USDA Agricultural Marketing Service
U.S. DEPARTMENT OF AGRICULTURE

Transportation and Marketing
Specialty Crop Block Grant Program

Fiscal Year 2023 Description of Funded Projects – Farm Bill

Number of Grants Awarded: 55
Number of Sub-award Projects: 589
Amount of Funds Awarded: $72,900,350.00
For more information, please visit the program's website: https://www.ams.usda.gov/scbpg
NOTE: The project descriptions below were provided by the grant recipients. (File updated September 7, 2023)

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Alabama Department of Agriculture and Industries	$496,334.85	1. Alabama Fruit and Vegetable Growers Association - Expanding Specialty Crops through Innovative Cut-Flower Production Education and Industry Connect	The Alabama Fruit and Vegetable Growers Association will plan and execute two cut-flower production meeting and workshop for farmers who are already growing this specialty crop, those looking to diversify, and beginning farmers.	$20,000.00
Alabama Department of Agriculture and Industries	$496,334.85	2. Assessing and Mitigating Amitraz-Resistant Varroa Mites in Alabama	Auburn University will complete the following research. The varroa mite (Varroa destructor) is the single greatest driver of honeybee (Apis mellifera) colony losses in the United States, including Alabama.	$39,986.00
Alabama Department of Agriculture and Industries	$496,334.85	3. Cultivar Selection for Vegetable Crops in Alabama: Helping Growers to Maximize Production	Auburn University and Alabama Cooperative Extension System (ACES) will partner to create a variety trial program for vegetable crops in Alabama. Our objective is to conduct variety trials for vegetable crops in several locations in the state, which will generate information to assist growers with decision-making on variety selection.	$39,999.32

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Alabama Department of Agriculture and Industries	$496,334.85	4. Drone-Based Automated Pests and Diseases Scouting in Specialty Crops.	Auburn University and the Alabama Department of Agriculture and Industries will partner to develop strategies to automate diseases and pests scouting for container nursery and vegetable production. The project will decrease crop loss and improve plant growth, yield, and farm profitability through the evaluation and demonstration of novel drone imaging for early automated field scouting.	$40,000.00
Alabama Department of Agriculture and Industries	$496,334.85	5. Evaluation of Watermelon Varieties in Alabama	Auburn University and Alabama Cooperative Extension Systems will partner with the Alabama Department of Agriculture and Industries to help prevent and mitigate Root-knot Nematode damage in Watermelon by evaluating several watermelon varieties in South Central Alabama using a novel approach for root-knot identification.	$40,000.00
Alabama Department of Agriculture and Industries	$496,334.85	6. Evaluating the Threat of Southern Bacterial Wilt Disease in Alabama Agricultural Production	The University of South Alabama will evaluate the status of bacterial wilt disease in the state of Alabama, the genetic diversity of R. solanacearum in Alabama tomato farming regions, and evaluate the performance of widely cultivated tomato cultivars against the isolated R. solanacearum strains.	$39,995.00
Alabama Department of Agriculture and Industries	$496,334.85	7. Expanding Education and Markets for Alabama Christmas Tree Growers	The Southern Christmas Tree Grower Association will partner with the Alabama Department of Agriculture and Industries to support a regional annual meeting held in Alabama 2024.	$15,000.00

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Alabama Department of Agriculture and Industries	$496,334.85	8. Expanding the Fan Base of Alabama Specialty Crops at University Football Games	Sweet Grown Alabama will promote Alabama specialty crops at university football games across the state by 1) inviting football fans to sample seasonal specialty crops in a tailgate setting and 2) marketing seasonal specialty crops with stadium advertisements. A tailgate booth will be set up at six Alabama universities during the 2024 football season. Participating fans will receive a sample of a local specialty crop/product and education regarding how to access and prepare the specialty crop. A brief survey will collect data from participants about knowledge gained and intent to purchase Alabama specialty crops. This project aims to increase consumer awareness and willingness to purchase Alabama specialty crops by promoting the industry in high-traffic outlets.	$60,000.00
Alabama Department of Agriculture and Industries	$496,334.85	9. Introducing New Strawberry Cultivars to Multiple Regions of Alabama	Auburn University and the Alabama Cooperative Extension Systems will partner with the Alabama Department of Agriculture and strawberry growers to evaluate new strawberry cultivars for a minimum of two years in Central and South Alabama.	$39,986.00
Alabama Department of Agriculture and Industries	$496,334.85	10. Nano-Enabled Fertilizer and Pesticide Use on Alabama Pecan and Vegetable Crops	Auburn University will partner with local pecan and vegetable growers to evaluate and demonstrate the efficacy of using nano-enabled fertilizers and pesticides to reduce current rates which in return will reduce costs.	$40,000.00
Alabama Department of Agriculture and Industries	$496,334.85	11. Overcoming Armillaria Root Rot Challenge in Peach Production to Sustain Family Farms	Auburn University and the Alabama Cooperative Extension System (ACES) will partner with the ADAI to alleviate the Armillaria Root Rot (ARR) disease infection rate and the consequential crop loss in peach orchards by developing scientifically based recommendations for the utilization of ARR resistant rootstock 'MP-29' in peach production and by disseminating research results to stakeholders.	$40,000.00
Alabama Department of Agriculture and Industries	$496,334.85	12. Plasticulture Mulch Management for Increased Profitability in Vegetable Production	Auburn University will develop research-based guidelines for the resilient and sustainable use of plastic and non-plastic mulching systems in vegetable production under multiple crop seasons.	$39,972.00

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Alabama Department of Agriculture and Industries	$496,334.85	Grant Administration	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.	$36,395.06
Alaska Division of Agriculture	$255,184.28	1. Increasing the Yield, Nutritional Quality and Energy Efficiency of Specialty Mushroom Farming in Alaska	Seven Spruce Project, in partnership with Hamakua Mushroom Heritage Farm Inc. and University of Alaska Anchorage, will increase the yield and decrease the grower costs of specialty mushrooms production through workforce development, improved substrate composition and energy efficiency. The Project will utilize local spruce wood as substrate, develop scientifically based methods to increase yields and train a skilled workforce, capable of operating medium to large-scale mushroom farm. We will disseminate methods and results to the stakeholders through online and in-person grower workshops, meetings and by providing multilingual training materials.	$60,000.00
Alaska Division of Agriculture	$255,184.28	2. "Meet the Chef" in Homer, Alaska	Homer Soil and Water Conservation District's project aims to increase the connections, awareness and understanding between local large-scale buyers and farmers selling local produce by facilitating gatherings between local chefs and local farmers to share information about expectations and needs; and produce chef demonstration videos to showcase various ways to utilize Alaskan Grown specialty crops for a wider consumer audience.	$17,180.00

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Alaska Division of Agriculture	$255,184.28	3. Specialty Crops Tester, Producer and Educator	The Sitka Conservation Society aims to hire a Specialty Crops Tester, Producer and Educator to coordinate the Pacific High School (PHS) Edible Garden Program, to develop and implement a plan to maximize greenhouse and garden capacities to support specialty crop knowledge, production, processing, consumption and access. The project will research and identify which specialty crops perform best in the new greenhouse; disseminate research outcomes and lessons learned to the agricultural community; increase the quantity and diversity of food produced in the garden and accessible via the PHS school lunch program; and delivering high quality youth and community education on specialty crops and agriculture.	$47,900.00
Alaska Division of Agriculture	$255,184.28	4. Island Fresh - Greens to Grow On	Southeast Island School District will perform a systematic data collection study to determine the highest yielding vegetable crops for growth in an aquaponic system. With the help of a greenhouse manager, data collection duties will be performed by students and tied into school curriculum, enhancing student knowledge and agricultural interest. The study will streamline efficiency and improve vegetable yields to maximize food production. This study will increase the availability of healthy, locally grown produce to residents of Prince of Wales Island, and a partnership with Alaska Department of Environmental Conservation will provide increased food safety.	$59,250.00
Alaska Division of Agriculture	$255,184.28	5. Alaska Specialty Crop Producers Harmonized GAP and GAP+ Cost Assistance	The Alaska Division of Agriculture will manage the Alaska Specialty Crop Producers Harmonized Good Agricultural Practices (HGAP) and HGAP+ cost assistance. This opportunity will provide assistance for the costs associated with obtaining buyer- required food safety, third party audit HGAP and HGAP+ certifications.	$30,000.00
Alaska Division of Agriculture	$255,184.28	Grant Administration	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.	$20,421.73

