura County Resource Conservation District to determine the environmental and financial efficacy of best management practices, addressing the shortfall of information regarding the efficacy of stormwater management practices in macrotunnel systems used by specialty crop growers, by developing and implementing a comparative study of these agriculturally and environmentally beneficial practices and conducting an economic analysis of the practices to determine their impact on the agricultural economy.

• Partner with The Regents of the University of California, Davis to inform and improve farmer decision-making and water management related to the value of using cover crops to improve the efficiency and productivity of cropping systems while also minimizing adverse environmental impacts by providing a data-based cost-benefit analysis of cover cropping in San Joaquin Valley tomato and almond production systems.

• Partner with The Regents of the University of California, Agriculture and Natural Resources to improve irrigation and nitrogen (N) fertilizer applications by expanding the web-based decision support program CropManage and fill in gaps in coastal cool season vegetables.

• Partner with Calaveras Winegrape Alliance to reduce the amount of irrigation water used by 20 percent in high elevation vineyards by developing a test model of reduced irrigation water usage, that will not compromise fruit quality or tonnage, meet the irrigation needs of producers, and ensure proper water stewardship, and then disseminate that model to the public.

• Partner with The Regents of the University of California, Davis to enhance the productivity of pistachio production in the face of increasingly limited, costly, and variable water quantity and quality by conducting site-specific field measurements of actual water use (ETa) and crop coefficients (Ka) in four mature commercial pistachio orchards grown on non-salt-affected and salt-affected fields under micro-irrigation, investigating the impacts of increasing soil-water salinity on canopy growth and crop ET.
• Partner with Sacramento Area Council of Governments to improve farm viability and the agricultural economy by developing a modeling tool to identify strategic flood irrigation scenarios in the Sacramento Valley that preserve habitat and maximize aquifer recharge for specialty crop production and providing specialty crop farmers with data on how their water supply and use changes under a series of conditions, means to identify synergies in irrigation strategies and possible market mechanisms to reward sustainable water management practices.

• Partner with California Table Grape Commission to enhance the sustainability and competitiveness of the California table grape industry by determining the approximate amounts of nitrogen (N) and potassium (K) that different cultivars need for optimum vine growth and fruit quality, while preserving the environment, and providing those results to table grape growers.

• Partner with Coastal San Luis Resource Conservation District to reduce nitrate pollution from irrigated lands by evaluating health and productivity of bioreactor grown blackberries; monitoring the effectiveness of the bioreactor in reducing nitrate loading; and evaluating the potential of the combined system for farm scale treatment and crop production.

• Partner with Cal Poly Pomona Foundation, Inc. to adapt lettuce cultivars to environments in which less water and nitrogen will be available and applied by using genetics and breeding to develop breeding lines and cultivars with increased water and nitrogen use efficiency.

• Partner with The Regents of the University of California, Davis to improve efficiency in adjusting irrigation amounts by developing a California specific in-hand tool for orchard (almond and pistachio) and vineyard managers to irrigate more conservatively by using normalized difference vegetation index for near real-time sensing metrics.

• Partner with The Regents of the University of California, San Diego County Cooperative Extension to reduce the nursery product losses incurred due to endemic and invasive pests and reduce the pesticide load deposited in the environment by developing and verifying the effectiveness of a new tool for the eradication of invasive pests that are already present in California, such as the red imported fire ant, the glassy-winged sharpshooter, the Asian citrus psyllid, and European pepper moth and to provide a new pest management tool for managing common but difficult to control pests in ornamental plant production, such as the western flower thrips, the American serpentine leafminer, melon aphids, fungus gnats, whiteflies, and mealybugs through demonstrating that hot water applications in a specially designed container unit will effectively kill major pests and invasives of potted nursery stock without damaging plants; performing an economic analysis of the procedure; and determining the impacts of pre- and post-water quality.

• Partner with USDA, Agricultural Research Service to decrease the impact of Verticillium wilt on lettuce production by focusing on development of molecular markers for marker-assisted selection of lettuce targeting the Verticillium Resistance gene family.

• Partner with The Regents of the University of California, Davis to mitigate girdling of citrus by voles by identifying the effective concentration of anthraquinone and evaluate the efficacy of an anthraquinone-based repellent on citrus crops, with the possibility of these results also benefitting tree and vine crops.

• Partner with The Regents of the University of California, Davis to increase capability (faster and more reliable) to detect and quantify root knot, lesion, and ring nematodes by developing qPCR assays directly from DNA extracts of soil.

• Partner with The Regents of the University of California, Davis to increase the number of resistant lettuce cultivars to soil borne fungi, Sclerotinia minor and S. sclerotiorum (which causes lettuce drop) by fully characterizing the yield and adaptation of these lines to identify the ones worthy of public release and evaluating the recombinant inbred line population for resistance and plant morphology to identify the quantitative trait loci for resistance that are independent of plant morphology.

• Partner with Central California Tristeza Eradication Agency to increase protection for California's citrus industry from Huanglongbing (HLB) by expanding its diagnostic capabilities using high-throughput multi-pathogen detection technology to respond to grower requests to detect for other disease problems.

• Partner with The Regents of the University of California, Riverside to minimize economic and environmental harm to specialty crop grower by developing a safe and effective nematode biological control agent for widespread use in California's nursery since nematodes are not currently being used in the U.S. to manage gastropods.

• Partner with USDA, Agricultural Research Service to detect, eradicate, and control insect pests and diseases (leaffooted plant bugs (LFPB)) by developing a new monitoring tool (host plant volatile-based attractant) for pomegranate growers to attract and monitor the insect pest, preventing LFPB from achieving large populations and spreading into other specialty crop orchards (pistachios and almonds).

• Partner with USDA, Agricultural Research Service to minimize economic and environmental harm to specialty crop growers (specifically almonds and also stone fruits, other nuts, and grapes) by developing effective fumigation methods that can deliver fumigants to deeper soil using deep injection, carbonation, and low permeability tarp or combinations of these techniques in broadcast or strip (tree row) and spot (tree site) applications to achieve good nematode control, low emission, and improvement on tree performance.
• Partner with Cal Poly Corporation to improve disease management against strawberry gray mold by giving strawberry growers information that will help them select the most effective fungicides and reduce or eliminate the use of less/in-effective fungicides.

• Partner with The Regents of the University of California, Fresno County Cooperative Extension to reduce insect damage and insecticide use by developing sustainable insect control programs for Southeast Asian specialty crops by identifying insect pests on key crops, develop sampling tools, and test IPM programs that include targeted insecticide use and sustainable practices (e.g., natural enemy release) to replace broad-spectrum insecticides.

• Partner with The Regents of the University of California, Davis to reduce weed competition that threatens transplant establishment and bearing crop performance, increase irrigation efficiency, and ensure that fruits and nuts (almonds, pistachios, and walnuts) can be harvested effectively and economically by describing how drought-related stresses affect weed community composition and control in perennial cropping systems and evaluating how herbicide persistence and efficacy is affected by the physical/chemical/biological characteristics of drought-stricken environments.

• 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.

Colorado Department of Agriculture

| Amount Awarded: | $734,857.36 | Number of Projects: | 11 |

• Increase the demand for locally grown Colorado specialty crops through a multi-faceted public relations campaign which will educate consumers on the variety of fruits and vegetables that come from within the state and the importance of specialty crops in their diets through tv and online advertising, hands on events, and a program to bring consumers directly in touch with those who grow their foods through a “Follow Your Fruits and Veggies” campaign.

• Increase the sales of Colorado produce suppliers by marketing and raising awareness about Colorado produce at the 2016 Produce Marketing Association’s (PMA) Fresh Summit Expo where Colorado growers can directly interact with the largest buyers in the country.

• Partner with Colorado State University to increase local specialty crops sales by creating trainings and workshops for growers which will help them remove constraints to producing high value crops such as dealing with irrigation and climate extremes, soil conditions, current disease and pest strategies, and innovative marketing approaches.

• Partner with Slow Food Denver to increase the consumption of Colorado fruits and vegetables in low income areas of Denver by education initiatives in local schools and community centers that will teach the importance of specialty crops and how delicious they can be, as well as to work with local groups to increase the distribution of Colorado specialty crops to these food deserts.

• Partner with the Colorado Potato Administrative Committee in order to increase Colorado potato growers incomes by studying and educating producers on the flavor profile of potatoes as the industry moves away from focusing on yield and potato size and more on taste.

• Partner with the Montezuma School to Farm Program to revive the fruit industry in South West Colorado by identifying, preserving, propagating and distributing knowledge about the traditional varieties and rare fruit genetics that have historically thrived in that area through workshops, marketing materials focusing on school children, current and potential fruit growers and the general public.

• Partner with the Colorado Nursery and Greenhouse Association to increase the sale of garden plants such as trees, shrubs, flowers and other plant materials by teaching young people and first timers about the joy of gardening.

• Partner with the Colorado Potato Administrative Committee to identify methods to maintain potato production in parts of the state where irrigation water is diminishing by identifying potato verities that need less water and fertilizer and effective rotation crops that will complement these strategies.

• Partner with Colorado State University to increase consumer demand for Colorado onions by showing it is a function food, studies have found that Colorado grown onions provide anti-cancer activity through breast cancer trials and so this project will identify the biochemical compound within Colorado grown onions and work with producers to grow verities that best develop this compound.

• Partner with Fort Lewis College to identify hop varieties that can grow in the dry, high altitudes of Colorado in order to allow a hops industry to begin and thrive in the state to meet increasing demand for locally sourced inputs, this information will then be disseminated by hosting workshops, tours for potential growers and buyers of the research locations, and developing training and hop growing management materials.
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.

**Connecticut Department of Agriculture**

| Amount Awarded: | $391,378.02 | Number of Projects: | 10 |

- Continue to improve food safety in Connecticut by preparing and maintaining a USDA-licensed auditor to perform accredited on-farm food safety audits and conducting outreach to specialty crop producers to participate in an audit.
- Partner with New England Farmers Union (NEFU) to develop educational resources on the Food Safety Modernization Act (FSMA) for Connecticut’s farmers.
- Partner with the University of Connecticut Extension to provide information and training regarding the Produce Safety Rule to Connecticut produce farmers.
- Partner with Hartford Food System to explore strategies to increase customer attendance at farmers markets and mobile markets by quantifying and identifying an underrepresented demand for Connecticut grown ethnic, specialty crops and by increasing awareness and education of best practices for the growing and marketing of ethnic crops for producers.
- Partner with New England Farmers Union (NEFU) to develop educational resources on the Food Safety Modernization Act (FSMA) for Connecticut’s farmers.
- Partner with Connecticut Agricultural Experiment Station to offer outreach to minority youth in the greater New Haven community with a goal of providing free bee school for 300 minority youths.
- Partner with Connecticut Greenhouse Growers’ Association to define the Connecticut Greenhouse Industry and showcase the state’s hallmark greenhouse grown specialty crops as a matter of public and retail/wholesale consumer education.
- Partner with the University of Connecticut to study plant nutrition and beneficial microbes in reducing plant pathogen risk in hydroponics which will benefit new and experienced hydroponic growers by providing sustainable disease management alternatives and plant nutrition guidelines.
- Partner with FRESH Farm Aquaponics, Inc. to design an innovative farming technology that combines vertical farming with plant-focused aquaponics in order to increase the production rates of specialty crops in Connecticut.
- Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

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

| Amount Awarded: | $210,837.58 | Number of Projects: | 5 |

- Partner with Washington Parks & People by utilizing parks and green space to educate the community of the importance of healthy specialty crop production through hands-on farming, healthy meal preparation and providing eight seasons of locally grown produce to local residents.
- Partner with Common Good City Farm to increase annual production of specialty crops by improving DC residents’ access to fresh, affordable produce and educating residents about the importance of consuming specialty crops.
- Partner with Dreaming Out Loud, Inc. to increase the production, consumption, and efficient distribution of specialty crops in targeted communities and to support farm-partners through providing direct-to-consumer access to Strike Force county farmer/partners and employing 20 low-income residents within the local food economy.
- Partner with DC UrbanGreens, Inc. to improve food access for more than 24,000 residents in Hillcrest, Fort Stanton, Garfield Heights and Westover View by establishing new specialty crop production at Fort Stanton Neighborhood Farm.
- 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.

**Delaware Department of Agriculture**

| Amount Awarded: | $326,383.46 | Number of Projects: | 7 |
• Provide additional outreach and materials for Delaware produce farmers, targeted to their size and complexity, by offering a free full-day annual conference in 2016 and 2017, with break-out sessions specific to producer size, in which the first year will introduce FSMA and the produce rules, and prepare larger farms to be ready for compliance by December 2016, and the second year will allow larger farms to share best management practices, while continuing to prepare the small and very small farms for their compliance deadlines.

• Educate Delaware families about proper food safety practices in the home kitchen pertaining to fresh produce by developing a food safety website focused on fresh produce and conducting targeted online advertising reaching Delaware residents.

• Promote the awareness, purchase, and consumption of specialty crops through the Buy Local initiative, utilizing three tools, a printed Buy Local handbook, a calendar, and a targeted online and social media advertising program, to promote farm stands and on-farm markets as sources of specialty crops.

• Partner with The Food Trust to improve the availability of fresh regional produce at both the farm stands and corner stores in underserved areas of the Eastside neighborhood in Wilmington by providing technical assistance to Urban Acres to strengthen sales at the four farm stands and developing a new distribution model to provide fresh regional produce to a pilot group of five healthy corner stores.

• Reduce bees’ risk of pesticide exposure by engaging specialty crop growers and beekeepers in the development and implementation of a pollinator protection plan and developing and modelling best management practices for improving the availability and quality of bee forage.

• Partner with University of Delaware, Cooperative Extension, Department of Plant and Soil Sciences to develop recommended practices for blueberry establishment in Delaware and test varieties for their performance in Delaware by collecting yield data from the variety trial and soil amendment study, begin a three year nitrogen fertilization rate and timing study with plants that are already established in the trial that had been a part of the mulch material study, and use the planting for a pruning workshop and an educational field meeting to share research results.

• Partner with University of Delaware, Department of Plant and Soil Sciences, Cooperative Extension to leverage prior work to develop knowledge and tools that can be used to breed cultivars with durable resistance to Phytophthora phaseoli (the causal agent of downy mildew), and use such cultivars to reduce the potential for emergence of new races in the pathogen population and provide a longer-term solution for host resistance to P. phaseoli.

**Florida Department of Agriculture and Consumer Services**

| Amount Awarded: | $4,109,995.76 | Number of Projects: | 41 |

• Partner with the University of Florida to increase the level of food safety of Florida Specialty crops sold at farmers markets through an evaluation of the food safety risks of specialty crops by determining the prevalence of foodborne pathogens and indicator bacteria and then developing food safety education programs to target managers and vendors of farmer’s markets to minimize pathogen contamination of these specialty crops.

• Partner with the Florida Specialty Crop Foundation to establish a Florida fruit and vegetable Food Safety Recall Workshop to help producers and handlers be prepared for a potential recall and how to implement the recall process in a timely, effective manner in order to minimize the food safety and economic costs that a possible health threat can cause.

• Partner with the University of Florida to increase the food safety of specialty crops raised by growers in Florida by creating training materials and then hosting a series of events at which growers can learn about the new Food Safety Modernization Act requirements and prepare for their implementation, ensuring that Florida specialty crop growers are FDA compliant.

• Partner with the First Coast Technical College to increase the production of, and demand for datil peppers by creating a culinary program for regional chefs to attend workshops on the unique features of this local pepper and learn about how it can be incorporated into their culinary repertoire.

• Partner with the University of Florida to increase specialty crops sales by re-connecting consumers with those who produce their food through agritourism by the evaluation of the potential market and the development of workshops and training materials in order to help specialty crop producers tap into this opportunity.

• Partner with the Florida Specialty Crop Foundation to increase the demand for locally raised Florida peaches by developing a marketing plan that will increase consumer knowledge of the availability and nutrition of Florida peaches, with a website, promotional videos and other material to be created and used.

• Partner with the Tropical Fruit Growers of South Florida to increase the availability of, and knowledge about, locally grown fruits to Spanish-speaking consumers by creating marketing material and marketing campaigns.

• Partner with Florida Agriculture in the classroom to address the continuing rise in childhood obesity rates by using school gardens and the nutritional benefits of Florida specialty crops to educate preK-12th grade students about healthier lifestyles.
• Partner with the South Dade Senior High School to increase youth nutrition in this region of South Florida by using student gardens as a tool to teach about the nutritional importance of fruits and vegetables.

• Partner with the Florida Specialty Crop Foundation to increase the production and efficiency of specialty crop producers by educating growers on the effectiveness of using hydroponic greenhouses and other protected agricultural systems on which varieties, production practices, and pest control strategies work best with them through trainings, a new conference, and educational materials.

• Partner with Fresh Ministries to develop education outreach and training programs to promote using aquaponics farms in Florida’s urban areas, bring locally grown, healthy, affordable fresh fruits and vegetables into designated food deserts and provide opportunities for potential agri-entrepreneurs.

• Partner with the Community Organizing Assistance and Community Help Foundation (COACH) to improve nutrition in Florida and the access to fresh fruits and vegetables by hosting nutrition and gardening seminars, youth workshops centered on the importance of specialty crops in one’s diet, and a public awareness campaign about local specialty crops.

• Partner with the University of South Florida to decrease the amount of waste and quality issues that arise within the supply chain for blueberries, strawberries, peppers and tomatoes, while at the same time promoting sustainability and increase the availability of high quality fruits and vegetables by pursuing two aims: 1) determine the losses in the overall quality and quantify the waste of specialty crops at each step of the supply chain; 2) recommend new approaches that will help each participant in the fruits and vegetables supply chain identify where significant loss in quality occurs and take the necessary actions to reduce waste.

• Partner with the Florida Specialty Crop Foundation to meet the surging demand for locally raised hops by studying which varieties of hops have the highest yield and quality when raised in the specific environment of Florida, after which these results will be disseminated to current and potential growers.

• Partner with the Florida Nursery, Growers and Landscape Association to develop an economic analysis of the landscape market which will then be used to assist growers as they make long term investment plans on how to develop their farms as well as to create marketing material to promote the vital place horticulture plays in Florida’s marketplace.

• Partner with the University of Florida to study how to adapt appropriate rootstock and fertilizer regimes to allow the Australian native crop Finger Limes to thrive in the unique environment of Florida and thus allow Florida citrus growers a new and innovative crop to introduce to market.

• Partner with Florida A&M University to examine how Muscadine Grapes react during vinification and result in better flavor and aroma compounds through a comprehensive analysis of this chemical process in order that the best quality muscadine grapes can be identified for growth by Florida farmers.

• Partner with the University of Florida to increase the production of Florida limes by studying which lime scion-greening tolerant rootstock combination will increase the production of high quality limes for the fresh market and then disseminate this information to the industry through workshops, field days, publications and electronic media.

• Partner with the University of Florida to introduce the production of edamame to Florida by investigating the feasibility of growth through the study of eighty varieties of edamame and how they thrive in Florida’s unique environment, identifying those that can be of high yield and high nutritional value, and disseminate this knowledge to potential growers looking to diversity their crop production.

• Partner with the University of Florida to increase peach production and yields by new best management practices for Peaches grown in Florida, especially around irrigation strategies, through a comprehensive growth study, after which these best practices will be provided to all current and potential growers through field days and publications.

• Partner with the University of Florida to increase grape producers income by developing guidance and trainings on how to turn muscadine grape seeds, which are currently discarded, into a useful product which can be converted into flour and high-quality seed oil.

• Partner with the University of Florida to develop novel specialty pepper cultivars for Florida’s fresh produce market by evaluating new lines of peppers and determine their postharvest flavor, nutritional profiles, and consumers’ preference in order to provide potential growers information about the optimal peppers for production in Florida’s environment.

• Partner with the Florida Specialty Crop Foundation to increase yields in Florida’s growing pomegranate industry by developing disease prevention strategies to issue to producers that will identify the period of fruit development that is most vulnerable to infection, reveal season dispersal patterns of the pathogens, and identify effective uses of fungicides and sanitary practices to reduce the presence of each pathogen.

• Partner with the University of Florida to increase the production and yields of specialty crops in Florida by studying which cultivars work best in Florida, tea quality, and pest and disease resistance strategies to continue to foster this new industry in the state.
• Partner with the University of Florida to decrease the crop losses of tomato growers due to the silverleaf whitefly’s transmission of yellow leaf curl virus by studying the use of biорational insecticides, such as clays, soaps and oils that kill whiteflies but have limited impact on pollinators, and whether this strategy can be more effective than traditional insecticides but better maintain the health of the tomatoes.

• Partner with the Florida Specialty Crop Foundation to combat the threat of Laurel wilt (LW) in the Florida avocado industry by studying how entomopathogenic fungi (EF) may be playing a key role in controlling these pathogens and how EF can be integrated into current LW management strategies.

• Partner with the Florida Specialty Crop Foundation to study how to meet the challenge of Bacterial leaf spot causes to lettuce grown in Florida, the most damaging disease currently threatening Florida leafy greens, as it has so far been resistant to pesticide treatment and so this project proposes to use plant breeding in order to identify resistant cultivars by identifying the molecular markers that will allow lettuce to avoid this devastating disease.

• Partner with the University of Florida to increase the income of citrus growers by creating management strategies to address the Huanglongbing disease (HLB) which effects citrus profitability due to the discoloration, misshaping and rotting this causes the fruit, through an evaluation of novel integrated pest management options, primarily insect-excluding screen covered structures and reduced pesticide use to cultivate young HLB-free trees and sustain economic fresh fruit yields in order to achieve a return on investment.

• Partner with the Florida Specialty Crop Foundation to study how to meet the challenge of Bacterial leaf spot causes to lettuce grown in Florida, the most damaging disease currently threatening Florida leafy greens, as it has so far been resistant to pesticide treatment and so this project proposes to use plant breeding in order to identify resistant cultivars by identifying the molecular markers that will allow lettuce to avoid this devastating disease.

• Partner with the University of Florida to decrease the crop losses of tomato growers due to the silverleaf whitefly’s transmission of yellow leaf curl virus by studying the use of biорational insecticides, such as clays, soaps and oils that kill whiteflies but have limited impact on pollinators, and whether this strategy can be more effective than traditional insecticides but better maintain the health of the tomatoes.

• Partner with the Florida Specialty Crop Foundation to increase potato and tomato yields in Florida by studying how to validate the precision timing of fungicides to manage late blight, caused by Phytophthora infestans, through a comprehensive testing and validation of the USAblight Decision Support System, as well as a cost analysis of this new strategy, and then communicate these finds out to specialty crop producers of tomatoes and potatoes.

• Partner with the Florida Specialty Crop Foundation to increase the yields of leafy vegetable producers by identifying new, cost effective strategies to combat weeds, for which leafy greens are particularly susceptible, and studying the most effective and complementary cover crops.
• Partner with Florida A&M University to increase crop yields and combat the spread of disease from grape vine to planting stock by establishing processes to more properly screen for pathogen infections through an early monitoring program, which will be disseminated to growers through a website and best practice guides.

• Partner with the Florida Specialty Crop Foundation to combat the threat of Tomato chlorotic spot virus (TCSV) to the Florida tomato industry, which is a large threat to crop yields in the state, by evaluating which tomato breeding lines have tospovirus resistance genes and accelerate the development of TCSV-resistant tomato cultivars.

• Partner with the Florida Specialty Crop Foundation to prevent the damaging effects of target spot outbreaks on Florida tomatoes by studying the fungicide resistance issues, identifying sources of resistance to the disease, and work with growers to incorporate this knowledge into their strategies through demonstration trials and workshops.

• 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.

**Georgia Department of Agriculture**

| Amount Awarded: | $1,161,512.28 | Number of Projects: | 11 |

• Partner with Georgia Agricultural Commodity Commission to promote the sale of specialty crops in Georgia and in other states through traditional advertising, digital advertising, and public relations in at least two targeted markets.

• Partner with Georgia Fruit and Vegetable Growers Association to focus on using the largest gathering of produce buyers in North America to help expand the marketing of Georgia produce and increase the competitiveness of Georgia specialty crop products by marketing Georgia products to current and new buyers.

• Partner with the Georgia Peach Council to implement a marketing plan to increase peach sales to improve the profitability and sustainability of farming Georgia peaches by creating an extensive marketing campaign including unique packaging, and a website.

• Partner with the Vidalia® Onion Committee to promote the versatility and benefits of Vidalia Onions to a younger consumer demographic by creating a fashionable, energetic campaign, combined with increased digital and social media activities as the first step in reaching the Millennial and Generation X consumers to begin to establish their long term loyalty for the Vidalia Onion.

• Partner with the Georgia Agritourism Association to enable specialty crop agritourism operators to be educated about various risk management practices, guide them in how to enhance educational offerings and field/farm tours for children, and provide them with up-to-date marketing strategies to attract consumer markets.

• Partner with Georgia Fruit and Vegetable Growers Association to provide educational opportunities for both growers and consumers by providing the latest and most current research information on production practices, pest management techniques and food safety guidelines while also being informed on sustainability needs and regulatory issues.

• Partner with the Georgia Pecan Growers Association to develop a children’s activity book that showcases the nutrition and versatile uses of the pecan, emphasizes healthy food choices, and promotes positive life-long eating habits and increased exposure of the pecan as well as create domestic demand for Georgia-grown pecans by promoting the health benefits of the nut and nut products at the annual Produce Marketing Association’s Fresh Summit.

• Partner with the University of Georgia to develop an irrigation smart phone scheduling application available to Georgia’s fruit and vegetable growers to ensure that they benefit from the competitive advantage that this technology offers.

• Partner with the Vineyard and Winery Association of West Georgia to conduct research on the best training systems for Pierce’s disease and powdery mildew resistant hybrid winegrape varieties, and their effects on overall plant performance in Georgia.

• Partner with the Georgia Growers Association to promote and enhance the production of olives, domestic olive oil and sustainable growth of the olive industry in Georgia and the Southeastern USA and partner with the Georgia Olive Growers Association and the University of Georgia (UGA) Extension Services to complete the development of a Certified Oil Lab located in Georgia at UGA.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

**Guam Department of Agriculture**

| Amount Awarded: | $212,900.90 | Number of Projects: | 1 |
• Partner with the University of Guam to decrease the existing level of orchid diseases that are tied to imports from outside of Guam through development of healthy orchid tissue culture production and replacing diseased plants with local healthy plants in the local floral market.

Hawaii Department of Agriculture

| Amount Awarded: | $450,956.37 | Number of Projects: | 13 |

• Partner with Hawaii Tropical Fruit Growers to boost the tropical fruit tree industry in Hawaii and meet increasing demand though providing growers and nurseries with the most in-demand tropical fruit trees

• Provide promotional support to Hawaii specialty crop commodity associations though producing marketing materials for the commodity groups that represent Hawaii specialty crops.

• Partner with The Hawaii Chocolate & Cacao Association to stimulate interest, fostering growth and generating sales in Hawaii-grown cacao through conducting a month-long state-wide cacao outreach program.

• Partner with the Hawaii Forest Industry Association to create a fact sheet based on Christmas tree farming practices specific to Hawaii through conducting presentations to interested specialty crop growers.

• Partner with Tri-Isle Resource Conservation & Development Council, Inc. to develop methodology and protocols for commercial field production of the Moringa crop, help establish a business plan and demonstrate small-scale uses and benefits through marketing of Moringa greens for Asian food markets and the sale of substrate for cultivating indigenous micro-organisms.

• Partner with The Hawaii Agriculture Research Center to breed a new papaya variety with long peduncles for high yield by evaluating new “Royal Kunia” cultivars in two locations, crossing with “Laie Gold” or “Sunrup” cultivar to breed the hybrids for resistance to papaya ringspot virus.

• Partner with The Hawaii Agriculture Research Center to develop and optimize single pod fermentation methodology for use in assessing current flavor profiles of existing germplasm, initiate program to evaluate grower germplasm and establish a low cost service for individual cacao cultivar assessment.

• 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.

• Partner with The Kohala Center to address the disparity between the availability of locally adapted specialty crop seeds for commercial farmers and home producers and the increasing statewide demand for locally grown foods and natural/organic products.

• Partner with Counter Culture, LLC to identify specific cultivars of pulse crops, trial and document well-adapted pulse varieties, management issues, threshing construction and disseminate recommendations designed to increase the production of Hawaii-grown pulse to farmers statewide through an industry publication and workshops conducted by LCC staff at Extension Offices and GoFarm new farmer training sites.

• Partner with The Hawaii Agriculture Research Center to propagate and distribute rooted nodes of the five most desirable cultivars of ‘awa to interested growers who do not have access to propagation material through obtaining and propagating stalks/nodes from 11 Hawaiian ‘awa varieties, planting propagation garden and distributing stalks to interested distributors.

• Partner with The Hawaii Agriculture Research Center to conduct pilot trials to adapt and demonstrate the viability of the operation, practices and techniques learned from other labs and distribute papaya tissue culture plants “Rainbow” at a lower cost.

• 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.

Idaho State Department of Agriculture

| Amount Awarded: | $1,889,347.83 | Number of Projects: | 17 |

• Partner with Clearwater Economic Development Association to launch a strategic and targeted promotion of the Lewis-Clark Valley American Viticultural Area (AVA) and to develop a sustainable organization designed to support and enhance the further growth of the fledgling, reemerging wine industry of the Lewis-Clark Valley.

• Partner with the Idaho Apple Commission to increase awareness of Idaho apples through the development of a five-minute video, in-store samplings and promotions, and the development of a brochure that will be distributed at the samplings and online.
• Partner with the Idaho Cherry Commission to increase awareness of Idaho cherries through the development of a five-minute video, in-store samplings and promotions, and the development of a brochure that will be distributed at the samplings and online.

• Partner with the Idaho Grape Growers and Wine Producers Commission to promote the economic growth and the quality of production of the Idaho wine industry through targeted ad placements and training for members, media, and other stakeholders.

• Partner with the Idaho Potato Commission to expand and create awareness of and demand for the Idaho potato and its products in markets outside its borders by using marketing and business development tools such as trainings, store promotions, trade shows, face-to-face meetings, and trade missions.

• Partner with Idaho Preferred to increase awareness and intent to purchase Idaho specialty crops through television advertising and demand-building retail and foodservice 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 and demonstrations in several Mexico cities as well as two trade missions.

• Partner with the USA Dry Pea and Lentil Council to increase the use of the region’s peas, lentils and chickpeas in the United States as an ingredient in food products and food-service menus by hosting an educational and hands-on product development course that will target and educate a specific audience in the food industry.

• Partner with the Idaho Bean Commission to develop sustainable water and soil conservation and weed management strategies for dry bean production by conducting field experiments measuring the effects of subsurface drip irrigation and three different types of tillage: conventional tillage, strip tillage, and direct seeding.

• Partner with Northwest Nazarene University to increase the production of Idaho specialty crops by designing an IdaBOT – a low-cost, autonomous utility robot to assist Idaho specialty-crop growers in the day-to-day maintenance and harvesting of their crops.

• Partner with the University of Idaho to investigate the nutritional benefits of potato peel waste, and promote a healthy image of potato products by investigating the influence and mechanism of potato peel waste in glycemic response in a model system; quantifying the functional compounds, calystegines (natural inhibitors of digestive enzymes), and dietary fiber (physical barrier of digestive enzymes) in potato peel waste and tubers; and screening the most commonly grown potato varieties in Idaho for calystegines and dietary fiber content.

• Partner with the University of Idaho to improve wine grape and small fruit grower operations by studying the effects of various canopy designs and cluster management in Alborz table grapes on yield, berry and cluster quality, cold tolerance, and disease infections and by studying performance, fruit quality, and sustainability of the newest 14 cultivars and 15 selections of table grapes under conditions of the Intermountain West.

• Partner with the Idaho Bean Commission to reduce bean losses from Bean Common Mosaic Virus (BCMV) and Bean Common Mosaic Necrosis Virus (BCMNV) by breeding resistant bean varieties and developing genetically engineered infectious clones of both BCMV and BCMNV which can be maintained as uniform cDNA sequences in an ordinary plasmid vector.

• Partner with the Idaho Potato Commission to develop an Idaho potato cultivar with high levels of Pale cyst nematode resistance by screening new and existing sources of potato germplasm for G. pallida resistance.

• Partner with Boise State University to develop and deploy a web-based tool allowing current and potential producers to explore and evaluate the suitability of sites within the Snake River Valley American Viticultural Area for production of specific varieties of wine grapes.

• Partner with the Snake River Economic Development Association to increase the market for Idaho pumpkin seeds by assisting producers with developing harvesting, washing and drying processes for this specialty crop so that they can concentrate on growing the seeds.

• 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.

**Illinois Department of Agriculture**

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• Partner with FamilyFarmed to increase the food safety of Illinois specialty crops to meet the demand for high quality local food by developing and running workshops for farmers, create a website to help famers create farm-specific food safety plan, and offer one on one technical assistance.
• Partner with the Illinois Stewardship Alliance to increase the local consumption of Illinois specialty crops through education and outreach at grocery stores, tasting at local events, cooking classes, and promotions of specialty crop products, with the intention of increasing the economic niche Illinois specialty crop farmers fill, creating jobs and economic growth throughout rural Illinois.

• Partner with the Illinois Green Industry Association to promote the environmental and health benefits of installing landscape specialty crops, such as trees, flowers and shrubs, in the hope of increasing the use and sale of these specialty crops through a multipronged marketing campaign.

• Partner with the Illinois Farmers Market Association to increase the sale of locally grown Illinois specialty crops by developing and disseminating a phone app that will allow users to identify specialty crops products that are currently in-season in their particular location, as well as share profiles of locations where these items can be purchased.

• Partner with the Illinois Specialty Growers Association to organize a conference for Illinois specialty crop producers, giving them the opportunity to network, visit a trade show with cutting edge technology, and attend education sessions focusing on conventional and organic production, marketing, food safety, risk management, agritourism, labor issues, pest and disease management, and more.

• Partner with the Land Connection for greater access, knowledge, and purchase of Illinois specialty crops, with a focus on economically disadvantaged communities, through a multipronged media campaign, marketing material and recipe/nutrition cards, and direct marketing to SNAP recipients.

• Partner with Illinois Agriculture in the Classroom to improve the knowledge of school children regarding the nutritional benefits of Illinois specialty crops by creating marketing material and support trainings and county program implementation to ensure that these new resources are actively utilized throughout the state.

• Partner with the Illinois Grape Growers and Vitners Association to increase the production and marketability of Illinois wine grapes by organizing a conference where agricultural and manufacturing best practices that can be shared with current and potential growers with a targeted outcome of increasing the market share of Illinois wines within the state.

• Partner with the Experimental Station to create an education campaign for schools and neighborhoods in Chicago to increase the knowledge of the nutritional benefits and enjoyment of consuming fresh and healthy foods, as well as how to grow and prepare them through in school and summer education programs and training and demonstrations at farmers markets.

• Partner with the University of Illinois to increase the production and sale of niche specialty crops, such as elderberry, aronia and goji berries by conducting research into the most effective pest management strategies for these under studied crops and work with current and potential producers to integrate these finds into their crop management strategies.

• Partner with Southern Illinois to increase the production of Illinois wine grapes by creating improved soil management strategies which are causing growers to produce less than 50% of their yield potential amongst 75% of growers by disseminating improved irrigation, nitrogen and vineyard floor management.

• Partner with Southern Illinois University to study specialty crops cooling straggles in order to determine the best technologies to harness in order to increase the shelf-life of perishable specialty crops, with a goal of increasing shelf-life of 7 days, and disseminate this information to farmers so that they may increase profits by decreasing crop wastage.

• Partner with Southern Illinois University to support the expansion of organic strawberry production, which receive a premium on the market and thus have the potential to boost incomes, by studying and disseminating more effective crop management strategies, including more effective irrigation and disease mitigation techniques.

• Partner with Southern Illinois University to examine how to produce organic tomatoes with lower amounts of nitrogen and greater water efficiency, and potentially increase production, decrease costs, and decrease nitrogen pollution, and disseminate this information out to Illinois tomato growers through workshops and training materials.

• Partner with the University of Illinois to combat the threat that Bacterial spot is causing to cucurbits across the Midwest, especially in winter squash and pumpkin production by identifying resistant cultivars and disseminating this information, and updated crops management strategies through workshops and educational material.

• Partner with the University of Illinois to facilitate the establishment of a hazelnut industry in Illinois by studying those varieties that grow best in Illinois climate through performance trials to be held at a variety of locations and environments across the state.

• 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.
Indiana State Department of Agriculture

Amount Awarded: $446,313.90  Number of Projects: 6

- Increase the sale of Indiana Specialty Crops and provide greater access to nutritious vegetables by creating and implementing a specialty crop marketing plan that will raise the awareness of Indiana Grown produce, with a special focus on harnessing social media to get the message out.