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American Samoa Department of Agriculture	$268,887.86	1. Sustaining and Enriching Local Produce By Means Of Acquiring Necessary Farming Equipment or Tools	The American Samoa Government Department of Agriculture (ASG DOA) has indicated the need within the territory of possessing the necessary farming equipment's and tools to sustain crop farming within the agricultural community. In recent administrative work conducted by the DOA, numerous farmers both subsistence and commercial made appearance in the DOA main office for assistance with farming tools and equipment's. Though resources of fertilizers, pesticides are also in high demand with the local farmers, a common need, high in demand among the farmers are not having the adequate tools and equipment's to sustain their farming efforts with their crop or plantations of specialty crops and common crops including taro, banana, giant taros, papayas, egg plants, lettuce, cabbage just to name a few of the growing efforts that's been showcased and shared with the DOA office.	$268,684.06
Arizona Department of Agriculture	$1,311,054.35	1. Palestriped Flea Beetle Control During Guayule Stand Establishment	University of Arizona will continue work to develop efficient, effective, and economically viable methods to reduce, mitigate, or eliminate palestriped flea beetle (PSFB) damage in guayule during stand establishment. Chemistries will be screened in a spray-chamber live beetle assay system and promising leads will be field-tested as foliar chemical controls. In laboratory assays we will test novel chemistries as seed coatings for the control of PFSB. Field trials will be conducted to validate field efficacies and crop safety to support regulatory needs and to develop recommendations for grower use. Project outcomes will identify effective chemistries that control PSFB and new regulatory packages for Special Local Needs applications for labels for Arizona guayule. The work completed will provide options for effective chemical controls that economically prevent insect damage during guayule stand establishment resulting in a healthy more uniform stand that is able to tolerate adverse conditions, ultimately avoiding lost productivity and costly additional inputs.	$32,542.00

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Arizona Department of Agriculture	$1,311,054.35	2. Building Capacity for Proactive Resistance Management	The University of Arizona will work extensively with growers and pest control advisors to identify their needs for an information product that will detail the availability of refuges based on insecticide usage patterns in their community. With this information, growers will be able to make better chemical control decisions that mitigate or even prevent resistances. To build understanding of refuge effects on resistance, we will study resistance bioassay data for six whitefly modes of action from Arizona whitefly populations in relation to Arizona Department of Agriculture section-level insecticide use records and build models that forecast the likelihood of resistance relative to availability of refuges. Our project will be a proof of concept that will lead to future development of a grower forecasting product that will help them mitigate or prevent resistance development in their community. This work will build and test new models for predicting resistances based on refuge availability and assemble stakeholders in focus groups to help design a future product for their use.	$19,952.00
Arizona Department of Agriculture	$1,311,054.35	3. Acre 51 Food Forest	The Creighton Community Foundation will demonstrate the feasibility of growing specialty crops in the urban Phoenix desert through a community food forest by using sustainable growing methods, water harvesting techniques, and integrated pest management and translating that to the community through educational workshops, volunteer workdays, training, and specialty crop dissemination among low-income, food insecure communities.	$93,820.00
Arizona Department of Agriculture	$1,311,054.35	4. Mobile Trap Crops for Organic Vegetable IPM	Macey Keith, partnering with AZDA, will enhance organic lettuce IPM programs in Arizona, specifically the desert southwest, using trap crops to combine conventional and organic practices to control Western Flower Thrip and Impatiens Necrotic Spot Virus (INSV). The economic loss of lettuce due to INSV (Impatiens Necrotic Spot Virus) is creating a demand for new strategic pest control tactics. The efforts of this trial are to create a new organic IPM practice that emphasizes cultural, mechanical, biological, and chemical control strategies carefully and appropriately.	$11,233.00

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Arizona Department of Agriculture	$1,311,054.35	5. Determining Water Disinfectant Dose and Understanding Impact on Soil Health	The University of Arizona will investigate the effects of disinfectants for use in irrigation waters. The overall goal of this study is to determine optimal concentrations of two commonly used disinfectants for use during the irrigation of produce while considering water quality conditions in Arizona and the impact on soil health and crop production. The optimal concentrations of free chlorine and peracetic acid (PAA) needed to kill pathogenic and irrigation water isolates of Escherichia coli and Salmonella using different water quality conditions typical of irrigation waters in Arizona will be determined.	$63,805.00
Arizona Department of Agriculture	$1,311,054.35	6. Salt Tracking Tools for Optimal Leaching and Water Management	The University of Arizona Environmental Science department has been a leader in water and salinity management for decades. More recently, some of this work has been in coordination YCEDA but this project does not require stakeholder resources as the back-ground field data for model testing has been compiled from previous work. The budget requests of this project is to partially cover salary of the scientist that do the model evaluations and comparisons, and some costs for supporting laboratory work to generate physical and chemical constants that are currently not available.	$87,972.00
Arizona Department of Agriculture	$1,311,054.35	7. Molecular RNA Interference Method to Manage Fusarium Wilt of Lettuce	This project will be focused on developing an RNAi-based fungicide to control the fungi Fusarium oxysporum f. sp. lactucae (FOL). FOL genes involved in ergosterol biosynthesis will be used to synthesize an in vitro homologous dsRNA molecule. The fungicide activity of synthesized dsRNA will be measured by spraying it on plants grown in the greenhouse and fields. Also, dsRNA mechanism of action, translocation in the plant, and biological affectations on FOL will be addressed.	$87,212.00

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Arizona Department of Agriculture	$1,311,054.35	8. Endangered Species Act - Supporting Positive Outcomes for Arizona Specialty Crops	The University of Arizona will work with the Arizona Department of Agriculture (ADA) to maintain ongoing access to timely and accurate pesticide use data for the benefit of Arizona specialty crop industries. Data will be available to support research priorities of specialty crops, Extension education, and pesticide registration needs, including EPA registration reviews of key chemistries for the production of specialty crops.	$82,566.00
Arizona Department of Agriculture	$1,311,054.35	9. Investigations on Biology and Management of the Agave Grease Mite	The University of Arizona in collaboration with partnering horticultural nurseries in Phoenix and Tucson will conduct investigations on the biology, transmission, seasonality and host range of the agave grease mite, a pest that is causing significant economic damage to agaves in Arizona. Through this project, we will also test management practices and disseminate our results to inform nurseries and landscape managers so they can take appropriate and effective measures to manage and control the spread of the pest.	$78,226.00
Arizona Department of Agriculture	$1,311,054.35	10. Do Water Sanitizers Change Soil Biology in Romaine Lettuce Fields?	The University of Arizona research and extension team plans to measure the short- and medium-term changes in soil microbial communities in the commercial romaine lettuce fields following the application of water sanitizers commonly used in leafy greens production. We propose to use universally recognized scientific approaches and tools to identify changes in soil biology as well as recommend key solutions for soil biological health improvements toward sustainable romaine lettuce production. The multidisciplinary project team will collaborate with the industry to select research sites and establish research plots. The research findings and recommendations will be shared through educational and outreach media such as grower meetings, field days, and extension articles to educate the industry and fill the existing knowledge gap.	$99,883.00

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Arizona Department of Agriculture	$1,311,054.35	11. Identification of Races and Host Resistance to Lettuce Downy Mildew	The University of Arizona, Yuma Center of Excellence for Desert Agriculture will characterize the population of Bremia lactucae present in the Yuma growing region each year and identify commercial lettuce cultivars resistant to the population. This will be accomplished by planting a field trial at the Yuma Ag Center each growing season with the differential lettuce cultivars designated by the International Bremia Evaluation Board, and plots of commercial cultivars and evaluating for signs of the pathogen and disease symptoms. Each year results will be released to stakeholders.	$19,032.00
Arizona Department of Agriculture	$1,311,054.35	12. User-Friendly Venues for Dissemination of Data-Driven Fertilizer Recommendations	The University of Arizona's Yuma Center of Excellence for Desert Agriculture (YCEDA) will convert fruit and vegetable fertilizer management information generated by the University of Arizona's Dr. Charles Sanchez through Arizona research trials over the past 3 decades into user-friendly formats that are readily accessible via the internet by Ag producers, crop consultants and others who can utilize and benefit from the information. This information is extremely valuable to keep Arizona specialty crop growers competitive but is not currently readily accessible in any venue.	$90,000.00
Arizona Department of Agriculture	$1,311,054.35	13. Honey Production and Beekeeping Educational Program	The University of Arizona Cooperative Extension Urban Agriculture Production, Small-scale, and Beginner Farmer, and Field Crops Integrated Pest Management Programs are proposing to develop an educational program that would help growers, beginning farmers and entrepreneurs interested in honey production and pollination to have first-hand learning experience about beekeeping in the Sonoran Desert before venturing into a new project. This training will provide them with the needed skills to have alternative operational revenue that will secure them financially, provide needed pollinators for their crops, and help conserve honeybees.	$99,990.00

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Arizona Department of Agriculture	$1,311,054.35	14. Safe Effective Sanitizer for Specialty Crop Harvesting and Processing Environments	The University of Arizona will evaluate the use of a new UV-C light technology for the sanitization of specialty crop harvesting and processing environments. 222-nm FAR UV-C light has been demonstrated to be safe for human exposure, unlike the germicidal UV-C light typically used for disinfection that can be damaging for eyes and skin. FAR UV-C wavelengths are also highly effective against a wide variety of microorganisms including bacteria and viruses. This new technology will be evaluated against various foodborne pathogens (including environmental isolates and foodborne outbreak strains) or surrogates on various surfaces found in fresh produce harvest / processing environments such as workers' hands, harvesting tools, cardboard boxes, plastic produce bins, and stainless-steel surfaces.	$61,841.00
Arizona Department of Agriculture	$1,311,054.35	15. Survey of Novel Plant Viruses in Arizona’s Produce Growing Region	The University of Arizona Cooperative Extension is collaborating with Arizona's lettuce and melon producer-cooperators and Co-PIs to understanding the role of insect vectors and host weeds in plant virus transmission. These efforts will assist in developing insect and weed management recommendations to reduce the impact of plant viruses for the Arizona lettuce and melon industry. This project is aims to understand the role of insect vectors and weeds in the occurrence and spread of plant viruses in melon and lettuce production. Results will be widely disseminated to the Arizona produce industry to aid in virus, weed, and insect pest management decisions.	$99,862.00
Arizona Department of Agriculture	$1,311,054.35	16. Increasing Date Palm Fruit Size	The University of Arizona will continue to attempt to increase `Medjool' date fruit size by application of urea, potassium sulfate and boron (B) directly to date palm fruit bunches, then disseminate the results to stakeholders through grower meetings, field days and email.	$39,673.00

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Arizona Department of Agriculture	$1,311,054.35	17. Inducing Seedlessness in Lemons	The University of Arizona will continue to attempt to induce seedless in lemons by application of various rates of elemental sulfur to the plants at bloom time then disseminate the results to stakeholders through grower meetings, field days and email.	$39,026.00
Arizona Department of Agriculture	$1,311,054.35	18. Antimicrobial Fogging Treatments for Safer and Longer Lasting Cantaloupe	Cantaloupe is a specialty crop that is economically important to the state of Arizona. However, cantaloupes have been associated with foodborne disease outbreaks, particularly with Salmonella enterica and Listeria monocytogenes. No effective decontamination treatment currently exists for cantaloupes. The University of Arizona researchers will conduct decontamination experiments using a novel fogging method consisting of low concentrations of natural antimicrobials and small volumes of water to assess 1) their effectiveness in reducing foodborne pathogenic bacteria and molds, and 2) their effectiveness in increasing the shelf-life of cantaloupes.	$95,371.00
Arizona Department of Agriculture	$1,311,054.35	19. GHP/GAP One-to-One Assistance	The Arizona Department of Agriculture's Agricultural Consultation and Training (ACT) division will offer and provide one-on-one assistance to fresh fruit and vegetable producers/growers, distributors, wholesalers and handlers so that they can become USDA GHP/GAP certified. This assistance program will provide benefits to those producers looking to address food safety concerns of their customers. These funds will be used for a GHP/GAP Coordinator to expand upon the education and outreach efforts of the current GHP/GAP Certification Training Program and to provide “one on one” assistance to training participants as needed to develop GHP/GAP procedures.	$43,000.00
Arizona Department of Agriculture	$1,311,054.35	Grant Administration	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.	$62,635.14

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Arkansas Agriculture Department	$364,134.47	1. Arkansas Grown Conference & Expo	The Arkansas Department of Agriculture's Arkansas Grown program proposes to partner with Arkansas specialty crop associations to host an Arkansas Grown Conference & Expo 2024 focusing on specialty crop farmers by offering training, networking, and a vendor show. Development of this project includes collaborating with partner associations; planning and coordinating workshops topics; recruiting experts to speak on the topics; promoting at a grassroots level; recruiting relevant vendors; advertising and promoting statewide; coordinating with venue personnel to plan te event; managing logistics before, during, and after the event.	$220,786.38
Arkansas Agriculture Department	$364,134.47	2. A Blackberry Discovery Farm: Expanding Berry Crop Research and Grower Support in Arkansas	The University of Arkansas System Division of Agriculture will develop a new "Blackberry Horiculture Discovery Farm" and new strawberry and blackberry production and fertility recommendations, to support expansion of these crops in Arkansas.	$115,839.50
Arkansas Agriculture Department	$364,134.47	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$27,095.58
California Department of Food and Agriculture	$23,934,874.31	1. California Grown: Always in Season	The Buy California Marketing Agreement (BCMA) will implement a multi-platform digital campaign including retail and foodservice promotions to create strong support from the retail and food service trade and increase consumer demand for California specialty crops and specialty crop products. The multiplatform digital campaign will utilize contextually relevant media placements, deliver rich and engaging experiences within impactful media, integrate multiple influencer marketing programs, and utilize social media to reach consumers in shareable environments. Retail trade outreach will be conducted, and promotional partnerships will be established with key California retailers to execute retail promotion programs both in-store and through digital extension.	$2,500,000.00

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California Department of Food and Agriculture	$23,934,874.31	2. Eureka! Guiding the Discovery of Sustainably Produced, Diverse, Appealing California Wines by United States Trade and Consumers	The project will accomplish this by launching a new marketing campaign Eureka!, executed on behalf of the California wine industry to boost sales of California winegrapes and wine. Through public relations, social media and digital outreach, and the pilot of an immersive one-of-a-kind event, Eureka! will guide a target audience of trade and consumers to discover the treasure of sustainably produced, diverse, and appealing California wines.	$500,000.00
California Department of Food and Agriculture	$23,934,874.31	3. Avocado Extra Virgin Oil: Expanding Alternative Market Opportunities for California Avocado Growers	The project is predominately research-focused, but the ultimate goal is market enhancement as the project team feels there is a potentially lucrative market niche for California EV avocado oil. Through the project's contribution to defining EV avocado oil grade standards, California growers and processors will benefit being leaders in high quality avocado oil production.	$487,077.00
California Department of Food and Agriculture	$23,934,874.31	4. Sharing Nutritional Benefits of California Prune and Plum Juices to Build Sales Among United States Families	This project addresses the priority of creating economic opportunities for specialty crop producers, including organic producers, through specialty crop market development activities that focus on local, regional, institutional, national, and international markets by leveraging the unique qualities of specialty crops grown in California. Reaching young United States families will boost demand domestically and grow sales into higher value domestic retail channels. The project will build domestic consumers for California prune and plum juices by targeting United States millennial families through, 1) a public relations campaign, 2) outreach to dietitians and health organizations like the American Academy of Pediatrics, and 3) digital and social media placements. This project's activities are projected to boost domestic California prune and plum juice sales by $1.7 million, with all profits flowing directly to SSG's 200 prune growers.	$500,000.00

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California Department of Food and Agriculture	$23,934,874.31	5. A Roadmap for Paso Wine: Data-Driven Research, Strategic Marketing, and Increased Sales	This project's research will present several opportunities to highlight the benefits of a California grown product that messages the Paso Robles' unique history, quality, and longevity of the winegrapes and wines from the region. By analyzing markets where Paso Wine sales are strong and tracking sales trends, this project will provide key markers that can potentially identify other markets for growth opportunities. This data will assist in forecasting and marketing allocation for Paso Robles wineries. By understanding when sales are strong and for what types of wines, brands can use that information to support those sales or reallocate marketing resources.	$379,677.00
California Department of Food and Agriculture	$23,934,874.31	6. Increasing Awareness and Consumption of California Specialty Crops Among California Fourth-grade Students and Teachers	This project addresses the program priorities of, educating to increase specialty crop consumption through healthy eating habits, increasing knowledge of how to produce, prepare, or preserve specialty crop, and increasing the awareness of and demand for locally sourced specialty crops. The project will achieve this by vital education and outreach efforts to California fourth grade teachers and students during the grade in which students focus on their state.	$499,371.00
California Department of Food and Agriculture	$23,934,874.31	7. Specialty Crop Resources for Early Childhood Education	Research shows that repeated exposure to an unfamiliar vegetable is needed to increase consumption, especially among young children. This project creates opportunities for TK-K students to learn and taste specialty crops in their cafeterias, classrooms, school gardens, and afterschool programs — a multiple-exposure model to increase knowledge and consumption.	$447,720.00

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California Department of Food and Agriculture	$23,934,874.31	8. Expanding Efforts to Increase Procurement of California Grown Specialty Crops in the California Corrections System	This project addresses the priorities education to increase specialty crop consumption through healthy eating habits; increasing knowledge of how to produce, prepare, or preserve specialty crops; Increasing the awareness of and demand for locally sourced specialty crops; and increasing the availability of specialty crops in homes, schools, the workplace, hospitals, prisons, and in other underserved communities. Programming at CDCR prisons will increase the availability of California grown specialty crops and establish connections between prison facilities and local food hubs and growers. The HOTM program will expose residents and staff to new California grown fruits and vegetables and will educate them on the health and other benefits of California grown produce.	$487,755.00
California Department of Food and Agriculture	$23,934,874.31	9. Hands-On Cooking and Nutrition Education for Low-Income Families	This project addresses the priorities of education to increase specialty crop consumption through healthy eating habits; increasing knowledge of how to produce, prepare, or preserve specialty crops; and increasing awareness of and demand for locally sourced specialty crops. 18 Reasons will implement and expand four programs including, 1) Cooking Matters, a six-week series offering general cooking and nutrition education for kids, teens, adults, and families, 2) Planned & Prepped, a four-week series offering hands-on cooking, meal planning, and budgeting for adult graduates of Cooking Matters, 3) Food as Medicine, an ongoing series with cooking and nutrition education for patients with type 2 diabetes, co-taught with a team of doctors, and 4) Nourishing Pregnancy, a four-month series with cooking, nutrition, and prenatal or postpartum education for low-income Black and Latinx pregnant people.	$450,000.00