- Partner with Purdue University to meet the increased demand for locally raised hops by creating best management practices for raising hops reflecting Indiana’s soil and climatic conditions as well as identify the scale at which the industry can be successful.

- Partner with Growing Places Indy, in partnership with the Chase Near East Side Legacy Center, to provide greater access to specialty crops by increasing Growing Places Indy’s production through the expansion of its farm which is the primary provider for fresh produce in Indianapolis’ Near East Side, as well as use the farm as a platform to educate area residents how they can get involved in growing nutritious specialty crops.

- Partner with Indiana University to enhance the current trend towards the greater use of high tunnels in specialty crop production by doing a study of their use in order to understand successful high tunnel growing strategies, create best management production practices, and then disseminate them out to current and potential high tunnel specialty crop producers.

- Partner with Purdue University to increase tomato yields through successful training and implementation of new identify management practices that effectively suppress and reduce infection by Xanthomonas on Indiana’s tomato crop, in light of the fact that traditional treatments have become ineffective.

- 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.

Iowa Department of Agriculture and Land Stewardship

Amount Awarded: $296,723.25  Number of Projects: 13

- Partner with the Land Stewardship and the Iowa WIC Program to increase the sales of fruits and vegetables at Iowa Farmers Markets and the consumption of various specialty crops resulting from an advertising campaign promoting the usage of the Farmers Market checks distributed to Iowa WIC participants.

- Partner with Iowa State University to collect current production and marketing data on Iowa grown vegetables, fruits, nuts, and other specialty crops, and extrapolate the data to determine the economic impact to Iowa’s economy to help industry stakeholders to identify the changes and trends in specialty crop production and marketing, identify future infrastructure needs for processing, packaging, storage, and distribution facilities, and determine the appropriate value of specialty crops for risk management and financing; and also establish the most up-to-date listing of fruit and vegetable growers to facilitate the outreach, education, and inspection activities necessitated by the implementation of the Food Safety Modernization Act.

- Partner with Iowa Wine Trail to create a first-of-its-kind advertising campaign designed to introduce the wine consumers of Iowa to four new specialty crop grape varietals and the wineries to increase name recognitions within the region.

- Partner with the Project Learning Program to educate adults with disabilities about the importance of fruits and vegetables in their daily diet, and the economic benefits to producing locally grown food.

- Partner with Practical Farmers of Iowa to collect and share data on fruit and vegetable profitability, soil health, cover crops, and production trials for Iowa’s climate and share that knowledge with specialty crop farmers in Iowa to foster and maintain a prosperous fruit and vegetable industry.

- Partner with Allamakee New Beginning and Iowa Food Hub to continue to defray costs related to Good Agricultural Practices/Good Handling Practices audits of specialty crop farms.

- Partner with the Iowa Department of Education to equip students with the knowledge and skills of gardening while also offering them the opportunity to grow specialty crops.

- Partner with the Iowa Honey Producers to create an easy to use, publicly accessible, searchable website that presents the bee laws of Iowa cities in lay terms using a table format.

- Partner with Iowa City Parks and Recreation to provide a permanent venue where specialty crop growers, educators, nutritionists and chefs can conduct educational events that inform families about the health and economic benefits of specialty crops.
• Partner with the New Hope Community to create a demonstration site for season extension and supply in Mahaska County and add producers of specialty crop vegetables and specialty crops into the network of producers and buyers in the fallow season.

• Partner with the Prairie Moonwort Hops Farm to provide information for other prospective small scale hop farmers in the Loess Hills region of Iowa in respect to the viability of small plots, as well as enveloping and documenting the methods needed to succeed at small scale hops farming.

• Partner with the Lutheran Services in Iowa to continue training in order to help refugee participants improve their production of specialty crops and increase the availability of this produce to the public and to begin to transition their specialty crop businesses to independent operations.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

Kansas Department of Agriculture

| Amount Awarded: | $319,419.76 | Number of Projects: | 7 |

• Increase the interest in, and sale of, Kansas specialty crops by creating marketing tools producers can make use of through the Savor the Season campaign, which will provide consumers with education about the selection, storage, nutrition and preparation of Kansas specialty crops.

• Partner with the Seward County Community College and Area Technical School to improve local specialty crops farmers’ management strategies by creating eight highly customizable specialty crop Enterprise Budgets, which will help producers better estimate costs and returns for producing specialty crops and more efficiently allocate their resources in order to increase production and income.

• Partner with the Seward County Community College and Area Technical School to provide hands on training and incubator plots to new and aspiring specialty crop farmer, teaching participants the fundamentals of both how to raise and manage crops but also the business side of the specialty crop business.

• Partner with the Kansas Association for Conservation and Environmental Education to use gardening as an effective tool to teach youths about the importance of consuming fruits and vegetables by providing schools and youth groups training materials and program templates as well as hands on workshop and training opportunities.

• Partner with the Kansas Rural Center to help local specialty crop producers cope with the short growing season and unpredictable weather in Kansas by providing training and assistance to farmers to adopt high tunnel farming with the aim of increasing farmers yields and increase the production of nutritious local specialty crops.

• Partner with the Western Prairie Resource and Conservation District to expand the vegetable production and distribution system in Western Kansas in order to facilitate an expansion of local production as well as combat the food desert that exists in the area as well as enhance producers vegetable safety practices.

• 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.

Kentucky Department of Agriculture

| Amount Awarded: | $291,564.95 | Number of Projects: | 8 |

• Partner with the University of Kentucky to increase the demand for Kentucky fruits, vegetables, nuts and herbs by increasing child and adult nutrition knowledge and consumption of specialty crops through workshops, trainings, and targeted marketing material.

• Partner with Hickory Lane Farms to increase the sale of regional specialty crop producers by bringing together producers and schools and restaurants, teaching farmers about how to use CSAs and other direct sales strategies, and initiating a program of nutritional education and marketing to increase consumer demand for local specialty crops.

• Partner with Kentucky Specialty Grains to commercialize Summer Flowering Chia by identifying growth management strategies, work with the food industry to highlight the values of the crop, including its high omega-3 oil content, and raise awareness amongst consumers of this type of chia in order to build demand.

• Partner with the University of Kentucky to develop new, and update existing, resources to help Kentucky growers transitioning away from growing tobacco to begin growing specialty crops, such as how to identify which crops would be best for them, help them identify marketing and sales opportunities and specialty crop profiles and budgets.
• Partner with the Berry Center to increase the sales of Kentucky specialty crop farmers who are looking to scale up their production by offering a series of conferences and meetings designed to help farmers take advantage of underused resources in terms of capital, certifications, crop budgets and marketing opportunities in order to help Kentucky specialty crop producers overcome the barriers preventing them from entering agriculture supply chains.

• Partner with the University of Kentucky to extend the growing season leading to increased vegetable production by evaluating which varieties and growing strategies Kentucky growers can use for winter vegetable production and disseminate this information to growers through workshops and distributed training materials.

• Partner with the Barren Country Beekeepers Association to regions honey production and sale by giving local growers access to updated harvest strategies and technologies that lower the amount of damage done to combs during the harvest process.

• Partner with the University of Kentucky to increase the total yield of Uba Tuba peppers through studying the varieties that grow best in Kentucky’s climate, study the best ways to extend the peppers shelf life by studying how it stands up to canning, pickling and dehydrating, and doing a marketing assessment of local demand for these specialty peppers.

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• Partner with Louisiana State University to increase the safety and competitiveness of Louisiana pecans by developing a safe, economical way to thermal treat pecans in a way that does not adversely affect the pecans taste and quality but will be consistent with increasing safety standards.

• Provide Louisiana farms with the ability to connect with the consumer and have their product recognized as a nutritious, local product through statewide branding, education, and promotion efforts that encourage consumers to buy fresh local specialty crop products within the state and increase Louisiana specialty crop producers’ sales.

• Increase the knowledge about, and consumption of, nutritious Louisiana specialty crops by school aged children through the creation of specialty crop school gardens at 30 Louisiana schools, through which thousands of kids can receive both classroom and hands on nutrition education.

• Partner with Louisiana State University to combat the spread of Bacterial wilt which is causing severe losses to Louisiana tomato, eggplant and pepper growers by creating and disseminating new management tactics involving resistant rootstock lines grafted to popular tomato varieties.

• 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.

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• 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 AgMatters LLC to assist Maine specialty crop growers as they undertake the task of preparing for Good Agricultural Practices/Good Handling Practices and Produce Harmonized Good Agricultural Practices food safety certifications through conducting individual work sessions via phone, email or in person.

• Partner with Maine Landscape & Nursery Association to increase the public’s awareness of, interest in, and support for horticultural specialty crops within the state of Maine through building and launching a Plant Something website and social media campaign.

• 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.

• Partner with the University of Maine to address pollinator safety within the confines of sound and effective pest management of significant insect pests and diseases to Maine’s fruit industry through conducting experiments and analyzing received data.
• 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 vaccini 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 Wild Blueberry Commission to develop and implement weed management as part of an IPM program for preventing weed control resistance in Maine wild blueberry fields through evaluating herbicides with different modes of action and identifying the best material and timing that will effectively control resistant weed species.

• 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.

• Partner with the University of Maine research and extension faculty to evaluate plant characteristics, determine flavoring and brewing characteristics of different hops varieties, develop resource materials for farmers and determine unique qualities and appropriate use of hops varieties through establishing a replicated trial of hops varieties.

• Partner with the Maine Agricultural and Forestry Experiment Station at the University of Maine to focus on the development of cost effective strategies for deploying environmentally sound pest management tools in organic vegetable and strawberry production in Maine through conducting a research project.

Maryland Department of Agriculture

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• 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 (USDA) GAP and USDA Harmonized GAP audit certification cost share assistance.

• 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 effective, timely advertising, promotional events, direct-to-consumer marketing, annual buyer-grower meetings and the annual Produce Marketing Association convention.

• Partner with Grow & Fortify to create, develop and promote partnerships between Maryland Specialty Crop Growers and Maryland alcohol producers by hosting a one-day conference that will focus on connecting growers and producers in an effort to promote the use of Maryland-grown specialty crops in Maryland-made alcohol.

• Partner with the Maryland Soccer Foundation to enhance the marketing and sales of sod produced in Maryland by creating an outreach and education exhibit explaining the environmental and recreational benefits of natural grass at the Maryland SoccerPlex.

• Partner with the Keystone Policy Center to reduce honey bee loss by organizing a stakeholder summit geared toward problem orientation, solution brainstorming, and prioritization, and by drafting and presenting a Maryland Managed Pollinator Project Plan to specialty crop producers, beneficiaries, and the public.

• 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.

Massachusetts Department of Agricultural Resources

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• Partner with Community Involved in Sustaining Agriculture, Inc. to increase awareness and sales of western Massachusetts specialty crops sold via wholesale channels by developing consumer-friendly PLU tags, coupled with consumer-friendly electronic content, educating specialty crop wholesale farmers about best-practices in consumer friendly content and supporting farmers in developing and maintaining that content in the first year.

• Partner with Groundwork Lawrence, Inc. to increase sales for regional specialty crop farmers and enable Lawrence residents to improve their diet and health by increasing resident’s nutrition knowledge and awareness of existing and new regionally-sourced produce purchase locations in the city in order to increase their consumption of these specialty crops.
• Partner with Massachusetts Nursery & Landscape Association, Inc. to increase awareness among millennials about specialty crops by developing a three pronged Plant Something MA: Get Dirty! campaign, targeting people with beginner (New to Dirt), intermediate, (A Little Dirty) and expert (Living Dirty) levels of expertise.

• Partner with New England Apple Association to increase competitiveness and sales of locally grown apples such as Cortland, Jonagold, and McIntosh, by featuring in-store samplings at participating supermarkets in the fall of 2016 and winter of 2017; point-of-purchase cards for New England’s 10 leading apples, for use by supermarkets, growers, farm stands, and all other sales channels; and a video on the search engine YouTube highlighting these apple varieties.

• Partner with The Sustainable Business Network of Massachusetts to increase sales of specialty crop products in Massachusetts by addressing and overcoming the barriers that prevent trade between specialty crop growers and buyers in Massachusetts through offering invaluable time savings and convenient opportunities for specialty crop growers to network and establish business leads, which may develop into business transactions and partnerships in the future, and for buyers to gain contacts and future opportunities to source local specialty crop and products.

• Partner with Ascentria Care Alliance to enhance the competitiveness of specialty ethnic crops by facilitating effective distribution channels between farmers and consumers of specialty ethnic crops in Central and Western Massachusetts and by increasing the volume of local, ethnic crops available for purchase by providing continued technical assistance to farmers.

• Partner with Mass Farm to School Project, LLC to increase the amount of Massachusetts specialty crops purchased by schools and other institutions by increasing market access to summer food service programs and promoting in-season purchasing and preservation of specialty crops for year-round use.

• Partner with The Third Sector/New Entry Sustainable Farming Project to improve market access and increase overall farm profitability by providing training and the needed “on-the-ground” technical assistance and personalized coaching support to help 80+ producers understand, apply, and improve specialty crop production, harvest, post-harvest, and food safety practices on their farms.

• Partner with Northeast Organic Farming Association to improve approaches for revitalizing compost-based urban soils for more competitive specialty crop production through on-site educational sessions that will be open to a wide community of urban farmers in the Boston area, conference workshops that attract city farmers across the region, and a best practice informational resource to fill the stated need for more technical materials for city farmers.

• Partner with Cape Cod Cranberry Growers’ Association to enhance the sustainability and viability of Massachusetts cranberry growers by i) providing accurate and timely diagnosis of cranberry plant pathogens, ii) increasing the scope and accuracy of detection of cranberry pathogens, and iii) responsiveness to emerging and existing diseases on cranberry.

• Partner with University of Massachusetts, Amherst to increase yield and profitability of cucurbit production on conventional and organic farms in MA and throughout the Northeast by providing new disease management tools and documenting the economic impacts of disease on yield and sales, and the value of using an integrated approach to disease control.

• 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.

**Michigan Department of Agriculture and Rural Development**

| Amount Awarded: | $1,929,840.47 |
| Number of Projects: | 27 |

• Partner with Pickle Packers International, INC to develop a Good Agricultural Practices food safety program, audit scheme and workbook for pickle and pepper growers through the establishment of a website and educational workshops.

• Collaborate with the Cherry Marketing Institute, Michigan Bean Commission, Michigan Apple Committee, and the Michigan Potato Industry Commission to promote specialty crops domestically and internationally through participating in trade shows, conducting export research and conducting a trade mission to increase sales and exports of specialty crop commodities.

• Partner with Cherry Marketing Institute to promote Montmorency tart cherries as a recovery solution for athletes and their nutrition regimen by focusing on athletic performance through a paid media partnership.

• Partner with Farmlogix, LLC to promote Michigan produce farm to school advancement through providing technology support to the Michigan Board of Education in tracking the procurement of fresh fruits and vegetables for the USDA Pilot Project for Procurement of Unprocessed Fruits and Vegetables.

• Partner with the Institute for Sustainable Living, Art & Natural Design to promote the competitiveness of honey production, mushroom production and crops in agroforestry systems through conducting a specialty crop education Farm School in conjunction with the 2016 Northern Michigan Small Farm Conference.
• Partner with Michigan Apple Committee to improve the competitiveness of fresh Michigan Apples by building online engagement with consumers to drive a deeper connection between social media involvement and in-store activity.

• Partner with Michigan Apple Committee to promote Michigan apples in the marketplace by cultivating a strong advertising campaign in trade publications in order to reach retailers and consumer publications that reach a larger number of consumers in the local region.

• Partner with the Michigan Asparagus Advisory Board to promote Michigan asparagus through updating the Michigan Asparagus Advisory Board website and brochure, and engaging an ad campaign to increase industry awareness.

• Partner with the Michigan Christmas Tree Association to remove barriers to Christmas tree sales, encourage repeat purchasing, provide information on Christmas tree selection and care through an advertising campaign, public service announcements and a QR code.

• Partner with the Michigan Onion Committee to provide access for onion growers to research and market information through creating a website.

• Partner with Marquette Food Co-op to increase the knowledge of fruits and vegetables and increase the likelihood of participants purchasing more specialty crops through educational programs of monthly cooking classes and food demonstrations at area farmers markets.

• Partner with Michigan Agritourism Association to increase the number of practical, farm-based educational resources available to small and mid-sized diversified specialty crop producers through six on-farm field days, online training videos and an outreach and promotional campaign.

• Partner with the Michigan Grape and Wine Industry Council to increase organizational and knowledge based capacity for wine grape industry sustainability program and certification through education engagement, building a webpage as an educational resource, including sustainability experts in events and familiarizing wineries with the process of self-assessment, sustainable winery energy and water practices.

• Partner with Michigan Integrated Food & Farming Systems to enable food safety educators to be proactive with a pilot group of next generation of farmers through working with area food safety specialists and preparing them to address evolving food safety guidelines.

• Partner with the Michigan Potato Industry Commission to build relationships with school decision makers and ensure equipment is kept up to date in the school meal program through the introduction of potato-friendly salad bars to school systems.

• Partner with Michigan State University Extension to address a set of barriers for increased institutional food service procurement of specialty crops through development and implementation of a training curriculum for food service professionals to increase knowledge and skills to handle and prepare seasonal Michigan specialty crops.

• Partner with Priva Civitas to increase sales for Saginaw County specialty crop farmers by facilitating new market demand through offering educational sessions.

• Partner with Michigan Bean Commission to examine critical diseases associated with yield performance in Michigan dry beans through assessment of strategies, development of cultivars and implementation of grower educational activities.

• Partner with Michigan Carrot Committee to reduce the number of pesticide applications while also reducing losses due to aster yellows in Michigan carrot and celery fields through collecting leafhoppers, determining the threshold in the laboratory and providing the information to growers.

• Partner with the Michigan Carrot Committee in collaboration with Michigan State University to build long-term, economically and ecologically sustainable carrot production system for Michigan producers given their on-going pest and nutrient management challenges by evaluating the impact of different cover crops on nematodes, weeds, nitrogen availability, carrot quality, carrot yield and profitability.

• Partner with the Southwest Michigan Research and Extension Center to maximize fruit quality and production while reducing costs and environmental impact through researching the target at harvest of grapes and sugar concentration.

• Partner with the Cherry Marketing Institute in collaboration with the Michigan Tree Fruit Commission to help fruit producers to make more informed management decisions by developing several new weather-driven application products through the Enviro-weather system.

• Partner with the Michigan Nursery and Landscape Association to evaluate over the top use of various non-traditional pre and post-emergence herbicides on late fall and early spring dormant ornamentals through conducting plant trials.