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California Department of Food and Agriculture	$23,934,874.31	10. Urban Ag at the Market: A Model for Urban Producers to Improve Fresh Food Access at Neighborhood Farmers' Markets	The project will address the identified priorities as follows: Urban Producer Trainees, which include backyard growers in underserved and/or low-income Los Angeles communities, established urban farmers, and students operating campus farms, will participate in the Urban Ag Accelerator training program, which focuses on increasing knowledge about specialty crop production in an urban setting to prepare trainees to grow produce for small-scale neighborhood farmers' markets. During the pilot, where urban producer trainees sell at local farmers' markets, the project team will develop and distribute targeted promotional materials to farmers' market customers, increasing both awareness of and demand for locally grown specialty crops. By placing urban producers at small-scale farmers' markets in underserved communities that currently struggle to recruit and/or retain regional farmers, the pilot will increase the availability of specialty crops in these neighborhoods. By working with backyard growers in underserved communities, the project will increase specialty crop production in these neighborhoods.	$500,000.00
California Department of Food and Agriculture	$23,934,874.31	11. Cooking Up Community: Culinary and Nutrition Education with California Specialty Crops for Los Angeles Students and Families	This project addresses the priorities of education to increase specialty crop consumption through healthy eating habits; increasing knowledge of how to produce, prepare, or preserve specialty crops; and increasing the awareness of and demand for locally sourced specialty crops. Research shows that opportunities to experience new foods help children increase liking, and liking a food is the best predictor of future consumption. Programs also give youth and families the chance to prepare snacks and meals with their own hands, since studies show that experiential learning is especially effective at bringing about behavior change and that a feeling of self-efficacy in cooking skills will increase the chance that children will help cook at home.	$251,455.00