• Partner with Michigan Vegetable Council to combat cucurbit downy mildew caused by plant pathogens in Michigan cucumbers, watermelon, cantaloupe, squash, pumpkin and zucchini through research and evaluation of optimized spray timing of fungicide.
• Partner with the Michigan Vegetable Council to develop a Phytophthora blight management program that includes novel fungicide application methods and cultivars with at least partial resistance to root, crown, and fruit rot to limit disease losses on squash and pumpkin through providing growers with an economically viable management program that limits Phytophthora blight and research.

• Partner with Lakeshore Environmental, Inc. to provide the specialty crop industry with a better understanding of water reduction of repurposing options through analyzing water use practices within various processing facilities.

• Partner with Lakeshore Environmental, Inc. to provide a cost-effective option for specialty crop food processor wastewater management during peak discharge periods through testing the effectiveness and best climatic conditions for specialty crop food processor wastewater aspiration and the tolerance of the system for various wastewater strengths, flow rates, and the presence of solids which could potentially clog the nozzles.

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• Partner with the University of Minnesota to provide needed food safety technical assistance and education to specialty crop growers in Minnesota using innovative and experiential learning opportunities including on-farm workshops, peer-to-peer learning opportunities, participation in national food safety courses, and a new online food safety plan short course.

• Partner with Central Lakes College to help meet the growing need for technical support for the wine and grape growing industries in Minnesota and to lead the effort to negotiate and implement rules concerning the Food Safety and Modernization Act by educating winemakers and grape growers and giving them access to personalized instruction from a seasoned professional.

• Partner with Minnesota Grown Promotion Group to increase sales and competitiveness of Minnesota specialty crops through development and distribution of new promotional materials for vegetable growers and honey producers, development of a new series of videos promoting specialty crops, sponsored search advertising, search engine optimization and increased exposure for specific specialty crops in the printed Minnesota Grown Directory.

• Partner with the Institute for Agriculture and Trade Policy to increase the local sale of Minnesota grown specialty crops in the child care marketplace through technical assistance and outreach to Minnesota’s 33-county level Head Start programs, including coordination with farmers, distribution and processing partners, and Head Start staff.

• Partner with the Minnesota Farm Winery Association to increase awareness and sales of Minnesota wine made from Minnesota grown grapes, fruit, and honey by promoting Minnesota wineries as “points of destination” for travel/tourism, community-based business meetings, and social/recreational gatherings.

• Increase demand and market access for Minnesota specialty crops with potential for wholesale distribution through promotional assistance at domestic trade shows such as the National Restaurant Association.

• Increase demand and sales of specialty crops by first determining what specialty crop producers most want to grow and then creating and implementing an advertising campaign for two to four vegetables that are easiest and most lucrative for Minnesota growers to cultivate.

• Partner with Renewing the Countryside to improve local producers’ access to new, institutional markets for edible specialty crops by providing regional farmer-buyer networking events that include food safety and local food procurement introductory workshops and by putting farm-to-cafeteria enhancement teams in place to develop the skills of buyers to purchase from specialty crop producers.

• Partner with the Minnesota Food Association to increase the marketability of traditional Asian, African, and Latino crops by developing, evaluating, and eventually providing training on techniques to improve the efficiency of these crops.

• Partner with Linden Hills Farmers’ Market to increase growth opportunities for specialty crop farmers by providing legal information sessions on topics necessary for specialty crop farmers working on scaling up their businesses including hiring and employment law; business connections and contracts; and farm liability protections through incorporation.

• Partner with the Minnesota Fruit and Vegetable Growers Association to better equip fruit and vegetable producers for economic success by providing them with production and marketing information to make them more competitive in local markets, offering them strategies to increase customer loyalty and ways to effectively use social media to maintain and create connections, and conducting a beginning grower workshop to help new vegetable growers build a foundation for success.

• Partner with the University of Minnesota to increase consumer knowledge on the benefits of native grasses, especially as larval food for pollinators, while increasing sales and use of native grasses through point-of-purchase marketing and educational materials at five garden centers in Minnesota.
Increase the awareness and consumption of locally produced specialty crops by creating new specialty crop educational materials and professional development opportunities for teachers including videos, a lesson booklet, and a student AgMag.

Partner with North Dakota State University to increase potato production by working to eradicate potato emergence disorder by determining whether the interaction between the root-lesion nematode Pratylenchus penetrans and fungal pathogen Fusarium oxysporum is the cause of this problem.

Partner with Seven Songs Organic Farm to expand production of ginger and turmeric by testing a cost-efficient model for growing ginger (and turmeric which has similar requirements) in the Upper Midwest, while also creating better crop rotation, lowering overhead costs, and meeting public demand for this high-value specialty crop.

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.

**Mississippi Department of Agriculture and Commerce**

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- Partner with Farm Families of Mississippi to develop and implement a promotional campaign that educates the public about the benefits of buying and consuming locally grown and produced specialty crops including, but not limited to, sweet potatoes, honey, sweet corn, and pecans.
- Partner with Mississippi State University to present training, encouragement, and marketing outlets to Mississippi farmers and growers for Mississippi-grown cut and value-added ornamental plant materials.
- Continue to increase agriculture awareness in the classroom and lunchrooms through the support of local farmers growing and serving specialty crops in school cafeterias and provide an educational tool to enhance the knowledge of school-aged children on agriculture and healthy eating.
- Partner with Mississippi State University to increase the understanding of soil health and vegetable quality, provide strategies for implementing no-till production into conventional and organic systems, and provide valuable information about the benefits of cover crop use in vegetable production systems.
- Partner with Alcorn State University to introduce and demonstrate the production of ethnic vegetable crops with potential for commercial production in Mississippi.
- Partner with Mississippi State University to boost the marketing efforts of all specialty crop producers in Mississippi by providing technical assistance and education on the best practices used in marketing of specialty crops (and their products/byproducts) using social media sites such as Facebook.
- Partnered with Hinds Community College to invest in specialty crop research; increase child and adult nutrition knowledge and consumption of specialty crops; and improve food access in underserved communities.
- Partner with Mississippi State University to conduct research to determine if skinning injury really does influence a consumer’s willingness-to-pay for sweet potatoes and what level of skinning injury is considered acceptable by consumers determined via non-hypothetical experimental auctions.
- Partner with Mississippi State University to screen for herbicide-tolerant phenotypes among a wide collection of tomato lines consisting of modern and vintage cultivars, wild species, stress tolerant lines, and introgression lines and identify markers associated with herbicide-tolerant traits in tomato, thus breeding herbicide-tolerant traits into agronomically important tomato lines/varieties.
- Partner with Mississippi State University to focus on reducing losses and market reliability from early Macrophomina phaseolina (MP) identification in sweet potatoes during harvest, bin storage, and packaging stages by continuing the collaboration of a diverse team to explore the development of rapid detection methods and hardware for qualitative and quantitative analysis of microbial volatile organic compounds in order to identify specific chemicals unique to Mp.
- Partner with Mississippi State University to hold training workshops and demonstrations that will provide multi-level education in specialty crop production procedures for Extension agricultural agents, Master Gardener volunteers, local fruit growers, and the general public.
- Partner with Alcorn State University to develop novel substrate mixtures for shiitake (Lentinus edodes) grow-blocks to enhance mushroom quality and/or quantity, and profitability compared to traditional grow-blocks that contain mixtures of sawdust and grain barley.
- Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.
• Partner with Columbia Center for Urban Agriculture to increase use of Missouri specialty crops in meals prepared and increase attendance at the Columbia Farmers Market by low-income families by organizing field trips, offering cooking demonstrations at a local food pantry, and giving cooking classes that will result in increased sales of specialty crops.

• Partner with Webb City Farmers Market to develop and increase blackberry production and marketing in Southwest Missouri and statewide by promoting, through a demonstration plot, workshops and field days, recently developed production practices, and newly available blackberry cultivars to farmers and by expansion of marketing efforts to ensure that increased production will be matched by increased sales.

• Partner with Webb City Farmers Market to establish a hands-on learning center for winter production and season extension, designed for Hmong farmers and other specialty crop farmers in the region by providing hands-on workshops that focus on fall, winter, and/or spring production.

• Partner with Missouri Farmers Market Association to increase production and sales of Missouri specialty crops by providing training that results in better managed farmers markets and more successful specialty crops growers.

• Partner with Kansas City Community Gardens to increase knowledge and support for Missouri’s youngest gardeners in their efforts to grow fresh fruits and vegetables in school and youth gardens by providing education, technical assistance, garden construction supplies, and soil amendments to help ensure garden success for school and youth gardeners in the Kansas City area.

• Partner with The Curators of the University of Missouri to provide education to Missouri farmers and producers to increase their decision making of scaling up production for specialty crops through 13 workshops across the state over a 3-year period.

• Partner with the Curators of the University of Missouri to determine and understand definitively if and specifically where cyanide occurs in both ripe and unripe elderberry fruits by developing highly sensitive methods to test for cyanide and its possible forms in elderberry fruit, and use the results from these analyses to provide qualitative and quantitative information about the presence of cyanide.

• Partner with Missouri State University to select promising new varieties for further evaluation of enological characteristics by conducting an assessment of the seven new grape varieties for their viticultural characteristics in 2015 and 2016.

• Partner with Missouri State University to increase knowledge of the genetic determinants of the Norton Grape, determining whether the Norton Grape can be improved in the hybrid population, by seeking knowledge of any factor that promotes or constrains rooting ability and guidelines that allow the incorporation of rooting ability as a selection criterion in strategic or operational breeding plans.

• Partner with Missouri State University to determine which varieties of primocane bearing raspberries are best for production in grow bags in this region by investigating the production in grow bags rotated in and out of a high tunnels and rotated into a high tunnel after late winter planted vegetables are harvested that may add a profitable crop to their mix, ultimately leading to greater economic farm sustainability.

• Partner with the Curators of the University of Missouri to increase the knowledge and marketable production of organic raspberries in Missouri by demonstrating methods of growing using moveable high tunnels and caterpillar tunnels to increase fruit yield and quality and deter Spotted Wing Drosophila.

• Partner with the Curators of the University of Missouri to decrease knowledge gaps regarding the rust pustule density at which elderberry production and juice quality is adversely affected by providing producers with new information on the infection level at which elderberry rust reduces plant growth, fruit yield, and juice quality.

• 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.
• Partner with Montana State University to help specialty crop value-added producers and manufacturers identify food safety compliance requirements and meet those requirements by offering food safety trainings on Hazard Analysis & Critical Control Points (HACCP), Global Food Safety Initiative (GFSI), Good Manufacturing Practices (GMPs), Good Agricultural Practices and Good Handling Practices (GAP & GHP), and more.

• Partner with Montana State University to increase access to local food for consumers and institutions by building networks among farmers, consumers, and buyers; educating consumers and wholesale produce buyers about the value of local food; and by improving on-farm food safety.

• Partner with the USA Dry Pea and Lentil Council to introduce, inform and inspire next generation of food professionals in using pulse ingredients in consumer packaged goods by developing and executing the Pulse Product Development competition for the United States along with an online pulse-focused toolkit for college and university food science programs.

• Partner with Western Montana Growers Cooperative to increase specialty crop farmer access to supermarkets by introducing a themed packaging line for produce items such as blueberries and cherry tomatoes and developing product-specific point of sale material to ease the merchandizing needs of supermarkets.

• Increase sales of Montana-grown peas, lentils, and chickpeas and direct consumers to resources to find more information on pulses’ health benefits and how to purchase and prepare them by developing and airing television and radio advertisements targeted to raise consumer awareness of Montana-grown pulse crops.

• Partner with Organic Seed Alliance to expand access to seed for organic beets, carrots, and onions by providing trainings to organic specialty crop seed producers and producer groups in post-harvest handling and in establishing quality assurance procedures; enabling organic specialty crop growers to solve production challenges through access to organically produced and regionally adapted varieties; and expanding organic production practices in specialty crop seed production.

• Partner with Montana State University to improve the health of Montana’s honey bee population by investigating the role of pathogens on colony losses and performing molecular diagnostics for 14 bee-associated pathogens and then quantitatively assessing this data.

• Partner with Montana State University to develop known pheromone attractants into a monitoring system for pea leaf weevil that will give farmers the tools they need to properly manage for pea leaf weevil, identify sources of the pest, and mitigate them before they cause widespread damage to their crop.

• Partner with Montana State University to allow potato growers to make better, more informed decisions about whether to plant certified seed by estimating the cost of PVY to commercial potato growers in Idaho, Oregon, and Washington; estimating the economic benefits from planting PVY-screened seed to growers; estimating the economic benefits of the Montana Seed Certification Program to the three-state region as a whole; and creating an online decision tool that illustrates tradeoffs between disease in seed and end of season losses, yield, and net revenue.

• Partner with Montana State University to monitor pests and potential invasive insects for tree fruits by surveying and monitoring tree insect pests in several commercial orchards in western Montana; testing whether tree fruit pest densities are lower in orchards managed with integrated pest management techniques; developing and publishing a MontGuide on Montana fruit tree insect pests; and increasing awareness of the brown marmorated stink bug and spotted-wing Drosophila through training of first detectors.

• Partner with Montana State University to mitigate seed yield loss and seed poor quality associated with limited knowledge of field pea pathogens by surveying soil and plants in Montana for field pea diseases, identifying the causal agents of observed diseases, developing diagnostic tools for the detection of identified pathogens, and disseminating data to farmers, extension agents, and producers on the identification and management of the diseases found in Montana.

• Partner with Montana State University to improve chickpea production in Montana by screening chickpea varieties with vigorous seedling establishment and high nitrogen fixation capacity, which will enhance the crop to compete with weeds, reduce disease infestation, and increase rotational benefits.

• Partner with Lake County Community Development Corporation to create year-round economic opportunities for specialty crop growers throughout the state by developing ready-to-serve value-added specialty crop products for public institutions by increasing distribution efficiencies for Montana specialty crops, expanding the farm-to-institution supply, and communicating project results to specialty crop producers and stakeholders.

• Partner with the Great Falls Development Authority to increase the production of pulse crops within Montana by promoting new opportunities for businesses to engage in pulse crop fractionation operations in the Great Falls trade area through the utilization of business cases targeted toward companies that currently are or plan to supply pulse crops ingredients, derived from peas, lentils, and chickpeas, to food and feed marketplaces.
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.

**Nebraska State Department of Agriculture**

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- State project to teach growers the specific steps of how to implement season extension practices through conducting four seminars over the three-year grant period.
- Partner with The University of Nebraska – Lincoln to increase the knowledge about growing hops in Nebraska and provide foundational performance data that specialty crop growers can utilize to consider hops production/cultivar selection through evaluation of the potential for hops production in Nebraska by conducting a trial consisting of growing a select number of cultivars in four different environmental regions.
- Partner with Community Crops to educate established and beginning producers of the alternative tillage techniques that exist for small scale specialty crop growers in three different ways through on-farm educational skill sessions, a small scale research project and hosting two public events to educate on alternative tillage methods.
- Partner with East Butler Public Schools to provide appetizing, nutritious food service products in farm-to-school sourcing through constructing a new greenhouse to create in-house, local, specialty crop production under the custodianship of East Butler students and staff.
- Partner with The University of Nebraska – Lincoln to increase school purchasing and use of fresh specialty crop items from local farmers and raise the profile of interest in farm to school programs statewide through training school food service personnel and farmers through in-person trainings and webinars; and executing a statewide media campaign.
- Partner with the City of South Sioux City in collaboration with the University of Nebraska – Lincoln to address food insecurity and food safety among Latino communities in South Sioux City through recruiting socially disadvantaged farmers, providing them with plots to grow specialty crops, training on food safety practices and encouraging them to adopt “Add a Row” as growing technique.
- Partner with the Meadowlark Hearth Living Environment Foundation (MHLEF) to provide small and medium-sized growers with seasonal specific information required for organic and Biodynamic seed production through on-farm field days, conference presentations, consultation, and special events.
- Partner with the University of Nebraska to develop dry bean cultivars with upright plant architecture that are suitable for direct harvest through exploring the effect of plant population on yield and quality of great northern and pinto beans grown in Nebraska to identify optimal planting densities and row spacing.
- Partner with The University of Nebraska – Lincoln to identify the best cultivars following optimal planting and harvesting time under organic production conditions for high seed yield and quality through planting cultivars as replicated plots under irrigated and non-irrigated conditions, measuring growth parameters and timing of developmental events.
- Partner with The University of Nebraska – Lincoln to determine the medicinal and market-value of Nebraska fenugreek seed in the U.S. Medicinal and prebiotic industries through researching fenugreek’s effect in boosting the population of disease-protective gut bacteria and its effect on high-fat diet induced obesity and insulin resistance.
- Partner with the University of Nebraska – Lincoln to produce ready-to-eat snacks from dry edible beans that retain a high concentration of folic acid through determining the effects of extrusion parameters on physical properties and folic acid concentration in dry edible bean extrudates.
- Partner with The University of Nebraska – Lincoln to create a growing system that would control environmental conditions in order to produce reliable active ingredient concentrations in herbs and medicinal plants through distilling, quantifying and identifying the oils from leaves and flowers of eight cultivars of basil.
- Partner with the University of Nebraska – Lincoln to protect against two insidious cellular stresses in pinto beans through generating data on the capabilities of the important bean market class grown in Nebraska.

**Nevada Department of Agriculture**

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- State project to prepare farmers for compliance with Food Safety Modernization Act and Produce Safety Rule guidance through trainings delivered in a series of workshops.
• Partner with Mason Valley Beekeepers to increase local honey consumption by promoting the benefits of local honey through outreach activities at local and regional events such as county fairs, farmers markets, schools, hospitals and various clubs.

• Partner with Aquaponics System Consultants to provide students with agricultural knowledge in conjunction with STEM focused education through collaborating directly with schools to provide the schools with their own Aquaponics based system.

• Partner with Urban Roots to build a farmer incubator program unique to northern Nevada and the high desert climate to develop “next generation farmers” through offering unique field experiences, small business mentoring, leadership development and introduction to regional food systems.

• Partner with On the Ranch, LLC to reduce poverty-induced food insecurity and health issues through the promotion of specialty crops by increasing access to locally grown specialty crops in low income tract areas and providing nutrition education.

• State project to address training and networking needs among specialty crop producers and food service directors through coordinating three trainings on local procurement and networking opportunities through farm field trips.

• State project to allow specialty crop producers to develop farm events that will bring product buyers directly to the farm while also increasing youth and adult knowledge on Nevada specialty crop production through coordinating workshops that incorporate Next Generation Science Standards and farm field trips for students.