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California Department of Food and Agriculture	$23,934,874.31	12. Peak of Season Specialty Crop Nutrition Education and Culinary Program	This project will address the priorities of education to increase specialty crop consumption through healthy eating habits; increasing knowledge of how to produce, prepare, or preserve specialty crops; and increasing the awareness of and demand for locally sourced specialty crops. The program uses a diverse model of specialty crop education curricula targeted to both adults and youth blending evidence-based nutrition education with recipe demonstrations or hands-on food preparation to ensure positive impact on healthy eating habits to increase specialty crop consumption. The participatory model enabling hands-on culinary preparation within culinary tracts in schools and in the community setting increases participant knowledge of how to prepare and preserve specialty crops. Two video curricula provide broad student introduction to urban and rural agricultural production methods, increasing knowledge of how to produce specialty crops in a classroom setting.	$499,982.00
California Department of Food and Agriculture	$23,934,874.31	13. Provide Research-Based Online Food Preservation Educational Events for Specialty Crops	This project addresses the program priority of increasing knowledge of how to produce, prepare, or preserve specialty crops. This will be accomplished by educating adults on the benefits of incorporating specialty crop foods in meals. Education activities include online demonstrations, follow-along hands-on workshops, email helplines for one-on one education, and online newsletters focusing on seasonal specialty crops. Classes will consist of live and recorded demonstrations. Participants will learn how preservation methods affect optimal food safety and quality during long-term storage.	$402,221.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	14. Youth Engagement and Education on Specialty Crops Careers in the Central Valley	This project addresses the priorities of increasing knowledge of how to produce, prepare or preserve specialty crops and increasing the availability of specialty crops in homes, schools, the workplace, hospitals, prisons, and in other underserved communities. This will be accomplished through field trips to specialty crop farms will introduce youth to the industry and center the farm as the basis for all specialty crop ventures. Interested students will be linked with internship opportunities. Intern choices will be linked to a specialty crop farm or community garden for hands-on experience in production, organizations that hold cooking and nutrition classes focused on specialty crop preparation, small local businesses that process and preserve specialty crops, or local groups that help increase access to specialty crops.	$232,552.00
California Department of Food and Agriculture	$23,934,874.31	15. Attracting and Building the Next Generation Workforce for Napa's Winegrape Industry	This project addresses the priorities of introducing and recruiting young and beginning farmers, as well as members of socially disadvantaged and underrepresented groups, including women and veterans, to the variety of specialty crop career opportunities; and creating and implementing workforce training programs to develop and maintain the technical skills required to keep the California specialty crops sector competitive. The project will address the identified priorities by, 1) introducing and attracting a new young workforce to winegrape careers through Fields of Opportunity, a youth mentorship program on Napa farms and a new year-round apprenticeship program, and 2) developing the technical skills of Napa’s current workforce to increase expertise and retention through workforce training through a conference on leadership and management training and bilingual train-the-trainer workshops for Napa farmworkers who speak Spanish.	$500,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	16. Growing Civic Urban Farmers	This project addresses the priorities of introducing and recruiting young and beginning farmers, as well as members of socially disadvantaged and underrepresented groups, including women and veterans, to the variety of specialty crop career opportunities and providing support to specialty crop producers in adopting the requirements of the Food Safety Modernization Act. It also addresses the priorities of creating and implementing workforce training programs to develop and maintain the technical skills required to keep the California specialty crops sector and conducting outreach to increase the safety and security of the specialty crop food system competitive.	$497,335.00
California Department of Food and Agriculture	$23,934,874.31	17. Development of Teaching Modules to Support California's Vegetable Crops Industry	This project will result in a practical and highly focused curriculum that will inform, enable, and empower a significant portion of the next generation of California's vegetable production workers, i.e., students who attend the partner universities and community colleges. Each of the affiliated colleges and the Agriculture and Land-Based Training Association (ALBA), a private-sector partner in Salinas, is both a minority- and Hispanic-serving institution that has majority student populations from historically underserved communities. This project addresses the priority of creating and implementing workforce training programs to develop and maintain the technical skills required to keep the California specialty crops sector competitive.	$396,926.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	18. A Specialty Crop Beginning Farmer Mentoring Program to Support Equity, Education, and Agricultural Sustainability in California	This project addresses the priorities of introducing and recruiting young and beginning farmers, as well as members of socially disadvantaged and underrepresented groups, including women and veterans, to the variety of specialty crop career opportunities; providing training to support specialty crop producers in adopting methods to reduce water use and improve water efficiency; and providing technical assistance and training to better equip farmers to protect and conserve natural resources through on-farm practices that reduce greenhouse gas emissions, increase carbon sequestration, and adjust to a changing climate.	$435,867.00
California Department of Food and Agriculture	$23,934,874.31	19. Creating Access for Asian Specialty Crop Producers Initiative	This project addresses the priorities of providing support to specialty crop producers in adopting the requirements of the Food Safety Modernization Act; providing training to support specialty crop producers in adopting methods to reduce water use and improve water efficiency; and creating and implementing workforce training programs to develop and maintain the technical skills required to keep the California specialty crops sector competitive. The project will also address the priorities of providing technical assistance and training to better equip farmers to protect and conserve natural resources through on-farm practices that reduce greenhouse gas emissions, increase carbon sequestration, and adjust to a changing climate; assisting specialty crop farmers in adapting to ongoing impacts of COVID-19, including addressing workplace health and safety requirements and market uncertainty, and by increasing equity in food systems; and conducting outreach to increase the safety and security of the specialty crop food system.	$353,585.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	20. California Frontline Supervisor Training Program	This project will focus on the program priority of assisting specialty crops farmers in adapting to the ongoing impacts of COVID-19, including addressing workplace health and safety requirements by, 1) frontline supervisor trainings, and 2) a virtual learning network. The program will empower frontline supervisors in their role as a liaison between growers and farmworkers by increasing their knowledge and confidence on critical worker safety topics.	$496,116.00
California Department of Food and Agriculture	$23,934,874.31	21. Understanding and Breeding for Yield Under Water and Heat Stress in Chili Pepper	Peppers drive a $1.4 billion salsa and $2.8 billion hot sauce market in the United States, with increasing demand. California produces one third of the peppers grown in the United States. Extreme weather events of heat and water scarcity threaten this rich source of nutrients available to all cultures and incomes. The project leverages initial work on screening populations derived from landraces collected in semi-arid regions of the center of genetic diversity, Mexico. The University of California at Davis (UC Davis) will combine tolerance to heat and water stress with yield and quality traits in chili peppers and develop genotyping and phenotyping tools to define the physiological and genetic basis of traits. Information and germplasm will be extended to growers, industry, and public stakeholders while training the next generation of scientists.	$503,653.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	22. Designing Drought Tolerant Specialty Crops Using Metabolic Modeling	The University of California, Riverside has the long-term goal to improve the productivity and sustainability of California's specialty crops by using metabolic models to create drought tolerant varieties. Climate change has and will continue to cause problems for California agriculture, including those caused by droughts. There are currently no commercial citrus varieties shown to produce desirable fruit and be drought tolerant in California growing regions. In this project, the team will use metabolic models to identify drought tolerance mechanisms of two citrus rootstocks grown in Brazil. The project team expects this research will enable the design of solutions for growers. Short-term solutions will involve nutrient amendments that redirect metabolic pathways facilitating drought tolerance. Longer-term solutions will involve engineering varieties that utilize an in-depth, model-based understanding of drought tolerance.	$499,921.00
California Department of Food and Agriculture	$23,934,874.31	23. Limited Irrigation Management and Smart Water Technologies for the Pistachio Orchard of the Future	Water is cited as the number one concern of pistachio growers in the Central Valley. Climate change and regulation of groundwater use threaten the sustainability of pistachio production. Limited irrigation involves applying less than full crop water needs or applying full irrigation to smaller acreage to obtain economically viable yields. Also, water technologies such as stem water potential sensors, soil water potential sensors, and remote sensing imagery can be used to refine irrigation scheduling decisions. With this project, the University of California, Davis (UC Davis) will, 1) evaluate limited irrigation management strategies for pistachios, 2) evaluate the performance of stem water potential sensors and soil water potential sensors in various pistachio orchards, 3) validate the accuracy of satellite remote sensing of evapotranspiration, and 4) disseminate findings to growers.	$498,402.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	24. Conversion of Almond and Walnut Shells to Prebiotic Oligosaccharides and Gluconic Acid	The Regents of the University of California, Davis aim to produce high-value prebiotic products, cellobiose and oligosaccharides, and an industrial chemical gluconic acid from almond and walnut shells to increase the economic return to farmers and processors and ensure sustainable management of these byproducts. Project objectives include producing cellobionic acid and cellobiose from the cellulose portion of the shells using fungal fermentation. Cellobiose will be one of the probiotic products. Cellobionic acid will be used as the hydrolysis agent to produce oligosaccharides as another probiotic product from the hemicellulose fraction of the nut shells, and the cellobionic acid will be hydrolyzed to glucose and gluconic acids during the process. Gluconic acid will be recovered as another product. Project success will be determined by the positive economic evaluation of the process and the farmers' and processors' willingness to adopt the new technology.	$498,706.00
California Department of Food and Agriculture	$23,934,874.31	25. Farmer Driven Drought Resilience Innovations for Soil Health, Environmental Stewardship, and Marketability of California Processing Tomatoes	The California processing tomato industry is under intense pressure from the decades long megadrought in the Central Valley. There is an urgent need to identify the suite of water, soil, and plant management practices which enable drought resilience and quantify their adaptive potential. The University of California, Davis (UC Davis) has developed a network of 25 fields with varied adoption of climate smart practices for over 5 years, leading to different water use, yields, soil health, and carbon statuses. This project proposes to work with this network to identify the socio-ecological drivers of drought resilience and quantify their relevance to cope with water shortage scenarios in field experiments.	$396,176.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	26. Appraising Uncertainties and Errors of Evapotranspiration of Micro-Irrigated Orchards and Vineyards Estimated with Satellite Remote Sensing Method	Evapotranspiration (ET) and water productivity information of California's perennial crops is limited and outdated, but crucial for water management decisions. In addition, many irrigation districts and groundwater management agencies recently adopted satellite remote sensing (SRS) methods to derive ET, which may lead to uncertain and highly inaccurate ET estimates, while the limits for acceptable ET inaccuracy are uncertain and unclear. With this project, the University of California, Davis (UC Davis) proposes to, 1) determine the acceptable levels of ET accuracy for orchards and vineyards by surveying main industry's stakeholders, 2) measure ET and yield in commercial nut orchards and wine-grape vineyards, and 3) quantify errors and room for improvements of SRS-ET tested against ground-ET measurements.	$496,321.00
California Department of Food and Agriculture	$23,934,874.31	27. Development of a New Integrated Drying and Aeration Method for Off-ground Harvested Almonds	California annually produces 5 million tons of in-hull almonds, with $5.6 billion economic value. The current harvesting method generates a large amount of dust, causing air pollution and making the industry unsustainable. The off-ground method has been considered as the most promising approach. The most critical challenge for this approach is to dry the almonds rapidly and efficiently and ensure product quality and food safety. Heated air drying is a promising method to dry a large volume of almonds in a short time. However, the moisture variation of products in different locations in a dryer may affect product quality and food safety. Also, it is not energy efficient at the later stage of drying. The University of California (UC), Davis, will develop a new integrated drying and aeration method for off-ground harvested almonds to increase drying capacity, reduce energy use and cost, and ensure product quality and safety.	$497,865.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	28. Improving Irrigation Management in Specialty Crop Systems: The Case for Advancing Proximal Sensing Tools and Forecasting Evapotranspiration Using	Acquiring accurate measurements of crop water use such as evapotranspiration (ET) is increasingly important in California. Farmers use various forms of ET to guide irrigation management. Some are based on crop coefficients, using reference ET from the California Irrigation Management Information System, while more sophisticated approaches use remote sensing. These new tools still require validation and refinement to ensure mass adoption. This project from the U.S. Department of Agriculture, Agricultural Research Service (USDA ARS) aims to, 1) continue efforts to ground-truth remotely sensed ET models, 2) develop a 10-day forecasted actual ET product based on satellite data and machine learning, 3) improve stress detection using novel machine learning methods to determine optimal, site-specific crop water use with ground-based and remotely sensed data, and 4) create the structure required to ingest new tools into cloud-based OpenET framework. Ultimately, the project's goal is to optimize irrigation management strategies for improved water use efficiency and crop health in a myriad of cropping systems.	$492,999.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	29. Wildfire Smoke Exposure Risk Assessment for Different Grape Varietals	Wildfires will occur with greater frequency and intensity in California, with 2020 wildfires resulting in a $3.5 billion loss in revenue in the wine and winegrape industry. During wildfires, large amounts of volatile phenols (VPs) are released into the air, absorb through the berry skin, and compromise fruit quality. Different grape varieties naturally contain different amounts of VPs and differ in their ability to absorb VPs; this has not been studied. This University of California (UC), Davis, project will determine VP synthesis in different varietals and the impact of smoke exposure on VP metabolism, vine physiology, and grape and wine composition. Information gained will aid in the development of targeted mitigation actions, determine the best time for grape sampling for risk assessment, determine varietal differences regarding VP synthesis and impact of smoke exposure thereon, and provide metrics for smoke risk assessment.	$499,991.00
California Department of Food and Agriculture	$23,934,874.31	30. Advancing Adoption of Decision Support Systems for Irrigation Management of Vegetable Crops	California growers are under increased regulatory pressure to achieve groundwater sustainability due to the Sustainable Groundwater Management Act (SGMA). Central coast growers face added requirements under Agricultural Order 4.0, which focuses attention on irrigation practice efficiency and, among other things, mandates reporting of crop evapotranspiration (ET). Decision-support models can help irrigators quantify ET and apply water in alignment with crop demand. CropManage is a leading software tool operated by the University of California, Cooperative Extension (UCCE), for guidance of ET-based irrigation and nutrient scheduling and now provides nearly 3,000 vegetable crop irrigation recommendations to approximately 200 farms annually. With this project, the University Corporation at Monterey Bay will perform additional validation work in commercial fields to broaden user acceptance through further refinement of CropManage and evaluation of a complementary satellite-based ET monitoring system.	$490,048.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	31. Control of Strawberry Pathogens by Nanoencapsulated Oils Extracted from Citrus Fruit Waste	California produces approximately 90 percent of the strawberries and 50 percent of the citrus grown in the United States. Strawberry yield and quality are affected by Botrytis Fruit Rot (BFR) and Powdery Mildew (PM), which can cause annual yield and postharvest losses greater than 15 percent. BFR and PM are controlled by multiple applications of conventional fungicides but have begun to develop resistance. Fungicide resistance frequency for strawberry BFR worldwide ranges from 18 to 86 percent. Organic waste from processing citrus is approximately 50 percent of the original fruit biomass; citrus oil has antimicrobial properties that, if applied effectively, could help control pathogens. With this project, Cal Poly Corporation proposes to close this loop using nanoencapsulated citrus fruit waste oil to control BFR and PM. Objectives are to, 1) extract and characterize oils from citrus fruit waste, 2) develop an encapsulation technique to apply citrus oils in a nanoemulsion as an antimicrobial delivery system (ADS), and 3) determine the impact of an ADS on BFR and PM control in vitro and in vivo.	$192,721.00
California Department of Food and Agriculture	$23,934,874.31	32. Rapid-Response Detection and Management of Emerging Outbreaks of Lettuce Fusarium Wilt in Coastal California	Fusarium wilt of lettuce has recently become one of the top lettuce pests on California's Central Coast. Data on resistance of commercial cultivars to the pathogen is lacking, and rapid diagnostic tools for all races are not available. Preliminary data suggests a novel race may be present on the Central Coast as of August 2021. The Regents of the University of California, Riverside's (UCR) goals of this project are to, 1) evaluate commercial cultivars and breeding material against pathogen races, 2) investigate the source of resistance to the potential novel race, 3) determine the geographic distribution of races in California, and 4) complete and validate molecular assays to rapidly detect the novel race in plant material and soil. Anticipated outcomes are that growers will be able to rapidly identify the race present in their soil and make informed cultivar selections.	$492,390.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	33. Advancing Diagnostic and Management Tools that Mitigate Severe Fusarium Bulb Rot Pre- and Post-Harvest Losses in California's Allium Crops	Fusarium bulb rot (FBR) is an emerging destructive disease of California garlic, onion, and leek production. In-field and post-harvest losses equal to or greater than 30 percent are common, with 60 percent or more garlic seed being contaminated. Rotten seed is not planted, resulting in hundreds of lost acres. Growers are desperate for effective management strategies. This project by the University of California, Davis, proposes to, 1) advance diagnosis and seed detection decision support tools, 2) evaluate epidemiological linkages between allium crops for rotation recommendations, 3) identify synthetic and biological chemistries effective against both pathogens, 4) develop in-field strategies for seed and fresh market FBR management in garlic, and 5) disseminate tools and recommendations via outreach presentations, trainings, publications, and diagnostic support.	$446,190.00
California Department of Food and Agriculture	$23,934,874.31	34. Molecular-Diagnostics-Ready Total Nucleic Acid Collection without a Laboratory	Specialty crops are the mainstay of California's agriculture. However, various diseases, such as Huanglongbing and curly top, threaten the industry's long-term prosperity and sustainability. The University of California, Riverside, aims to develop a new tool for infield total nucleic acid collection in order to improve disease and pathogen detection. The project team will validate the device with three distinct pathogen types, including bacteria, viruses, and viroids, and three different crops, including citrus, avocados, and grapes. The success of the developed device will be evaluated based on the accuracy and sensitivity of quantitative polymerase chain reaction (qPCR) tests using known infected samples in the lab and field. The project team will educate and train specialty crop stakeholders through presentations and hands-on training at regional events and a dedicated website.	$310,543.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	35. New Traps and Sensors for Regional Monitoring of Navel Orangeworm in Pistachios	Navel orangeworm (Pyralidae: Amyelois transitella) (NOW) is the key pest of pistachios. Adults deposit eggs on nuts and larvae feed on kernels, reducing crop yield and quality, but only if hull integrity is low. As such, pesticide use for NOW is a function of pest abundance and hull integrity. Unfortunately, monitoring for this is time and labor intensive. The University of California, Riverside (UC Riverside) will provide a decision support tool to promote judicious pesticide use for NOW by integrating new automated traps and plant volatile sensors to track regional NOW abundance and changes in pistachio hull integrity.	$473,917.00
California Department of Food and Agriculture	$23,934,874.31	36. Improved Nematode Thresholds Determination in Almond	California almonds are produced in different agro-ecological environments and soil textures, with varying assemblages of plant-parasitic nematodes, including Pratylenchus vulnus, Meloidogyne spp., and Mesocriconema xenoplax. To combat these threats at planting, producers select resistant rootstocks or use pre-plant soil fumigation with 1,3 dichloropropene (1,3-D). In Integrated Nematode Management, grower decisions are based on nematode numbers in the soil. These are determined by highly trained personnel in tedious, species-specific extraction and counting procedures, while species identification frequently requires molecular confirmation. In a wheat advisory system in Australia, amounts of soil pests and pathogens have been determined with real time quantitative polymerase chain reaction (rt qPCR) tests from soil DNA extracts, foregoing classical nematode procedures. This University of California, Riverside, project will use DNA methods and almond-pest-specific rt qPCR protocols to determine reproducible thresholds, guiding rootstock and fumigation decisions.	$498,088.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	37. Reducing Chemical Use and Maintaining Product Quality Using Smart Technology for Early Detection and Notification of Insect Activities in Tree Nu	The University of California, Davis, believes that tree nuts are the most important specialty crops in California, with a value of $9.5 billion as 20 percent share of the agriculture output in the state. At present, insect infestation during storage and handling is monitored by human inspection and cannot be discovered in a timely fashion, which causes a 3 to 4 percent product loss. Meanwhile, a frequent fumigation practice uses a large amount of chemicals. The project team at with the University of California, Davis (UC Davis) have successfully developed a smart wireless technology (SmartProbe) for early detection of insects and environmental monitoring. The insects were detected when they emerged, and temperature and relative humidity (RH) were simultaneously monitored in almond and walnut during storage, which made reducing chemical use and maintaining product quality achievable. This project will study the reduction of chemical use and preservation of product quality through the further development and implementation of this technology.	$497,672.00
California Department of Food and Agriculture	$23,934,874.31	38. Loss of Susceptibility for Durable and Broad-Spectrum Resistance Against Root-Knot Nematodes in Tomato	Root-knot nematodes are highly evolved obligate parasites that threaten global food security. These nematodes have a remarkable ability to modify host cells that serve as their only source of nutrients throughout their life cycle. Resistance to root-knot nematodes conferred by the single dominant gene Mi-1 is available in many varieties of fresh and processing tomatoes. However, reliance on Mi-1 has led to the emergence of resistance-breaking nematode populations in tomato fields in California and worldwide. Research over the last years has identified a number of plant susceptibility genes that are essential for development of root-knot nematodes. The University of California, Davis's goals of this project are to, 1) characterize tomato susceptibility genes that are essential for root-knot nematode development, 2) use CRISPR-Cas9 enzymes to mutate key susceptibility genes in tomato, and 3) demonstrate the efficacy of identified targets to control root-knot nematodes in greenhouse and field trials.	$369,068.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	39. Testing Citrus Tristeza Virus Delivery of Bacillus Thuringiensis-Pesticide Proteins in Cara Cara Navels and its Economic Benefits	This project by the University of California, Agriculture and Natural Resources division will support the California citrus industry in response to the threat of Huanglongbing (HLB) disease transmitted by the Asian citrus psyllid (ACP). ACP is endemic in parts of California and innovative tools are required for cost-effective control to prevent introduction of Candidatus Liberibacter asiaticus (the HLB-associated bacterium assumed to be the causal agent) into commercial citrus. A citrus tristeza virus (CTV)- based vector driving the production of engineered Bacillus thuringensis-derived proteins (BtP) to manage ACP populations in citrus has shown promising results in Florida. A bioactive CTV-based vector from a California isolate that can be used to determine BtP's efficacy in growing conditions unique to California will be tested and its economic benefits assessed.	$495,341.00
California Department of Food and Agriculture	$23,934,874.31	40. Developing a User-Friendly Risk Assessment Tool to Assess the Food Safety Risks of Fresh Produce Production and Landscape Use	The Center for Produce Safety (CPS) will partner with the University of California, Davis, to help produce growers better manage the risk of contamination in their fields. Production of leafy greens and other fresh produce grown in California is a billion-dollar industry, concentrated in the Salinas Valley and Imperial Valley. Outbreaks of foodborne bacterial infections due to Escherichia coli (E. coli) O157:H7 have been traced back to produce grown in these regions, which have led to investigations on the origin of the bacterial contamination. Despite much scientific effort, it has been difficult to determine exact causes of E. coli O157:H7 contamination in fresh produce. This project will develop a risk assessment model that will consider knowledge from multiple sources and research studies to determine where and when the risk of a contamination event is increased.	$386,842.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	41. Development of a Risk Ranking Tool for Evaluating Hazards and Risks Related to Agricultural Water Subpart E	The Center for Produce Safety (CPS) will partner with the University of Arizona to develop a tool that ranks the risks posed by agricultural water. The U.S. Food and Drug Administration (FDA) is proposing revisions to some preharvest agricultural water requirements in Subpart E of the Food Safety Modernization Act Produce Safety Rule, requiring a more risk-based approach to assess potential hazards to agricultural water. To enhance industry and regulatory confidence in making risk-based decisions on agricultural water and its use, this project will build a risk ranking tool, backed by quantitative microbial risk assessment (QMRA). This tool will allow users to identify hazards and practices that increase potential risk as well as mitigation strategies that reduce risk, applicable to their production system.	$456,713.00
California Department of Food and Agriculture	$23,934,874.31	42. Characterization and Mitigation of Food Safety Risks Associated with Waxing Roller Brushes	The Center for Produce Safety (CPS) will partner with the University of California, Davis, to optimize the cleaning and sanitizing protocols for waxing roller brushes used by fruit packinghouses. Waxing roller brushes play an important role during the application of waxes onto fruit and vegetable surfaces. However, food safety risks associated with waxing roller brushes have not been well characterized, and the cleaning and sanitizing of roller brushes have been challenging for the produce industry. To address the above knowledge gap and challenge, the team will first evaluate the impact of waxes and wax residues on the survival of pathogens on roller brushes made with different materials. Second, the team will conduct microbial sampling at operating packinghouses during peak packing season to generate first-hand information about the native microbial loads of commercially used waxing roller brushes. Third, the team will characterize the physical and chemical properties of wax residues and compare, optimize, and validate the efficacy of commonly used roller brush cleaning and sanitizing protocols. Optimized protocols will be validated at two pilot facilities for both clean-out-of-place and clean-in-place usages.	$462,246.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	43. Evaluation of Sanitation Protocols for Non-Conventional Food-Contact Surface Materials used in Produce Packinghouses	The Center for Produce Safety (CPS) will partner with the University of Arkansas System, Division of Agriculture, to develop guidance for produce packinghouses on sanitizing hard-to-clean food-contact surfaces such as wood, vinyl, and foam. Data are lacking on the microbial risks associated with current cleaning and sanitizing practices for non-conventional, porous food-contact surfaces that may be found in very small to medium-sized and seasonal packing facilities. Also, there is a need for evidence-based sanitation standard operating procedures for these surfaces. This project will evaluate cleaning and sanitizing practices for porous food-contact surfaces and assess the risks of product contamination influenced by surface or equipment characteristics.	$254,196.00
California Department of Food and Agriculture	$23,934,874.31	44. Improving Methods for the Assessment of Infectious Human Enteric Virus Survival in Produce	The Center for Produce Safety (CPS) will partner with the University of Barcelona to improve methods used to detect and measure infectious viruses in fresh produce. Detection of viruses in produce items is difficult, partly because contamination usually occurs at low levels but also because the molecular tests currently used are time consuming, have low recovery efficiencies, and do not discriminate between infectious and inactivated viruses. This project will optimize current human norovirus (HuNoV) and hepatitis A virus (HAV) concentration and detection methods in leafy greens and berries, to increase efficiency, reduce turnaround time, and provide estimates of viral infectivity and risk of infection.	$358,166.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	45. Advancing Food Justice and Resilience in Low-Income, Black, Indigenous, and People of Color Communities	San Francisco Parks Alliance will fiscally sponsor Urban Sprouts, which believes safe and beautiful outdoor environments are the best conduits for advancing healthy, economically thriving, and socially connected communities; they should be accessible to all. Urban Sprouts offers three programs: garden-based education, job training, and community health and nutrition education. The Community Sprouts program offers hands-on training in regenerative agriculture through a network of Certified California Production gardens and through one-on-one technical support for home gardeners. Community Sprouts focuses on growing specialty crops without chemical pesticides and fertilizers, prioritizing water conservation, and maximizing carbon sequestration. The Sprout Out program is an intensive agricultural job training program that focuses on strengthening transferable jobs skills, increasing financial capacity, farmer's market management, and earning the nationally accredited ServSafe Food Protection Manager Certification. The Community Health and Nutrition Education program provides hands on classes and demonstrations that use culturally appropriate recipes and practices to promote the production and consumption of specialty crops.	$151,710.00
California Department of Food and Agriculture	$23,934,874.31	46. Cultivating the Next Generation of Agricultural Workers in the South Central Valley	Hundreds of specialty crop growing, packing, and processing operations in Southern San Joaquin Valley seek vocational and skill development of their employees. There is a lack of accessible, affordable, and applicable training opportunities that align with the unique characteristics of the farming industry. Most importantly, agricultural workers lack access and opportunity to pursue skill development on their own. The California Farmworker Foundation (CFF) will bridge the gap between agricultural operations and regional community colleges in Kern and Tulare counties to address cultural, social, and economic barriers that exist for both employees and employers. The project will marry existing industry training needs with available educational assets and resources in the region.	$499,715.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
California Department of Food and Agriculture	$23,934,874.31	Grant Administration	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.	$1,795,636.85
Colorado Department of Agriculture	$799,208.65	1. Identification of the Causal Agents of Potato Early Dying Disease Complex and Fusarium Dry Rot in Colorado Potato Crops	To enhance the competitiveness and sustainability of Colorado's potato specialty crop sector, the Colorado Potato Administrative Committee (CPAC) and scientists at Colorado State University (CSU), in collaboration with potato grower cooperators in the San Luis Valley, will identify the causal agents of potato early dying disease complex and Fusarium dry rot in Colorado potato crops. The proposed project aims to (1) identify the pathogen/pest complex causing the potato early dying and dry rot diseases in the San Luis Valley, Colorado, (2) develop molecular detection methods of pathogen/pests responsible for potato early dying and Fusarium dry rot in Colorado, and (3) share the outcome of this project with stakeholders using online and printed communication tools through CSU Extension, CPAC, and other media distribution networks in addition to in-person presentations at producer and industry meetings, extension conferences, and webinars.	$60,905.22
Colorado Department of Agriculture	$799,208.65	2. Supporting New High Elevation Specialty Crop Growers	In order to make the FIT and Incubator program more accessible we are requesting wages, Summer Short Courses (SSC), Spring Farmer Training Immersion (SFTI) scholarships and a living stipend for at least three participants. We will also offer a second-year experience as a Field Assistant that allows a farmer to gain more experience on the same farm taking on more responsibility and gaining new skills. SCBGP funds supported the development of 12 High Elevation Growing Guides (www.tinyurl.com/highelevationgrowingguides) that are available in English and Spanish for print or downloads. In order to serve a more diverse population, we are proposing to translate them into Navajo and Ute and distribute them.	$86,661.62

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Colorado Department of Agriculture	$799,208.65	3. Modeling and Teaching Value-Added Methods to Increase Specialty Crops Sales to Wholesale Buyers in Rural Colorado	Guidestone Colorado will continue its work to evaluate and share institutional buying patterns with local specialty crop producers while growing institutional capacity to accept, process, and preserve fresh, seasonally available produce in rural Colorado. Guidestone will implement growing and processing techniques on-farm to respond to learned institutional buying preferences and utilize commercial kitchen space to process fresh produce in ways responsive to institutional needs. This project will seek to close the gap between locally and conventionally grown produce by testing, refining, and sharing innovative on and off-farm value-added methods to ultimately expand market access to institutional buyers for local growers and increase the value of produce sales in rural Colorado communities.	$74,339.82
Colorado Department of Agriculture	$799,208.65	4. Optimizing Fertilization of Pulse Crops to Improve Profitability and Environmental Outcomes	Colorado State University will conduct research to reduce the use of nitrogen fertilizers by promoting nodulation and enabling the fixation of nitrogen from the atmosphere by pulse crops. Additionally, our study will facilitate the incorporation of pulses into crop rotations for Colorado farmers.	$90,000.00
Colorado Department of Agriculture	$799,208.65	5. Going Viral: Creating a Grape Virus Education and Presence Mapping Program	Colorado State University (CSU) aims to increase the sustainability of the Colorado wine grape industry by creating a virus-focused educational program and establishing the capacity to test for grapevine viruses at the CSU Plant Diagnostic Clinic. Grapevine leafroll and Red blotch are group of wine grape viruses known to cause profit loss both directly by reducing vine vigor and crop yield and indirectly by altering fruit composition, changing the resulting wine flavor. This program will focus on developing free classic extension products such as webinars and factsheets, to provide regionally relevant information and work with the four main growing regions to host a series of in-the-field demonstrations of viral sampling and scouting techniques during fruit color-change (August), the optimum viral sampling time.	$33,664.23