• Partner with Urban Roots in collaboration with the University of Nevada College of Agriculture to identify hop varieties that will thrive in Nevada’s high desert ecology and yield highly desirable qualities for Nevada brewers and supplement supply through a research study and building necessary infrastructure.

• Partner with the Churchill Economic Development Authority to increase specialty crop access for Nevada specialty crop growers and consumers through creating a space where goods from at least 22 local specialty crop famers can be purchased by local consumers, including surrounding communities and allowing local specialty crop growers to package and produce value-added specialty crop products.

• 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.

New Hampshire Department of Agriculture, Markets and Food

| Amount Awarded: | $265,773.46 | Number of Projects: | 6 |

• Partner with Vital Communities to increase awareness of specialty crops through an enhanced online presence, cooking education demonstrations, marketing technical assistance for specialty crop growers, and promotional materials.

• Partner with Cheshire County Conservation District to increase procurement, demand, and education of fruits and vegetables in schools through development of NH Harvest of the Month materials, piloting the program in four schools of the Monadnock Region through engaging school districts’ teachers and food service staff in classroom and cafeteria trainings, creating a NH Harvest of the Month website, and rolling out the program to schools statewide via webinars, workshops and presentations at conferences in year two of the grant with the leadership of NH Farm to School.

• Partner with The New Hampshire Plant Growers’ Association to increase member sales through promotion of the Plant Something campaign.

• Partner with NH Division of Travel & Tourism Development to promote New Hampshire specialty crops including vegetables, fruits, flowers/plants, maple, honey, wine and Christmas trees by focusing on a targeted television and internet advertising campaign.

• Partner with University of New Hampshire Cooperative Extension to improve the ability to manage pests, avoiding unnecessary pesticide application, being alerted to potential problems before they occur, and preventing crop loss and damage, by expanding specialty crop growers’ access to environmental and weather data and real-time models that directly help them make informed decisions about crop pest management.

• 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.

New Jersey Department of Agriculture

| Amount Awarded: | $707,065.87 | Number of Projects: | 11 |
• Partner with Garden State Wine Growers Association to increase sales of and prominently promote New Jersey wines through the Jersey Fresh Wine Festival and introduction into the retail and licensed beverage spaces in New Jersey.

• Partner with New Jersey Blueberry Growers Association to promote New Jersey produced blueberries through a consumer-oriented radio campaign to differentiate New Jersey blueberries to the consumer and promote them as a nutritious alternative in their diets that would air during peak production weeks and be broadcast in markets throughout the Northeastern Seaboard.

• Increase the overall effectiveness of the marketing of all specialty crops in New Jersey by advertising Jersey Fresh in print and television advertisements which will culminate in an increased awareness of Jersey Fresh products and ultimately, an increase in sales of Jersey Fresh products.

• Partner with New Jersey Farmers’ Direct Marketing Association, Inc. to support specialty crop producers’ ability to direct market their products and attract customers, through the development and expansion of electronic and print media marketing resources.

• Partner with New Jersey Nursery & Landscape Association, Inc. to increase New Jersey plant sales through marketing efforts of Plant Something, which will include the development of a traditional, electronic and social media messaging campaign.

• Partner with New Jersey Peach Promotion Council to promote New Jersey peaches through advertising in print media and various promotional events.

• Partner with Trenton Farmers Market to increase sales of all the specialty crops (strawberries, blueberries, sweet corn, peaches, tomatoes, melons and apples) by marketing the farmers’ market through local newspapers and radio stations, creating videos to share on YouTube, and hosting at least seven cooking demonstrations at the market.

• Partner with the Tri-County Cooperative Market Association to expand the customers who purchase and increase the volume of products sold at the market by enhancing the website to be geared toward the customers and advertising to a broader range of customers.

• Partner with Atlantic County Board of Agriculture to increase new expertise to benefit Garden State specialty crop agriculture by providing positive but realistic hands-on farm experience to student interns who have a desire to pursue a career in specialty crop agriculture.

• Partner with New Jersey Agricultural Society to increase student understanding and interest in specialty crops and increase family consumption of specialty crops purchased from specialty crop beneficiaries through an engaging, hands-on learning environment at school gardens hosted by 20 new schools.

• 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.

**New Mexico Department of Agriculture**

| Amount Awarded: | $507,181.82 | Number of Projects: | 10 |

• Positively impact consumer demand of New Mexico pecans through promotion at the 2016 IBIE Trade Show and the 2017 Natural Products Expo West Trade Show.

• Partner with the New Mexico Certified Chile Association to educate consumers about New Mexico green chiles through a national advertising and chile certification campaign.

• Partner with Cooking with Kids, Inc. to address the nutritional health of children and families in New Mexico through hands-on food and nutrition education; connecting specialty crop farmers with New Mexico schools and training specialty crop farmers to market their crops.

• Partner with Magdalena Public Schools to provide an opportunity for students to produce locally grown vegetables and stock their school cafeteria through structured classroom education with experienced teachers and community members.

• Partner with New Mexico State University to educate growers, home gardeners and consumers on Jujube cultivar selection and production in New Mexico through publications, website development and marketing efforts.

• Partner with New Mexico State University to enhance nutrition and increase the availability of profitable crops through conducting a trial of a type of Peruvian potato for cultivation in New Mexico.

• Partner with New Mexico State University to illuminate genes that initiate flower production and the timing needs to mitigate alternate bearing by evaluating the effectiveness of growth regulators and their role in mitigating the effect of alternate bearing.
• Partner with New Mexico State University to expand evaluations of hops cultivars; demonstrate mechanized tools for scaling-up hops production; and educate growers and brewers on opportunities and challenges to hops production through maintenance of plots across the state, assessing usefulness of refurbished hops equipment and conducting a one-day intensive workshop.

• Partner with Nambe Pueblo to enhance and extend current agricultural projects to increase access to healthier foods and better nutrition for 1200 Nambe Pueblo people through enrichment and maintenance of fields and improved irrigation.

• 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.

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

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• Educate consumers about the many environmental, economic, and health benefits of specialty crop consumption by providing a cost-share pilot program to the State’s eligible specialty crop members that will allow for customized advertising and promotion activities, thereby increasing consumer awareness and sales of the State’s specialty crop products.

• Raise awareness and provide information to buyers and sales leads by providing shared space to specialty crop industry groups exhibiting at the New York State Pavilion so that they can promote their specialty crops.

• Assist consumers and commercial buyers in easily searching for and locating sources of specialty crop products by expanding the Pride of New York database and database functionality to increase specialty crop industry representation.

• Partner with New York Farm Viability Institute and Cornell University to help growers reduce pesticides by 30 to 40 percent and improve growers’ profitability by offering a series of one-day, in-depth training courses on better spray application techniques.

• Partner with New York Farm Viability Institute and Cornell University to address increasing demand for fresh, year-round local food by engaging key players in the controlled environment agriculture (CEA) vegetable industry to assist in the development of market and business planning tools; offering a detailed two-day entrepreneur workshop that will connect 30 new/transitioning CEA entrepreneurs with an advisory board; and asking attendees to complete a business plan.

• Support the implementation of school efforts that increase the capacity of schools to procure and serve locally-produced specialty crops in the cafeteria by offering grants that will equip schools to carry out and successfully implement farm-to-school plans and initiatives that are currently in place.

• Partner with New York Farm Viability Institute and Cornell University to increase the overall quality of production and vineyard profitability by evaluating different cultural (roguing) and chemical (contact and systemic insecticides) management strategies directed to leafroll viruses and their mealybug vector, Pseudococcus maritimus; estimating the cost of the different disease management strategies and calculating net return scenarios; and developing a comprehensive, integrated pest management (IPM) program to be disseminated to the local grape community.

• Partner with New York Farm Viability Institute and Cornell University to improve Cercospora leaf spot management practices by identifying and registering alternative, efficacious fungicides for good rotational practices and then delivering practical integrated disease and weed management strategies for conventional and organic beet production to producers.

• Partner with New York Farm Viability Institute and Cornell University to reduce the impact of leaf mold in tomatoes produced in high tunnels by determining the diversity of the pathogen (races or strains present) in New York, working with growers to identify the most-resistant tomato varieties for high tunnel production across the State, and determining the efficacy of commercially available disease-control products that have not been previously tested.

• Partner with New York Farm Viability Institute to improve the Honeycrisp apple variety and sales by utilizing a new tool called a DA meter to sample Honeycrisp apples as they are harvested to better determine ripeness indicators.

• 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.

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

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• Partner with North Carolina Potato Association, Inc. in a continued effort of implementing a marketing campaign that promotes North Carolina grown potatoes which will improve profits and the long-term sustainability of NC potato farms.
• Partner with North Carolina Strawberry Association to promote and market North Carolina Strawberries directly to consumers, and to increase grower use of our website for educational purposes. Increasing grower participation in association activities can increase their production quality and value.

• Partner with North Carolina Potato Association, Inc. in a continued effort of implementing a marketing campaign that promotes North Carolina grown potatoes which will improve profits and the long-term sustainability of NC potato farms.

• Partner with North Carolina Sweet Potato Commission to conduct a feasibility study to determine if developing North Carolina sweet potatoes as a brand will increase consumer recognition and increase purchases of North Carolina sweet potatoes.

• Maintaining the participation in GAP certification in North Carolina by reducing extra cost of certification for growers by providing assistance through cost sharing, this certification is a requirement of major retail stores and this certification will open the door for these growers to increase sales.

• Partner with Carolina Farm Stewardship Association to provide on-farm high tunnel production training to 170 specialty crop producers as well as to determine the costs associated with grafted tomato production in high tunnels. The results of the cost analysis will be published in the NC Organic Seasonal High Tunnel Organic Tomato Production Guide and the High Tunnel Micro Irrigation Guide on CFSA website.

• Partner with PHARMN (Preserving Heritage Agriculture and Regional Markets Now) to increase awareness through hands on training to local land owners and law enforcers on the cultivation of wild-simulated American ginseng in the High Country of western NC, as well as, to conduct a market analysis to provide an overview of the potential markets for locally-grown ginseng to assist growers in connecting with viable local markets.

• Partner with Rural Advancement Foundation International (RAFI) to create educational materials and videos to educate producers about recordkeeping requirements for crop insurance for specialty crops.

• Partner with North Carolina State University to conduct a postharvest study to generate new knowledge for Christmas tree growers about pallet storage and forced-air cooling of Christmas trees, the use of ethylene blockers and harvest timing on needle retention, the effectiveness of Christmas tree fire retardants and treatments to reduce trunk crack rate.

• Partner with North Carolina State University to develop integrated control strategies for cucurbit downy mildew by evaluating newly released pickling cucumber lines for resistance, monitoring efficacy of fungicide products, and analyzing fungicide-resistant pathogen populations. Findings of this project will provide robust management recommendations to cucurbit growers that will protect the tools we have available for disease control in the long term.

• Partner with North Carolina State University to identify integrated management strategies for black rot in sweet potato and train stakeholders on disease diagnostics and control by evaluating varieties for resistance to the disease, examining products for chemical control when host resistance is not sufficient, and disseminating findings to stakeholders during grower meetings and field days.

• Partner with North Carolina State University to develop management strategies for Phytophthora blight of pepper by evaluating pepper varieties for resistance, monitoring efficacy of fungicide products, and analyzing pathogen populations in North Carolina. Findings of this project will have immediate impact on pepper growers by providing management recommendations for Phytophthora blight.

• Partner with North Carolina State University to improve somatic embryogenesis methods for Fraser fir and thus, provide a pathway for large-scale clonal propagation and genetic engineering in the future. Progress will be evaluated and success measured by comparison to the current state of the technology for each stage of this process.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

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• Partner with North Dakota State University to enhance knowledge and safe food handling of specialty fruit and vegetable crops from field to table through training, dissemination of research-based information, and provision of food safety demonstration kits housed in 25 counties.

• Partner with North Dakota State University to provide current and future pulse farmers with information that can enhance their knowledge of food industry supply chains by evaluating the market trends of peas and lentils and their use in the food industry and then analyzing the market potential for their use.
Partner with North Dakota State University to advance value-added exports of specialty dry beans by screening and improving health relevant bioactive profiles of commercial dry bean cultivars with natural elicitors for enhancing value for global exports.

Provide information to help producers determine the value to place on their fruits and vegetables by conducting a pricing study to gather baseline data of fruit and vegetable prices across the state, providing education to producers on how to value their seasonal fruits and vegetable, and focusing on increasing access to fruits and vegetables of low-income North Dakota consumers.

Partner with the North Dakota Trade Office to increase the value of regional specialty crop exports through three outbound trade missions to Columbia/Peru, Mexico/Dominican Republic, and India and one inbound trade mission bringing international specialty crop buyers to the Upper Midwest.

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 characterizing the agronomic and genetic components of winter pea production such that best management practices and superior varieties can be developed for North Dakota and Midwest environments.

Partner with North Dakota State University to improve seed yield and quality in confection sunflowers by evaluating whether delivering fungicides through drop-nozzles mounted on a conventional spray boom of a high-clearance sprayer can improve fungicide coverage and improve control of Sclerotinia head rot.

Partner with North Dakota State University to identify optimal fungicide application strategies for Sclerotinia control in dry edible beans by testing how the timing and duration of conditions favorable for Sclerotinia influences optimal fungicide application timing; assessing how the profitability of a second fungicide application is influenced by the row spacing; evaluating the impact of precipitation patterns on optimal fungicide use to optimize irrigation scheduling where Sclerotinia is a limiting factor; and conducting field trials at multiple locations to confirm that results are consistent across environments.

Partner with North Dakota State University to provide updated tree species and/or cultivar information to North Dakota commercial nursery crop producers and retailers by evaluating potential woody species to enhance, diversify and increase the inventory of usable landscape plants for the United States Department of Agriculture hardiness zones three and four.

Partner with Northern Plains Sustainable Agriculture Society (NPSAS) to increase access to superior varieties of selected market classes of vegetables by identifying current standard cultivars and traits needed for improved performance, employing replicated variety trials at North Dakota State University and at vegetable farms across North Dakota, and reporting data through eOrganic’s Variety Trial Reports website, field day tours, workshops at collaborator events, and through social media.

Partner with North Dakota State University to provide protection from dicamba drift to specialty crop producers and to establish data that eases consumer concerns about pesticides by attempting to correlate lab-tested herbicide residues with actual crop injury and yield loss in dry beans, field peas, and potatoes.

Partner with North Dakota State University to mitigate the effect of soybean cyst nematode on dry bean production by determining whether soybean cyst nematode increases root rot severity caused by F. solani, and R. solani, two important fungal pathogens found in the major dry bean production areas of North Dakota and northern Minnesota.

Partner with North Dakota State University to increase yield and reduce the nitrogenous fertilizer cost of dry beans by determining the success of in-furrow inoculant application on dry bean biological Nitrogen fixation potential, which will thereby potentially increase the overall economic profitability of dry bean growers.

Partner with North Dakota State University to enhance specialty crops and soil quality by quantifying the impact of tillage (no-till and conventional-till) and application of an Arbuscular mycorrhizal fungi (AMF) inoculant on vegetable plant growth/health; documenting a transfer of this knowledge to organic vegetable growers and other clients; and documenting adoption of these practices by organic vegetable growers in the state.

Partner with North Dakota State University to identify best management practices for faba bean production by determining the optimal planting conditions for faba bean, identifying threatening diseases, evaluating faba bean tolerance to herbicides, and identifying the effectiveness of pre-harvest desiccation.

Partner with North Dakota State University to increase specialty crop production by screening about 50 green foxtail samples from across the state to determine how widespread green foxtail resistance is, to which herbicides or groups green foxtail is resistant, and if the pattern of resistance correlates with historical herbicide use.
• Partner with North Dakota State University to provide growers with management options for root rot in field peas by improving pathogen quantification from roots using Genotype by Sequencing; obtaining initial data on the importance of seed quality and plant nutrient levels in root rot severity of field peas; obtaining second year data for nematode populations and chemical and physical soil characteristics; evaluating cultivars used in North Dakota for resistance to pin nematodes; and determining the effect of pin nematodes on plant growth of field peas.

• Partner with North Dakota State University to improve pea growers’ response to Fusarium root rot by quantifying the impact of common herbicides and herbicide programs on Fusarium root rot of field peas and developing herbicide usage guidelines for fields where the disease is a problem.

• Partner with North Dakota State University to reduce losses caused by Potato Virus Y (PVY) by assessing the potential for remotely sensing PVY in seed (and commercial) potato fields through determining the wavelengths of reflected light that are associated with PVY of seed potato plants; determining whether these wavelengths are discernible for new cultivar releases, advanced selections, and commonly grown cultivars; determining if PVY strains are discernible from one another using spectral data; and determining if PVY infection can be differentiated from nutrient deficiency.

• Partner with North Dakota State University to help producers manage losses caused by potato mop top tuber necrosis (PMTV) by screening red, white, yellow, and russet-skinned potato cultivars for their susceptibility to powdery scab and tuber-induced necrosis caused by PMTV.

• Partner with North Dakota State University to aid producers in selecting fruit crops or cultivars that may avoid peak spotted wing drosophila (SWD) populations by evaluating SWD’s host preference for common and newer North Dakota fruits; determining the phenology (timing) of SWD appearance in fruits through trapping; and testing for a correlation between skin thickness and SWD damage in grapes and juneberries.

• Partner with North Dakota State University to reduce losses to North Dakota honey production caused by American Foulbrood disease (AFB) by identifying means by which one hundred percent of all spores within a hive can be rendered sensitive to antibiotics, thus preventing relapse of AFB when treatment is discontinued.

• Partner with North Dakota State University to curtail losses to bean production due to bean rust by determining the frequency of virulence to currently utilized rust resistance genes in the rust pathogen population from North Dakota and by using this information to guide breeding efforts to achieve durable rust resistance.

• Partner with North Dakota State University to assist breeding programs in incorporating root-resilience traits in improved dry bean varieties resulting in an increase in dry bean productivity by studying resistance/tolerance to root rot pathogens and resistance/tolerance to soil zinc deficiency, both of which affect root health at early stages.

• Partner with North Dakota State University (NDSU) to curtail the losses resulting from common bacterial blight by using genome-wide association mapping to evaluate NDSU breeding lines for common bacterial blight resistance loci, which will provide NDSU breeders with invaluable genetic information on host material that has been selected under North Dakota growing conditions.

• Partner with the National Sunflower Association to reduce yield loss in confectionary sunflowers by incorporating downy mildew (DM) resistance identified in oil-type sunflower into confection sunflower, performing molecular mapping of DM resistance genes, and pyramiding DM and rust resistance genes in a single genetic background.

• Partner with North Dakota State University Williston Research Extension Center to provide information on high tunnel specialty crop production by comparing commercial varieties of traditional high tunnel crops such as tomatoes, peppers, melons, lettuce, spinach, and kale and evaluating different varieties of high-value cut flowers including delphinium, lisianthus, amaranth, and pennisetum seedheads.

• 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.

**Commonwealth of the Northern Mariana Islands Department of Lands and Natural Resources**

| Amount Awarded: | $212,642.99 | Number of Projects: | 1 |

• Increase the production and availability of locally grown Northern Marianas specialty crops and the ability of producers to generate an income through the promotion of the use of high tunnels by the local specialty crop industry and studying which techniques and crops work best with the high towers when growing in Northern Marianas unique environment.
Ohio Department of Agriculture

Amount Awarded: $525,381.92  Number of Projects: 8

- Partner with the Ohio State University to enhance the existing produce safety program and extend educational opportunities to Ohio packers, processors and shippers of fresh produce by developing food safety educational programs for these stakeholders.

- Partner with the Ohio Ecological Food and Farm Association to increase the competitiveness of Ohio organic specialty crops by providing direct technical support and educational programming to help beginning and existing organic farmers improve organic production and marketing skills, help others transition to certified organic production, and work with farmers of all sizes and levels of experience on-farm to establish food safety plans and implement them.

- Partner with the Ohio State University to develop strawberry production in Ohio by 1) developing and publishing a protocol for insect, disease, irrigation and fertilization management; 2) establishing strawberry research at Piketon Ohio to better inform grower management recommendations; 3) advancing an established method to produce strawberries for four months compared to the traditional one month; 4) developing an online resource module; 5) providing training on all aspects of strawberry production; and 6) developing a strawberry plant propagation protocol.

- Partner with Foodbank, Inc. to expand knowledge of growing and harvesting specialty crops as well as the nutritional benefits and culinary uses of specialty crops through a volunteer training program in which project partners will be responsible for training garden volunteers and low-level offenders on how to produce, maintain, and harvest specialty crops.

- Partner with the Center for Innovative Food Technology to increase the production of wine grapes, juice grapes, and hops by utilizing high pressure processing to control microbes and “wild yeasts” and further enhance the flavors of these specialty crops.

- Partner with the Ohio State University to improve grower production techniques by examining the effectiveness of containers on cane berries for improved winter and frost production and examining the use of Chemigation (micro sprinklers) for more effective pest control.

- Partner with Refugee Response to increase the availability of locally grown ethnic specialty crops and illustrate the value of this niche and underserved market in the Cleveland area by conducting market research, outreach, and education and by developing the infrastructure needed to successfully cultivate these specialty crops.

- 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.

Oklahoma Department of Agriculture, Food, and Forestry

Amount Awarded: $570,303.62  Number of Projects: 10

- Develop a booklet to increase the fruit and vegetable consumption by youth in Oklahoma by providing teachers hands-on instruction and connections to specialty crop resources and lessons.

- Build consumer awareness about OK Grown products by educating them on the venues in which they can purchase fresh fruits and vegetables that are locally grown.

- Partner with Oklahoma State University to evaluate the impact of cattle grazing withdrawal periods prior to harvest of native pecans and to assess the potential contamination routes of human pathogen on pecan orchards.

- Partner with Redlands Community College to compare two nutrient and pest management systems (conventional vs. alternative) of producing vegetables in home or small scale gardens.

- Partner with Samuel Roberts Noble Foundation to study the length of growing season and total production of selected vegetables produced in a permanent hoop house, moveable hoop house and those grown in a traditional field setting.

- Partner with Oklahoma State University to evaluate eight different vegetable/herb species for hydroponic production in Oklahoma using different nutrient formulations to provide growth information as a means to diversify crop production under controlled environments.

- Partner with The University of Tulsa to survey cucurbit fields to determine local virus settlement dynamics in cucurbits crops and to develop and deliver robust and friendly diagnostic tools which will provide epidemiological data about the distribution of viruses infecting cucurbits in Oklahoma.

- Partner with Oklahoma State University to develop recommendations for maximizing production on the main heirloom legume crops that are being grown by small producers from both disadvantaged communities and Native American nations.
• Test four strawberry varieties on plastic to see which ones perform well in Oklahoma and examine strawberry production practices that can assist Plasticulture growers. The two year program will demonstrate how to prepare the field, what to look for in a variety, how to enhance production and profitable marketing techniques.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

Oregon Department of Agriculture

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• Create awareness of the fresh fruits and vegetables available from Oregon while building a platform for Oregon fresh fruit and vegetable producers and packers to build relationships with buyers and create sales in domestic and international markets.

• Partner with High Desert Food & Farm Alliance to improve direct markets and tracking of specialty crop products using a group purchasing Community Supported Agriculture model at identified businesses and establishing procurement policies at institutions.

• Partner with Oregon Strawberry Commission to test fresh market strawberry varieties, assess public opinion on taste, and encourage Oregon growers and produce buyers to try new promising varieties with high market potential.

• Partner with Oregon State University to produce unique business opportunities for dulse products that are highly nutritious and very different from what is currently in the marketplace by demonstrating the economic potential of sustainable aquaculture operations in Oregon, both in coastal and inland rural areas, for a nutritious seaweed - dulse.

• Partner with the Pear Bureau Northwest to increase pear sales in Southern China markets by conducting the “USA Pear Road Show” where supermarket shoppers in China as well as children will increase their awareness about USA Pear attributes, including varieties, availability, ripening, nutrition, and also use the activities to generate media coverage to reach a broader audience in these markets.

• Partner with The Rogue Initiative for a Vital Economy to increase sales of vegetables and fruits grown in Jackson and Josephine Counties in Oregon by improving the capacity of specialty crop growers by holding farm production and business planning workshops; connecting them with distributors, retail stores, restaurants and institutions; and labeling these products as locally produced.

• Develop a Quality Management System for the specialty crop industries receiving inspection services to be implemented statewide to include training manuals and modules to increase efficiencies and streamline and standardize commodity inspections and industry procedures.

• Educate the Oregon specialty crop community on wholesale, retail and food service buyers; consumers; and key players in the food/agricultural industry, (2) promote the health benefits, availability, and diversity of Oregon specialty crops, and (3) enhance the competitiveness and profitability of Oregon specialty crops by connecting domestic and international food buyers with Oregon specialty crop growers/producers, packers, processors and commissions.

• Partner with Adelante Mujeres to increase producer readiness for successful farm-to-market opportunities and expand viable markets of specialty crops grown by socially disadvantaged farmers in Washington, Multnomah, and Hood River Counties by conducting pre- and post-season evaluation meetings with producers, collect sales data and buyer information from distributors and CSA’s , and share best practices, as well as, project evaluation with other organizations, specialty crop stakeholders, and through online channels.

• Partner with Agri-Business Council of Oregon to increase adolescents’ knowledge of specialty crops and attitudes toward the consumption of fruits and vegetables and career opportunities within the production of the Oregon fruit, vegetable, tree nut and horticulture industries and their supporting partners by connecting a middle-school science program with a local farm operation for an entire academic year through field trips and multiple classroom appearances.

• Partner with North Powder Charter School to create a Farm to School Program that will provide produce to at risk families and create Next Generation Farmers by teaching students learn how to grow, harvest, distribute and sell their products through local farmers markets.

• Partner with Northwest Cider Association to survey the industry to gain knowledge on what apple and pear varieties are in highest demand in Oregon and connect orchardists with cideries to encourage a stable market for future crops.

• Partner with Oregon Hop Commission to establish a seasonal labor advisory committee for Oregon specialty crops to help survey and identify other tools that may be needed by farmers to help with the seasonal labor needs assessment.
• Partner with Oregon Manufacturing Extension Partnership to increase the understanding of Oregon rural specialty crop producers on export practices including market research methods, product innovation and operational capabilities, thus increasing the numbers of companies conducting export sales.

• Partner with Oregon Raspberry & Blackberry Commission to launch an outreach campaign to hospitals, senior assisted living facilities, senior organizations and websites with brochures on health benefits of berries, recipe booklets and purchase information. Scientific presentations will be given at the Academy of Nutrition & Dietetics annual convention to reach influential dieticians in the field of diet and aging to further increase awareness of berries in senior diets.

• Partner with Oregon State University to develop an advanced training program for potential commercial beekeepers under the current Master Beekeeper Program and initiate a honey bee tech transfer team for longitudinal monitoring of honey bee colony health in Oregon.

• Partner with Oregon State University to expand the reach and effectiveness of training for beginning specialty crop operators in the Portland metro area by integrating and strengthening existing educational programming.

• Partner with Rogue Farm Corps to facilitate the transfer of knowledge from established successful sustainable specialty crop farm operators to advanced students of agriculture by delivering innovative and effective hands-on training, classroom learning, and business development support to increase the number of successful specialty crop farmers in Oregon.

• Partner with Sauvie Island Organics Salem-Keizer Education Foundation to increase student knowledge and appreciation for Oregon specialty crops through a mobile Oregon fruit and vegetable education program for students without school gardens and to increase parent knowledge and appreciation through cooking, gardening and interactive events that reinforce the lessons in the classroom.

• Partner with Sauvie Island Center to increase children knowledge of specialty crops and favorable opinion toward fruits and vegetables grown at Sauvie Island Organics and most Portland area Community Supported Agriculture farms by attending hands on training at an organic farm, planting, tasting and harvesting vegetables students will leave with a great deal of enthusiasm for the crops they encountered.

• Re-establish market access for Pierce’s Disease infected (X. fastidiosa) host plants shipped as plants for planting to the European Union by verifying that Oregon is free of X. fastidiosa through supplementing general surveillance data with a survey that meets the guidelines of ISPM No. 10 to include inspection with mandatory sampling and testing.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

Pennsylvania Department of Agriculture

| Amount Awarded: | $994,125.17 | Number of Projects: | 17 |

• Department of Agriculture project to create a targeted communication and education strategy that builds stakeholder awareness and preparation for compliance through dissemination of training and outreach materials.

• Department of Agriculture project to increase the number of specialty crop producers with GAP/GHP Certification through offering financial assistance through a cost-share program.

• Partner with Penn State University to conduct a survey of members of the tree fruit industry to determine their educational needs with respect to food safety regulations, food safety practices and methods for delivering training to workers through conducting site visits and surveys.

• Partner with the American Mushroom Institute to enhance mushroom farm production and management efficiencies through developing new and expanding existing best practices programs for food and farm worker safety as well as by providing the mushroom farming community with useable tools to help tell farm’s and industry’s story of sustainability and good environmental stewardship in marketing and other efforts.

• Partner with Strategic Contracting to host an event at the Pennsylvania Farm Show to increase consumption of specialty crops by promoting locally-grown specialty crops through cooking demonstrations, distributing information from specialty crop commodity representatives and distributing cookbook with specialty crop recipes.

• Partner with Fayette County Community Action Agency, Inc. (FCCAA) to promote and improve the access to locally grown fruits, vegetables and processed produce (specialty crops) that are designated for distribution to underserved communities, local restaurants, local farmers markets and community supported farms through the development of a mobile market program.
• Partner with the Pennsylvania Wine Association to increase emerging Millennial consumer interest and visitor conversion with PA Wines and related Agritourism content marketing through utilizing a combination of digital media performance indicators including website visits, social media engagement and media coverage reports.

• Partner with Penn State Extension, Schuylkill and Berks Counties to increase the knowledge of growers on proper selection of hops varieties and the respective integrated pest management techniques to produce quality hops in PA through conducting a research trial, developing a sample budget, developing production guidelines and providing information on hops to the general public.

• Partner with Pennsylvania Association for Sustainable Agriculture to encourage the sustainable production of non-traditional specialty crops with strong market potential in Pennsylvania, increases revenues and production for producers, and provide more specialty crop diversity to Pennsylvania consumers through training farmers to expand their existing specialty crop operations and providing producers with skills to market and sell crops directly to consumers or wholesale.

• Partner with Pennsylvania Farm Link, INC to provide 200 level workshops to address the need of ensuring farmers have access to available business, financial and technical information to help farms thrive through hosting workshops and conducting breakout sessions.

• Partner with Pennsylvania Farm Link, INC. increase farmer participation in completion of farm succession plans through conducting workshops and planning meetings.

• Partner with Penn State University to stimulate mushrooms’ own pest defensive mechanisms by elucidating the physiological basis of mushroom self-defense, evaluating anti-herbivore efficacy and determining the potential for incorporating new forms of integrated pest management program.

• Partner with Penn State University to minimize the impact of pesticides on both honey bees and the many species of wild pollinators that many fruit trees are dependent upon through analyzing pesticide residues in nectar and pollen, conducting ingestion bioassay and incorporate data into IPM recommendations.

• Partner with Pennsylvania Co-Operative Potato Growers, INC to evaluate potato germplasm for par-frying processing, evaluate cultural field practices to determine how Pennsylvania potato quality could be improved, determine the most suitable varieties for par-frying in Pennsylvania through conducting field and laboratory experiments to evaluate and select high quality processing potato varieties for par-frying.

• Partner with Rodale Institute to identify and assess the impact of cover crop residue mulch on weed management compared to tilling the cover crop and using plastic mulch through land preparation, soil sampling and recording data collected.

• Partner with Penn State University to deliver improved data and tools supporting the rapid identification and diagnosis of Phytophthora and better identification of the species through collection of clinical samples.

• 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.

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• Build capacity and promote partnerships and food safety by offering training sessions on Food Safety, Good Agricultural Practices, Good Handling Practice, Good Manufacturing Practices, and courses related to business management.

• Continue to increase the level of awareness among consumers about the merits of local specialty crops, both in local markets and internationally, and to develop and create new markets by providing additional opportunities for specialty crop producers to participate in collective local and international promotional activities to numerous specialty crop agricultural firms.

• Continue creating awareness of a common specialty crop brand that maintains and improves the competitive position of exportable specialty crop agricultural products through media advertising, trade show participation, packaging material redesign and packaging material production.

• Improve seed varieties and increase capacity by providing beginning farmers with training on specialty crop production practices and providing them with nursery space, seeds, herbicides and materials so they can develop harvesting skills.

• Partner with Plenitud Puerto Rico to assist local specialty crop farmers in the management of their operations by offering free and accessible trainings, educational resources, and educational site visits where they will learn about a variety of viable techniques for sustainable and organic farming, as well as about different crops, niche markets, pest management, marketing strategies, and other tools.
• Partner with Fundación El Ángel de Miguel Cotto to increase awareness among teachers and students about the importance of the production and preparation of healthy foods by offering trainings on nutrition and healthy lifestyles as well as food safety lessons on how to prepare healthy food and how to develop a home or school garden.

• Increase pineapple acreage among Puerto Rican producers by educating producers on the benefits and efficiencies of the improved seed variety MD2 and by distributing this improved seed variety to producers.

• Partner with Semilla LLC to help local farmers develop cocoa farms that are profitable, resistant to possible pests, and productive by providing an incentive in buying cocoa grafts and offering management consulting and individualized field consulting and workshops related to the cultivation of cocoa and the local and international cocoa market.

• Partner with Agro Tropical, Inc. to enhance the cultivation of Malanga in Puerto Rico by developing high-quality Malanga seeds that are pest-free and homogenous, which will thereby produce a constant market supply of high-quality, pest-free, and similarly sized Malanga seeds for utilization by Puerto Rican specialty crop farmers.

**Rhode Island Division of Agriculture**

| Amount Awarded: | $244,108.61 | Number of Projects: | 8 |

• Partner with the University of Rhode Island, Nutrition and Food Sciences Department to help maintain Rhode Island agricultural viability by allowing Rhode Island based Produce Safety Alliance (PSA) training for farmers to meet regulatory compliance mandates and/or buyer requirements.

• Partner with Rhode Island Public Broadcast System (PBS) to increase the awareness of specialty crops grown by local farmers and educate the public on the benefits of buying local and supporting the viability of farms by airing seven half hour episodes on PBS.

• Partner with Rhode Island Agricultural Council (RIAC) to enhance the visibility and viability of specialty crops throughout Rhode Island and New England via a multi-faceted promotion and education campaign by redesigning the RIAC website, developing pamphlets educating the public about the RIAC and its member organizations, creating a traveling display highlighting Rhode Island specialty crops, and presenting at agricultural events throughout New England and in classrooms across the state.

• Partner with Northeast Organic Farming Association of Rhode Island (NOFA/RI) to enhance the competitiveness of eligible specialty crops by training farmers to produce high-value organic crops to meet local market demand through a series of Advanced Grower Training Seminars, technical support provided by local Farm Advisors, and a series of On-Farm Workshops where organic techniques will be demonstrated.

• Partner with Farm Fresh Rhode Island to engage in a systematic approach to increasing demand of Rhode Island grown specialty crops in school cafeterias by establishing a presence on school district wellness committees, raising awareness of local specialty crops and their nutritional benefits through education programs in classrooms and after school care programs, and facilitating communication among purchasers, producers and processor/distributors.

• Partner with Farm Fresh Rhode Island to engage in a systematic approach to increasing demand of Rhode Island grown specialty crops in school cafeterias.

• Partner with the Rhode Island Beekeepers Association (RIBA) to increase the disease and mite resistance and the viability of the honeybee population in Rhode Island consequently increasing the yield and quality of Rhode Island fruit and vegetable crops assist Rhode Island beekeepers by providing to each registered Rhode Island beekeeper with a genetically superior queen for re-queening of an existing hive and support the RIBA's ongoing initiative to develop its own breeding program .

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

**South Carolina Department of Agriculture**

| Amount Awarded: | $502,281.43 | Number of Projects: | 14 |

• Partner with the South Carolina Christmas Tree Association to increase live tree sales in the state by implementing a targeted marketing campaign that will utilize digital media platforms and cable television to make the public aware of the live tree industry and its benefits to the environment and families.
• Partner with the South Carolina Peach Council to increase the consumption of peaches while providing education regarding its health benefits by developing a targeted advertising campaign that utilizes social media, print advertisements, and web-based promotions that will translate into increased peach sales.

• Partner with the South Carolina Watermelon Association to increase the consumption of watermelon while providing education regarding the many nutritional benefits of our product by promoting the South Carolina watermelon industry to retailers, wholesalers, and to the consuming public via an extensive industry spokesperson program, consumer education marketing program, and grower education program.

• Increase awareness among both South Carolinians and visiting tourists about a variety and abundance of specialty crops produced in the state by funding five months of radio advertisements wherein each month will focus on a different variety of specialty crops.

• Generate awareness for plant and flower shows, grower meetings, and other specialty crop events by advertising these events on social and digital platforms, such as Facebook and Pandora Radio, thereby enabling information about the events to reach more consumers than in efforts past.