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Colorado Department of Agriculture	$799,208.65	6. 2024 Colorado Literacy Project Featuring the Pueblo Chile	The Colorado Foundation for Agriculture will increase the knowledge and consumption of Pueblo Chile through its 2024 Colorado Literacy Project, an annual agricultural and reading literacy program for elementary schools across Colorado. For this project, a new children's book will be published about Pueblo Chile and Dr. Mark Bartolo, the man who developed the Pueblo Chile. Accompanying academic resources and student activities will be created and used in the classroom. In the spring, farmers, ranchers, and agriculturalists, will volunteer their time to complete classroom visits, reading the book to students, completing activities, and talking about their connection to agriculture. Students will sample a Pueblo Chile product and start their own Pueblo Chile plant during the visit, enhancing their understanding, and creating a memorable experience. This project aims to reach 600 classrooms, 12,500 students, and 550 teachers and volunteers across the state.	$29,697.36
Colorado Department of Agriculture	$799,208.65	7. Exploring Regional Available Substrates for Sustainable Container Production of Colorado Native Plants	Colorado State University will evaluate regionally sourced growing media for use in peat-free or peat-reduced nursery container production of Colorado native plant species. Properties of growing media and plant growth response of up to ten species will be measured in a replicated study over two growing seasons in order to assess suitability of peat-alternatives during the finishing period when native plants are sized up for retail sale. Results will be statistically analyzed and findings will be distributed to green industry professionals at conferences, through educational outreach, and via news releases to industry trade groups. If species that have not been previously used within the industry are found to succeed in peat-reduced container production, these species will be proposed to industry collaborators for introduction, and accompanying finishing protocols will be published. Relevant fact sheets published through Colorado State University Extension will be updated and findings will be submitted for peer review in a journal.	$63,609.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Colorado Department of Agriculture	$799,208.65	8. Exploring Novel Post Harvest Technologies for Storage and Shelf Life Extension of Locally Grown High Quality Peaches	The Colorado State University will address peach cold storage extension challenge in Colorado through cooperation among researchers, tree fruit growers and agricultural professionals and will develop decision-support tools to optimize peach postharvest handling. More specifically the team will optimize hypobaric controlled atmosphere (CA) conditions for long term storage of CO peach cultivars, will combine hypobaric CA storage conditions with remote sensing technologies for optimum postharvest peach fruit quality management and decision making and will optimize grower commercialization with an improved hypobaric CA storage protocol.	$59,546.52
Colorado Department of Agriculture	$799,208.65	9. Validating IPM Tactics to Manage Alfalfa Mosaic Virus in Chili Peppers in Colorado	Colorado State University scientists will establish a sustainable strategy to manage a new pathogen in chili peppers, alfalfa mosaic virus (AMV) by validating the effectiveness of resistant chili varieties and integrated pest management tactics on producers' farms and disseminating results to stakeholders. In a previously funded project, we found that a resistant variety, had significantly lower virus load and significantly higher yields than a susceptible variety, especially when planted early. The goal of the current project is to validate these results on a larger scale in realistic production conditions and with inclusion of other resistant varieties in order to confirm they can be implemented by chili pepper producers in Colorado. This project will result in recommendations for specific varieties that have superior resistance against the virus and planting date modifications that can be implemented in by chili pepper growers. The outcomes of this project will lessen the environmental and economic burden of this devastating disease and improve profitability of chili pepper production in Colorado.	$71,810.19