• Partner with GrowFood Carolina to help South Carolina’s specialty crop farmers enter and expand into the wholesale market by hosting a Wholesale Success training for specialty crop producers that focuses on topics such as proper pre/post-harvest handling techniques; wholesale marketing and operations including packaging specifications; maintaining the cold chain, packing and grading; worker health, hygiene and sanitation; record keeping; and food safety plans.

• Help specialty crop growers promote and market their products in institutional settings by expanding the capacity of South Carolina specialty crop growers and distributors to supply locally grown produce to additional institutions by offering continued training and cost share support for Good Agricultural Practices (GAP) Certification and testing the feasibility of a Value-Added Freezer Pilot Program through a partnership with a distributor of local produce in Charleston County.

• Partner with the South Carolina Nursery and Landscape Association to help producers and direct influencers improve marketing of new nursery products to the final consumer by hosting an annual trade show that will include a variety of educational seminars on new ornamental plant varieties, pest and disease control practices, and environmental stewardship.

• Partner with Clemson University to increase nutritional knowledge and consumption of leafy green vegetables; to enhance good handling practices and food safety during production and preparation; and to promote South Carolina agriculture and sustainable production practices by piloting the use of an aquaponics system in two schools in South Carolina.

• Partner with Clemson University to increasing consumer education with respect to the nutritional value of kale by developing comprehensive nutritional composition data for kale varieties grown in South Carolina and selecting kale varieties that respond to moisture stress without corresponding losses in biomass, taste, and nutritional quality under greenhouse conditions.

• Partner with Clemson University to develop strategies for the prevention of bronzing and resultant postharvest losses on peach fruit by determining the occurrence and prevalence of bronzing on fruit from multiple cultivars and locations, determining associations between bronzing, thrip incidence, weather data, spray data, and heavy metal content of spray material, and reproduce bronzing symptoms under controlled conditions.

• Partner with Clemson University to improve fungicide recommendations for watermelon by sampling 25 commercial fields in 2016 and 2017 to document the frequency and severity with which diseases, such as gummy stem blight, anthracnose, powdery mildew, and downy mildew, occur in the nine major watermelon-growing counties in South Carolina.

• Partner with the Carolina Farm Stewardship Association (CFSA) to increase specialty crop producers’ productivity from high tunnel production by providing on-farm high tunnel production training to 175 specialty crop producers, providing one-on-one training to 30 National Resource Conversation Service Seasonal High Tunnel contract recipients, and by publishing the ‘SC Organic Seasonal High Tunnel Production Guide’ and the ‘High Tunnel Micro Irrigation Guide’ on the CFSA website.

• 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.

South Dakota Department of Agriculture

| Amount Awarded: | $285,890.82 | Number of Projects: | 10 |

• Partner with South Dakota State University to develop a comprehensive GAP training program through training with a GAP consultant, SDSU personnel in Food Safety Modernization Act rules, and producing post-harvest training videos.

• Increase the awareness of South Dakota wines among consumers by hosting a Wine Pavilion at the South Dakota State Fair
Partner with South Dakota Specialty Producers Association to advance the production, processing, promotion and marketing of specialty crops in South Dakota by connecting producers, customers and potential agri-tourism markets through Local Foods Initiatives, Institutional Promotion, and Food Safety.

Partner with South Dakota Specialty Producers Association to promote the competitiveness of specialty crops by bringing together producers, resource providers, farmers markets, food hub supporters, consumers and retailers through a two-day conference to expand their dialogue about local foods in South Dakota.

Partner with South Dakota State University to increase consumer awareness of maple syrup as a healthy alternative to processed sweeteners, increase demand and foster local production through workshops, conducting consumer and retail surveys, and presentations to Conservation Districts.

State project to support specialty crop producers and the competitiveness of specialty crops at farmers markets through providing stipends to specialty crop growers at South Dakota farmers markets.

Partner with Rilling Produce to provide more efficient water usage, more uniform water application, increase yields and profitability for vegetables produced in the Missouri River valley through the installation of subsurface drip irrigation.

Partner with South Dakota State University to develop products for consumers, retail markets and institutions through establishing initial benchmark levels of anthocyanin for fresh aronia berries produced in South Dakota.

State project to create a South Dakota Pollinator Protection Plan to improve the health and habitat of both small and commercial scale hives through identifying threats to pollinator health, best management practices for industry and effective use of regulatory programs.

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.

Tennessee Department of Agriculture

| Amount Awarded: | $511,308.46 | Number of Projects: | 15 |

Partner with Thunder Road Wine Trail to build awareness and enhance the image of the Thunder Road Wine Trail through a marketing and public relations campaign.

Partner with the Winery at Seven Springs Farm to increase the amount of Tennessee specialty crops purchased by Tennessee wineries by developing a palletized, pressurized vessel and sparkling wine capability that can be a shared resource among partner wineries on the Thunder Road Wine Trail.

Partner with Middle Tennessee Nursery Association (MTNA) to conduct an MTNA field day to share ideas, research from universities, USDA and various horticultural suppliers.

State project to promote specialty crops to consumers and training of farmers and food industry professionals on marketing efforts through an advertising and media campaign.

Partner with the Tennessee Nursery and Landscape Association to increase the awareness of the benefit of nursery plants to the environment and for the community through conducting trade shows and exhibitions.

Partner with the University of Tennessee Extension Service to provide training sessions for University of Tennessee and Tennessee State University personnel and other interested parties concerning how to teach producers to obtain GAP certification in a cost effective manner through conducting four all-day sessions.

Partner with Portland High School to provide students and families with specialty crops for their pantries by involving students in the process to grow year-round specialty crops.

Partner with Ross United Methodist Church to promote healthy lifestyles and specialty crop education through the planting of community garden.

Partner with the Tennessee Fruit and Vegetable Association to provide stakeholders with a central point of communication for marketing and information though performing outreach, bolstering membership and centralizing concerns.

Partner with the Pick Tennessee Conference to enhance the specialty crop operation for 400 farmers through assisting with participation in seminars, in-depth trainings and education opportunities at an annual conference.

Partner with the University of Tennessee to investigate the potential production of C. mas as a specialty fruit crop in Tennessee through the investigation of eight cultivars.

Partner with Landmark Training Development Company to enhance the economic viability of Tennessee’s cherry tomato growers with an emphasis on production, product quality and sustainability through a research study which proposes to extend the growing season.
• Increase the knowledge of pumpkin producers in disease management, pest management, marketing, and increase pumpkin sales through conducting bus tours of pumpkin farms and educational workshops.

• Partner with the University of Tennessee to identify what viruses are of greatest concern to Tennessee grape growers, what varieties are the priorities for new plantings and what sources of vines test virus-free through identification of what viruses are associated with and impacting vineyards throughout Tennessee.

• Partner with Red River Farms to increase apple tree yields through utilizing “High Density Production” which increases the number of trees grown per acreage.

**Texas Department of Agriculture**

| Amount Awarded:     | $1,807,330.89 | Number of Projects: | 16 |

• Partner with Turfgrass Producers of Texas to promote St Augustine grass’ drought, pest, and disease resistance to the public and landscapers through digital and print media, direct mailings, in-store promotions, trade shows and professional meetings.

• Partner with the Texas Pecan Growers Association to create new markets for Texas pecans by showcasing the Texas pecan industry and availability of high-quality products at the Produce Marketing Association’s Fresh Summit 2016 event, which is considered to be the leading trade show in the U.S. spotlighting fresh produce.

• Partner with the Texas Vegetable Association to build on momentum generated by the success of previous media campaigns and increase brand awareness and health education of Texas vegetables by utilizing proven tactics such as live chef appearances, television commercials, digital ads, and in-store demonstrations to target women aged 25-54 and by implementing a new social media strategy to generate buzz about healthy Texas vegetables.

• Partner with the Texas Watermelon Association to increase sales of Texas watermelons within New York City by communicating the nutrition benefits and quality of Texas watermelons through geo-targeting online advertising (including standard and rich media, retargeting, behavioral targeting and keyword targeting), highly-visible out-of-home placement, and in-store demonstrations/point-of-sale promotions in May and June when the most Texas watermelons are available in stores.

• Partner with Texas Wine and Grape Growers Association to increase grape production in Texas by providing three regional educational and outreach workshops dedicated to all aspects of vineyard soil management that will attract new producers and expand the capacity of experienced producers.

• Increase Texans’ awareness and preference for locally grown specialty crops, enhance marketing efforts for specialty crops and enhance producers’ level of preparedness to sell products to local educational institutions by introducing Texas students to locally grown specialty crops, encouraging them to incorporate healthy food items into a balanced diet, and by providing training to Texas specialty crop producers interested in selling products to local schools.

• Increase the competitiveness of the Texas olive and horticulture industries by working to educate growers and promote olive tree farming in Texas so that Texas growers will be more competitive in the growing domestic olive industry and by working with Texas retirement communities to establish green spaces, which will be used to educate consumers on landscape techniques such as plant selection, pruning, watering, fertilization and pest control.

• Partner with Texas Hill Country Wineries Association to improve Texas grape production by evaluating new, classically-bred Pierce Disease (PD) grape varieties for disease tolerance and fruit quality at two diverse locations that have high risk of PD and by conducting grape rootstock evaluations since rootstocks have shown that they have the capability of mitigating the effects of PD.

• Partner with Uvalde County Underground Water Conservation District to increase knowledge of leafy green water conservation techniques among current and future Texas farmers by evaluating water use efficiency and growth of lettuce in hydroponic culture systems; screening and selecting lettuce varieties, with emphasis or Romaine and Bibb types for resistance to tip-burn and adaptability to hot environments; comparing production cycles, yield, quality, and water productivity of leafy greens grown in hydroponics, pivot and drip irrigation following conventional and organic practices; determining preferential quality and consumer preferences for leafy greens and labeling effects; and conducting educational science-based programs in hydroponic technologies, water conservation, crop variety adaptation and marketing of leafy greens.

• Partner with HEB to increase the supply and availability of nutritious, great-tasting Texas grown tomatoes to retail marketers and consumers by evaluating drought tolerance and water use efficiency of tomato lines from the Texas Tomato Breeding Program; determining how drought stress impacts nutritional quality, taste and susceptibility to insect pests and diseases; providing Texas vegetable growers – including large commercial growers, truck farmers and home gardeners – with test results; and increasing public awareness of the flavor and nutritional benefits of locally grown Texas tomatoes.
• Partner with J & D Produce to increase the amount of locally grown tomatoes consumed by Texans through identifying positive genotype x environment interactions (including grower-specific nutrition and cultural practices), expediting seed production of the best hybrids, and coordinating directly with growers in cultivar improvement and selection for multiple, unique production environments.

• Partner with Black Gold Farms to safeguard the Texas potato industry through the development of a comprehensive Zebra Chip (ZC) disease management program that will screen advanced potato lines, from both public and private breeding programs, for resistance to ZC; screen a collection of geographically diverse psyllid populations for resistance to neonicotinoid insecticides; and conduct surveys, in and around Texas potato fields, for potential biological control agents of the potato psyllid.

• Partner with the Texas Pecan Growers Association to reduce pecan losses as a result of cotton root rot by maintaining and evaluating a high-density disease screening field nursery established in 2012 at high risk of cotton root rot to compare diverse pecan germplasm for Phymatotrichum omnivorum survival and by informing growers of early disease ratings among entries.

• Partner with the Texas Citrus Pest and Disease Management Corporation to decrease the spread of citrus greening disease or Huanglongbing (HLB) by hiring an area wide consultant who will act as an industry source of sustainable early detection using intensified (complete grove) surveys of infected groves and other as-yet un-surveyed groves within proximity to these new finds.

• Partner with GreenTech Agro LLC to use new technologies in indoor farming (Growtainers) to help improve and increase artichoke growing by optimizing germination and early growth conditions in Growtainers so that the time from sowing to planting out is reduced; by optimizing vernalization conditions so that vigorous plants can be sowed out after the last frosts; and by starting and/or growing artichokes in indoor farms during the off season when prices for artichokes are higher.

• 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.

U.S. Virgin Islands Department of Agriculture

| Amount Awarded: | $207,559.77 | Number of Projects: | 6 |

• Enhance farmers’ ability to better meet the market demands for locally grown fruits and increase their capacity and income capabilities by establishing six fruit orchards and offering technical assistance through monthly one-on-one visits and annual workshops addressing plot management, soil testing, best practices, packaging, and marketing.

• Increase specialty crop production in underserved communities and enhance child and adult nutrition knowledge and consumption of these crops through the establishment of community gardens, which will then host tours and workshops to educate community members on harvesting techniques and the benefits of specialty crops.

• Partner with the University of the Virgin Islands to assist growers in reducing their economic losses from downy mildew through researching the use of varieties that have been determined to be downy mildew resistant under local conditions.

• Partner with the University of the Virgin Islands to enhance on-farm marketable sweet potato production in the Virgin Islands through the evaluation of pre-emergent herbicide for weed control during the early establishment of sweet potato plants and the evaluation of the use of improved technology on sweet potato harvesting and marketability.

• Support pitaya growth by evaluating four low-cost trellis systems on production of six select varieties, evaluating the use of burlap and palm fronds on the trellis post to support aerial root growth, and providing local farmers hands-on experience growing this new fruit in the Virgin Islands.

• 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.

Utah Department of Agriculture and Food

| Amount Awarded: | $315,035.21 | Number of Projects: | 18 |

• Partner with the Thanksgiving Point Institute to increase youth nutrition through a local 4-H program that will teach children to plant, maintain, and harvest specialty crops as well as host community workshops using a newly developed specialty crop curriculum.
Partner with Utah State University to increase the sale of drought tolerant, vital in light of Utah being the second driest state in the nation, through a marketing program as well as a study, to be made available to the landscape industry, about best practices to increase interest and awareness amongst consumers in low water usage landscape products.

Partner with the International Rescue Committee to increase the sale and consumption of specialty ethnic crops by identifying 10 potentially profitably ethnic vegetables, identify seed sources, conduct production and sustainability research, and establish best practices on post-harvest and handling, as well as offer consumer education to increase demand for these products.

Partner with the Great Salt Lake Resource Conservation and Development Council to increase the consumption of locally grown Utah specialty crops helping local farmers understand ways to advertise and distribute their marketing and increase the knowledge of locally available crops by hosting open houses and farm tours, establishing pilot cooperative distribution programs and create a website to connect farmers and potential buyers of specialty crops.

Partner with the Phoenix Tears Nursery to increase the sale of microgreens by studying sunflower microgreen propagation, harvesting and nutritional content, documenting how best to grow, harvest, and store them, getting this information out those who might be interested in commercializing this crop.

Partner with the Youth Garden Project to cultivate healthy children, families and communities through education programs in order to connect people with healthy food from seed to table by teaching classes about fruits and vegetables to Kindergarten through Twelfth grade as well as taking students on field trips to specialty crop growers, supplementing students science lessons with learning about fruit and vegetable nutrition.

Partner with the Green Urban Lunch Box to reduce food wasting, provide training and education on urban specialty crop agriculture techniques and provide access to specialty crops amongst Utah’s most vulnerable populations by using abandoned urban land as a venue to train groups on how to grow organic vegetables and care for fruit trees.

Partner with Utah State University to develop a program and materials to work with 4-H clubs around the state to teach Utah students about the importance of specialty crops and teaching about healthy lifestyles to address the rampant issue of childhood obesity.

Partner with the City of South Salt Lake to implement a program to increase child and adult nutrition knowledge and consumption of fruits and vegetables and to assist residents and producers in improving the efficiency of the supply chain of specialty crops in the South Salt Lake community.

Partner with Wasatch Community Gardens to encourage youths from primarily low-income families to consume more specialty crops by teaching them hands-on gardening, nutrition, and food preparations skills through weekly, garden based classes.

Partner with Utah State University to use better vegetable growing strategies and reduce a reliance on pesticides by creating a comprehensive, Utah-specific Vegetable Production and Management Guide that includes chapters on vegetable production methods, soil and water management, integrated pest management and chapters on specific crops such as onions, peppers, melons and squash/pumpkins.

Partner with Utah State University to combat the Tobacco mosaic virus (TMV), which has become an increasing problem for vegetable and ornamental crops, especially for organic growers, through testing updated disease management strategies; this information will then be disseminated to growers through marketing material and trainings.

Partner with Utah State University to increase the production of peppers and tomatoes by developing new, appropriate cropping systems to allow these crops to improve market opportunities by training growers on row covers and low tunnels in order to increase production per unit areas, lower productions costs and offer vegetable growers new approaches to meet local demand for seasonally produced vegetables.

Partner with Utah State University to document the benefits and reduced nitrogen needs of using legumes as a cover crop for peach growers, studying which fertilizer strategies and which legumes will increase soil fertility, tree grown, yield, and nutrition of mature peach trees.

Partner with the Davis Conservation District to meet the challenge watermelon growers in the state are facing due to disease and decreased water availability by studying grafting watermelons onto the heartier rootstock squash, which should also extend the growing season, and disseminate these findings out to those growers who might best make use of it.

Increase the efficiency and yield of Utah specialty crop producers by providing training and guidance on how to make use of aquaponic growing methods, which have the potential to extend producers growing season as well as grow more high value crops.

Partner with Utah State University to create pest management strategies to combat the spread of codling moths which effect apple and pear producers in Utah by testing whether developed codling moth strategies are effective in the Utah environment and disseminate findings to those producers currently or potentially looking to grow these fruits.
• Partner with Utah State University to prevent the spread of Fire blight amongst Utah apple and pear populations by testing new and innovative strategies and biological control agents for their efficacy within Utah’s unique environment and how these tactics effect the taste, look, and biology of the fruit.

Vermont Agency of Agriculture

| Amount Awarded: | $276,090.06 | Number of Projects: | 9 |

• Partner with the University of Vermont State and Agricultural College to provide Food Safety Modernization Act Readiness Produce Safety Workshops that will increase the number of specialty crop farmers using best post-harvest handling practices and cleanable, energy-efficient buildings and equipment and also provide new knowledge to farmers and service providers about using an integrated approach to planning for post-harvest produce quality.

• Develop a state-level Food Safety Modernization Act-compliant produce safety program that offers market opportunity for all Vermont produce growers, provides regulatory oversight to the 200 +/- covered operations, and preserves consumer confidence in Vermont’s food products.

• Partner with Vermont Tree Fruit Growers Association to promote Vermont apples, ciders and wines, through state information centers to maximize visitor awareness of farm-based organizations and member business products and facilities, with the goal of optimizing product awareness and subsequent sales.

• Partner with The University of Vermont Proctor Maple Research Center to increase the number of products which use real maple as an ingredient, and thus ultimately increase the size of the market and sales of pure maple products by increasing the awareness of pure maple by both consumers and food manufacturers.

• NA

• Partner with the University of Vermont State and Agricultural College to investigate the efficacy of popular biofungicides and biostimulants in hops and cucurbits as a potential new tool for mitigating mildew diseases in a relatively environmentally and consumer-friendly way and sharing the innovative pest management strategies by hosting outreach programs and opportunities for Northeast farmers to learn about relevant IPM strategies.

• Partner with Northeast Organic Farming Association of Vermont to increase the viability of schools as a consistent market for Vermont specialty crops by building relationships between school food services and farmers to foster an environment for teachers and students to increase their knowledge about the fruits and vegetables in which they consume.

• Partner with Intervale Center to complete feasibility studies for two potential aggregated product lines, a packaged organic mesclun greens product, and a packaged frozen organic berry product (mixed, strawberries, blueberries, and/or raspberries) – for sale through larger wholesale and institutional markets, and pilot a new mixed greens product through the Intervale Food Hub to test its viability.

• Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

Virginia Department of Agriculture and Consumer Services

| Amount Awarded: | $503,828.92 | Number of Projects: | 16 |

• Partner with Appalachian Sustainable Development to ensure that farmers in Virginia can continue to sell to quality wholesale and retail markets by assisting them in obtaining the Good Agricultural Practices certification needed to access those markets.

• Partner with Appalachian Sustainable Development to demonstrate the viability of using value added products to increase farmer profitability in southwest Virginia by increasing demand for value added products among retailers, wholesalers and end customers and by identifying the most efficient and cost effective means of processing seconds for small and medium scale farmers in southwest Virginia.

• Partner with Virginia Wineries Association Cooperative Vine to Wine Co-Op to reduce overall grape and wine production costs and enhance the competitiveness of the Virginia wine industry by providing two cooperative endeavors - group purchasing and service provisions.

• Partner with Old Dominion University Research Foundation to improve Virginia specialty crop, small-farmer competitiveness by creating sustainable farm populations of native mason bees and monitoring pollination in greenhouses.
Partner with Eastern Shore Resource Conservation and Development Council to enhance the competitiveness and profitability of specialty crops by meeting the growing demand by farmers for educational programs directed towards sustainably grown specialty crops.

Partner with Institute for Advanced Learning and Research to facilitate the study of tree training and pruning methodology and fruit bagging technology in Virginia Asian pear orchards to improve Asian pear yield and quality, and to develop a standard Asian pear training and pruning and bagging system for Virginia farmers, and strengthen Virginia Asian pear market.

Partner with Virginia Polytechnic Institute and State University to increase grower knowledge on two new blackberry cultivars, make recommendations on performance of these two cultivars, and provide data supported recommendations for foliar nutrient applications.

Partner with Virginia Polytechnic Institute and State University to demonstrate the benefits of high-density apple systems to growers in southwest Virginia.

Partner with Virginia Polytechnic Institute and State University to provide a scientific-basis for minimizing foodborne pathogen contamination of cucurbits during growing and postharvest packing, and disseminating this information to Virginia cucurbit growers/packers.

Partner with Virginia State University to test different fertilizer application rates on hops, identify potential pest and diseases in hops, and disseminate information through field days, online bulletins, and a referenced manuscript.

Partner with Virginia Polytechnic Institute and State University to perform a series of both field and greenhouse experiments to assess the risk of (i) Listeria monocytogenes (human foodborne pathogen) contamination, (ii) basil downy mildew and septoria leaf spot (plant pathogens) infection, and (iii) the combined effect of such plant pathogen infections on foodborne pathogen contamination in fresh market herbs.

Partner with Virginia Polytechnic Institute and State University to determine the potential for vapor and spray drift injury to specialty crops, along with a documentation of the injury symptoms, and develop an Extension publication for vegetable, fruit, and nursery crop producers that can be shared with neighboring producers of agronomic crops on how to minimize the potential for millions of dollars in damages to specialty crops resulting from use of this new technology.

Partner with Virginia Polytechnic Institute and State University to: 1) identify species of Colletotrichum isolated from grape, apple and strawberry, 2) screen for efficacy of fungicides among these species, 3) determine the effect of high relative humidity to the infection process, and 4) determine cultivar susceptibility.

Partner with Virginia State University to research production of coriander in Virginia to meet the food demands of immigrants from South Asia and Central/South America.

Partner with Virginia Polytechnic Institute and State University to examine three cold hardy cultivars for their cropping potential under Northern Virginia conditions, the effect of two pesticide regimes, and the effect of high tunnel winds.

Perform pre-award and post-award activities to administer Specialty Crop Grant Program funding and ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations.

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**Washington State Department of Agriculture**

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<td>24</td>
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- State project to assist Washington State fruit and vegetable producers with meeting new mandatory FDA Produce Safety rules and obtain voluntary USDA GAP certification through providing outreach and education.
- Partner with Washington Hop Commission to determine common elements, and develop a baseline “Best Practices” program for hop producers which includes the most important, commonly accepted practices that are required by most or all of the existing certification programs through evaluation of existing sustainability/quality control/GAP programs.
- Partner with LINC Foods to ensure specialty crop producers located within a 100-mile radius of Spokane obtain GAP certification through training, technical assistance and assistance with audit fees.
- Partner with Washington State Tree Fruit Association to help tree fruit producers and packers in Washington State to learn about the requirements and implementation procedures of the Food Safety Modernization Act (FSMA) through education, training and materials.
- Partner with Pear Bureau Northwest to promote and introduce USA Pears in China through a marketing campaign that will educate consumers about varieties, origin and recipes of USA pears.
• Partner with Washington State University to increase market opportunities for processed whole berries in baked goods and snack products through developing high-quality dehydrofrozen red raspberries with structural integrity.

• Partner with Washington State Potato Commission to build upon a recent trade mission to Southeast Asia by assisting with follow-up efforts to cultivate the interest developed amongst consumers to purchase Washington State potatoes.

• Partner with Sustainable Connections to connect local specialty crop producers with wholesale buyers through one-on-one technical assistance, facilitate farmer/chef mentorships, Forward Contract development support, hosting the annual Northwest Washington Farm-to-Table Trade Meeting and being a regional resource for sourcing referrals.

• Partner with Washington State University to enable performance of comprehensive market evaluation to develop information that will support the sale of sliced pears in the market through enabling predictable ripening of sliced 1-MCP treated pears thereby addressing the urgent issues of inconsistency, convenience and consumption all at once.

• Partner with Washington State University to deploy science-based strategies to empower nurseries to maintain clean planting stock in certified mother blocks for growers to plant healthy vineyards through outreach and education activities to showcase advantages of using clean plants and implementing rouging for healthy vineyards.

• Partner with Washington State University to provide growers with management recommendations that will reduce the impact of needle cast diseases on the production and quality of noble fir bough material from high and low elevation production sites through identifying the specific pathogens causing needle cast diseases impacting noble fir bough and Christmas tree production and quality.

• Partner with Washington State University to provide apple producers with information on horticultural management issues through utilizing two or three axis training systems and analyzing the horticultural and economic aspects of orchard establishment of Cosmic Crisp using a top grafting approach.

• Partner with Tilth Producers of Washington to educate small-scale specialty crop growers on organic and/or sustainable practices to have direct impact on the success of their operation through specialty crop farm walks, workshops and farm tours.

• Partner with Sno Valley Tilth to build on the success of a pilot project designed to increase the number of new specialty crop farmers by expanding the number of landowners and new farmers participating in the Experience Farming Project (EFP) through providing tools, resources and mentorship.

• Partner with USDA Agricultural Research Service to develop a “risk-index” for weedy hosts of potato psyllid, the vector of the pathogen that causes zebra chip disease in potato through research and analysis of five specific plant traits.

• Partner with Washington State University to evaluate commercial AMF products in onion and carrot crops in the Columbia Basin through greenhouse and grower-cooperator field trials, to assess equipment compatibility and potential benefits of AMF products on onion and carrot growth, P use efficiency, and soilborne disease management.

• Partner with Washington State University to measure the impact of netting in both commercial and research orchard environments through evaluating photosensitive anti-hail nets as an alternative to irrigated overhead cooling to reduce sunburn in tree fruit orchards and reduce orchard water use.

• Partner with Washington State Fruit Commission to increase demand and crop value for sweet cherries through conducting research into the effects of sweet cherry consumption on gut health and the impact on obesity-related disorders using an in vivo murine model.

• Partner with Washington Red Raspberry Commission to determine the extent of fungicide resistance in several key berry pathogens across multiple counties in Washington and identify new disease control tools including biofungicides and conventional synthetic fungicides through an integrated research project.

• Partner with Washington State University to address the industry’s need for improved integrated pest management techniques for soilborne pest and disease management through two experiments which will compare conventional and alternative pre-plant soil fumigation techniques and evaluation of management techniques of cover crops.

• Partner with Washington State University to initiate control strategies for potato powdery scab disease through development of a diagnostic method to survey powdery scab infestation on farms and improving grower education about powdery scab disease.

• Partner with Washington State University to contribute to a programmatic effort to increase plant water use efficiency (quantity of high quality grapes per unit of water applied) while overcoming a number of problems associated with surface irrigation through a technique employing the use of PVC delivery tubes placed vertically below the soil surface.

• State project to expand training and offer new, innovating training to farmworkers and farm supervisors through expansion of the Hands-on Handler Training and Sprayer Application Equipment Best Management Practices training courses of the WSDA Farmworker Pesticide Education Program.
• Partner with US Hop Industry Plant Protection Committee to provide compounds to Washington hop growers crop protection tools to address serious plant protection issues to provide higher quality crops and avoid rejection from EU officials for residue violations through conducting residue trials on two key crop protection compounds.

West Virginia Department of Agriculture

| Amount Awarded: | $259,067.67 | Number of Projects: | 12 |

• Partner with The Richwood Pantry to increase knowledge and awareness of the specialty crop industry through educational workshops and field trips to local farms and community gardens and to increase the amount of specialty crops grown by the successful opening and operation of the weekend Farmers Market during the months of July, August, September and October of 2016, and continuing annually.

• Partner with West Virginia State University Research and Development Corporation to increase specialty crop production and access to specialty crops in the state by youth, by determining which varieties of kohlrabi, sweet potatoes, colored potatoes, colored carrots, radishes, orange and purple cauliflower, patti-pan squash, pumpkins, cucumber, and heirloom tomatoes are easiest to grow in West Virginia and determining which varieties of the above vegetables are most liked by youth, and therefore easiest to market to youth in WV.

• Partner with Linwood Alive Inc. to increase knowledge and awareness of specialty crops by constructing a specialty crop high tunnel and use it as an educational model designed to establish and promote a culture of independent and community supported local specialty crop food growth.

• Partner with Rock Branch Elementary to increase knowledge and awareness of specialty crops at Rock Branch Elementary through hands-on learning of growing and harvesting fruits and vegetables.

• Partner with Unlimited Future, Inc. to enhance the extended-season production of beginning farmers with a specific focus on a microgreen enterprise by establishing a sustainable training and development program to increase the success of beginning farmers in the Tri-State region (WV, KY, and OH).

• Partner with West Virginia University Research Corporation to increase the long-term financial success of 40 diversified specialty crop and value-added producers in WV by providing them with the tools and know-how to optimally manage their farm operations.

• Increase knowledge of Good Handling Practices/Good Agricultural Practices and food safety for specialty crop growers by providing training designed to provide problem solving and documentation skills that extend beyond compliance and exposing specialty crop growers to multiple presenters with expertise and alternatives designed to allow specialty crop growers and opportunities to customize programs that are both obtainable and verifiable.

• Expand and successfully manage risk in maple operations by providing West Virginia and neighboring states tree syrup producers access to current information, best practices, and increased income opportunities associated with the production, manufacturing and distribution of tree syrup products and establishing a comprehensive Maple Camp.

• Partner with New Appalachian Farm and Research Center to investigate the use of flash-freezing as a way to expand the economic viability of marketing local produce by testing various products and package sizes for flash-frozen specialty crops for use in schools, other institutions, and restaurants, as well as market opportunities at regional food hubs, coops, farmer markets and grocery stores.

• Provide scientifically based research to explore baseline impacts, promote specialty crop centered events and provide insight into future crop expansion and production to increase these impacts by isolating the impact of the specialty crop themed events (the established West Virginia Strawberry Festival and newly created West Virginia Peach Festival) and determining how this may increase and contribute to specialty crop production and if these events can provide an impetus to increased production, economic impact, and assist in generating commodity synergy.

• Partner with Central Appalachian Empowerment Zone to reintroduce the Golden Delicious Apple Tree to its county of origin by utilizing reclaimed Post Mined Land that has been donated by Natural Resources Partners in Clay County.

• 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.

Wisconsin Department of Agriculture, Trade and Consumer Protection

| Amount Awarded: | $1,305,944.30 | Number of Projects: | 19 |
Partner with the University of Wisconsin to provide Wisconsin fruit and vegetable growers with the food safety training necessary to comply with the Food Safety Modernization Act through support for five educators to conduct food safety workshops directly to farmers throughout the state.

Partner with the Ginseng Board of Wisconsin to increase exports of ginseng and enhance profitability and expansion of Wisconsin ginseng through monitoring Maximum Residue Limits (MRLs) among international ginseng markets and advancing field management strategies to produce a superior product for export to key markets in Asia.

Partner with Wisconsin Grape Growers Association to increase knowledge and visibility of Wisconsin wines, meads and hops through the development of a comprehensive Fermented Beverage Program of outreach, research and education.

Partner with the University of Wisconsin to support the growth of the Wisconsin hops industry through evaluation of hop varieties, standardize and gain adoption of an economically sustainable system for production of pathogen-free planting stock, development of a disease assessment and evaluation of the disease status of existing hop yard plantings.

Partner with Wisconsin Hop Exchange Cooperative to identify brewer needs to provide training and education to hops producers to increase crop marketability through brewer dialogues.

Partner with Glacial Ridge Hop and Grain to improve the safety and efficiency of hops harvesting through creating and delivering instructional resources for the small-to-medium sized hops farmer to build their own hops harvesting equipment.

Partner with Wisconsin Apple Growers Association to promote native bee diversity in pollinating apples for enhanced productivity through comparing apple fruit set and native bee visitation to apples when understory floral resources are present or absent and investigating whether these patterns are influenced by the surrounding landscape.

Partner with the University of Wisconsin to survey native nematode populations and isolate the more promising species for mass propagation and deployment against cranberry pests through establishing laboratory cultures and testing for virulence against flea beetles and cranberry fruitworms.

Partner with Wisconsin Potato Industry Board to develop and gain adoption of current weather-based web tools for insect and disease management as well as expand the offering of crop tools through the addition of the insolation, evapotranspiration, and irrigation scheduling models.
Amount Awarded: $311,166.48  Number of Projects: 14

- Partner with Cheyenne Honey LLC to help enhance the Wyoming honey-packing industry and give Wyoming honey producers an alternative to selling their honey to out-of-state packers by testing the practicality of storing and packing 10 to 20 thousand pounds annually of liquid raw Wyoming honey without warming the honey above 95 degrees Fahrenheit.

- Partner with the University of Wyoming to increase the knowledge of specialty crop stakeholders and value-added entrepreneurs by developing a comprehensive how-to guide that will help both specialty crop groups navigate the startup phase and by hosting two two-day workshops to further educate these stakeholders.

- Partner with Central Wyoming College to increase knowledge and awareness of Wyoming apples by preserving unique apple varieties that currently exist in an orchard, restoring the orchard by planting new apple trees and other fruit tree varieties, and using the orchard as a demonstration site for apple producers, college students and the community to provide educational opportunities.

- Partner with Elk Mountain Herbs to educate herb growers on the most scientifically valid and most cost-effective methods for authenticating their crops to buyers in the supply chain by providing the technical training and materials necessary to increase the knowledge base of the herb growers in Wyoming and introducing them to authentication practices and increased marketing opportunities for high-quality herbs in the supplement supply chain.

- Partner with Wyoming Department of Education to increase individuals’ knowledge on specialty crop production through the support of such projects as community gardens and hoop houses by providing six small grants to child and adult daycare facilities and K-12 schools.

- Partner with Casper Community Greenhouse Project to assist specialty crop producers in building sustainable businesses and making informed business decisions when dealing with customers by developing the Resources & Regulatory Guide for Wyoming’s Specialty Crop Farmers; publishing it and making it available in print, electronic and web form; and hosting one webinar and one workshop to present and promote the guide.

- Partner with Fremont Local Foods to increase knowledge of horticulture through public education and collaboration opportunities among consumers, growers, legislators and retailers and also through a two-day intensive horticulture training curriculum covering soils, plants, growing techniques, greenhouse operations, and more.

- Increase the availability of specialty crops within Wyoming by hosting a specialty crop forum to review specialty crop activities, discuss future endeavors, and present sessions that will focus on production, innovation, latest marketing trends, and new technology for specialty crop production.

- Partner with the University of Wyoming to evaluate goji berry (Lycium barbarum) as a potential high-value crop for Wyoming and evaluate its potential for organic production by studying the days required for flowering and fruiting; studying its vegetative propagation for rapid production of planting material; and comparing growth and reproductive parameters of plants obtained through vegetative propagation and seed-derived plants to determine potential difference in juvenile period and yield.

- Partner with the University of Wyoming to educate specialty crop producers and agricultural educators about the benefits of on-farm bio-fertilizer production by evaluating the efficacy of a cyanobacterial bio-fertilizer production system developed at Colorado State University as compared to existing off-farm nitrogen inputs for use in organic specialty crop production in Zone Four Wyoming farms and by disseminating results through field days, conferences, and publications.

- Partner with SandHill Ranch to demonstrate the viability of hybrid hazelnuts for the challenging and high-altitude areas predominant throughout Wyoming by establishing a trial hazelnut orchard and creating detailed records to determine viability.

- Partner with Action Resources International to substantially increase the local production of and capacity for specialty crops in Albany County and to increase food access by creating a large-site specialty crop production garden, which will greatly increase the amount of fresh fruits and vegetables available to food insecure individuals and families.

- Partner with the Town of Saratoga to increase awareness of hugelkultur permaculture as an alternative method of growing crops, compare traditional specialty crop production methods with the hugelkultur method, and provide a diverse pollinator habitat for local pollinators by educating students, citizens and visitors to the North Platte River Valley on the use of hugelkultur practices for specialty crop production and pollinator habitat.

- 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.