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Colorado Department of Agriculture	$799,208.65	10. Detection of Potato Mop Top Virus in Potatoes for Export	The Colorado Potato Administrative Committee and Colorado State University will collaborate to improve market relations with Mexico, by developing and evaluating a pre-shipment screening strategy to detect the presence of potato mop-top virus in potato lots for export. We will provide training to growers interested in on-farm testing and the screening service will also be offered by the CSU Plant Diagnostic Clinic.	$34,235.87
Colorado Department of Agriculture	$799,208.65	11. Promoting Colorado Produce at Buyers Events	The Colorado Fruit and Vegetable Growers Association (CFVGA) will showcase Colorado's wide variety of high-quality produce to U.S. produce buyers at trade events featuring high buyer to other attendee ratios to increase sales of Colorado produce. CFVGA will rent a booth and take its display touting the quality and variety of Colorado produce at buyer events in 2024 and again in 2025. CFVGA representatives attending the booth will converse with buyers and encourage them to consider buying Colorado produce. Collateral to be used will include the Colorado produce calendar which lists all produce raised commercially in Colorado and the expected harvest time availability.	$27,405.11
Colorado Department of Agriculture	$799,208.65	12. Improving the Food Safety Capacity of Colorado Specialty Crop Producers and Handlers	Colorado Department of Agriculture Markets Division Fruit and Vegetable Inspection Service will provide services to enhance food safety by training producers and handlers necessary protocols and procedures to ensure shareholders understand and can minimize any microbial contaminants entering the food chain and keeping consumer food products safe for consumption. These measures will be obtained by providing the shareholders with training on Good Agricultural Practices and Good Agricultural Handling Procedures (GAP/GHP) and performing audits to ensure the critical services provided to the shareholders were followed. The scope of the training and audits will encompass growing conditions of products, harvesting conditions, packing conditions, and all general food handling and distribution conditions.	$46,626.36

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Colorado Department of Agriculture	$799,208.65	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$118,692.89
Connecticut Department of Agriculture	$403,931.24	1. Using the Stable Isotope of Nitrogen as a Long-Term Marking Strategy to Eliminate Natural Dispersal Capacity of Spotted Lanternfly	The Connecticut Agricultural Experiment Station (CAES) will utilize stable-isotope methodology to gain empirical information on the dispersal patterns of spotted lanternfly (SLF), a new invasive pest of grapes, to support vineyard pest management strategies. We aim to determine how far, where, and when SLF will move across Connecticut to infest vineyards. Results will be shared with growers through field-days, talks, and the CAES web page.	$93,345.00
Connecticut Department of Agriculture	$403,931.24	2. Evaluating the Use of Organic Amendments to Reduce Crop Drought Stress by Increasing Plant Available Water	The Connecticut Agricultural Experiment Station (CAES) will evaluate the use of organic amendments to enhance soil water storage, increase soil carbon stocks, and reduce plant stress during drought conditions. Improving the intrinsic capacity of soils to hold and provide water to plants, especially in times of high evapotranspiration demand, is critical. This project has two goals: 1) quantify benefits of organic amendments for plant available water capacity, and 2) use plant drought stress indicators as a tool for evaluating the effects of changes to plant available water capacity on crop yield and quality. CAES will carry out knowledge dissemination and outreach through our network of local farmers. The long-term goal is to improve sustainable small-scale and urban agriculture that is resilient to a harsher climate.	$96,162.00
Connecticut Department of Agriculture	$403,931.24	3. Expanding CT Grown Wines into Package Stores & Restaurants	The Connecticut Vineyard & Winery Association will expand and increase sales of CT Grown wines by piloting a marketing effort focused on increasing the visibility and demand for CT Grown wine in package stores and restaurants. Our pilot project will create and test the use of professionally designed and attractive displays in 40 locations, and then use pre- and post-sales data over one year to measure any increase in sales for participating vineyards and wineries.	$62,878.05

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Connecticut Department of Agriculture	$403,931.24	4. Establish a Commissary Honey House and Training Hub in New Haven	Huneebee Project will develop and establish a commissary honey house and training hub to make success amongst existing and aspiring beekeepers in Connecticut more equitable and to make Connecticut more competitive amongst honey producers in the Northeast. This training hub will serve as an incubator for entrepreneurs across Connecticut whose products are derived from the honeybee (i.e., honey, beeswax, and propolis). Honey harvesting and beeswax rendering equipment will be rented on a sliding fee scale; guidance and reliable information on Servsafe licensure, food licensing and registration, labeling, and retail and wholesale compliance will be accessible and free; and scholarships for licensing fees will be made accessible as needed.	$82,300.00
Connecticut Department of Agriculture	$403,931.24	5. Planting to Plating, Increasing Access and Awareness of Connecticut Grown Specialty Crops to Urban Consumers	The Connecticut Department of Agriculture will be responsible for the planning and execution of the project This project will increase access and awareness of Connecticut Grown specialty crops to urban residents through a multilingual video campaign with amplification through social media, website, and consumer e-newsletters. Through these videos, Connecticut Department of Agriculture will not only be able to increase knowledge about how and where specialty crops are grown, but also how to prepare them for eating.	$35,000.00
Connecticut Department of Agriculture	$403,931.24	Grant Administration	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.	$32,290.96
University of the District of Columbia	$243,001.17	1. DCCFN Archdiocesan Farm Project	The District of Columbia Catholic Farming Network (DCCFN) will establish two urban farms on properties controlled by the Roman Catholic Archdiocese of Washington, DC to grow specialty crops for the purpose of educating parish-run food pantry clients and training them in seasonal specialty crop production. Our community engagement will expand specialty crop accessibility for twenty stakeholders.	$120,508.79

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
University of the District of Columbia	$243,001.17	2. Washington Youth Garden Expansion	Friends of the National Arboretum will promote awareness and consumption of specialty crops through field trips and family visitor days at the Washington Youth Garden; produce distribution at schools and summer programs; and increased planting of fruits, nuts, mushrooms, and plants to attract pollinators.	$65,421.00
University of the District of Columbia	$243,001.17	Grant Administration	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.	$57,071.38
Delaware Department of Agriculture	$342,020.44	1. Be Swell and Test the Well to Improve Food Safety in the First State	The Delaware Department of Agriculture, Food Products Inspection Section, intends to help offset the financial burden on Delaware growers by reimbursing growers' water testing cost for the requirements of the Produce Safety Rule. These growers may take a significant financial hit in efforts to comply with new rules and regulations set forth by the Food Safety Modernization Act (FSMA). Parts of these efforts are the extensive and costly water testing that growers are required to perform. Water testing and other effects will continue to provide safe food for Delaware citizens, as well as citizens of the United States and abroad.	$45,000.00
Delaware Department of Agriculture	$342,020.44	2. Connecting Students with Specialty Crop Agriculture	Marvelous Produce will implement a tiered educational approach for both high school and elementary aged students. Agriculture education will be administered based on the growing of strawberries in the spring and pumpkins in the fall. The purpose of this project is multi-faceted. The goal is to reach our elementary students at a young age, on the importance of agriculture and how crops grow. Elementary students will come to the farm on field trips, have a u-pick experience at our farm and leave with a wealth of knowledge on these specific crops. Using our farm and our crops, we have the opportunity with this project to spark more interest in agriculture and create a lasting impact on students of various ages here in the first state!	$20,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Delaware Department of Agriculture	$342,020.44	3. Educating Through Specialty Crop Crates	Delaware Farm Bureau, in relationship with the Delaware Department of Agriculture, will promote specialty crops, while educating children on the importance of agriculture and healthy eating. The Educating through Specialty Crop Crates program will enable elementary school teachers to apply to receive a crate, which will include various hands-on activities, lesson plans, and other specialty crop related materials to utilize within their classroom.	$20,000.00
Delaware Department of Agriculture	$342,020.44	4. Expanding Master Gardener Outreach to Educate Children About Vegetables Through an Entertaining Puppet Show	With new, more easily transported audio equipment and backdrops, Sussex County Master Gardeners, volunteers with Delaware Cooperative Extension, will expand the outreach of their award-winning puppet show, "The Misadventures of Peter Rabbit in Farmer McGregor's Garden", performing before grades Pre-K through 2 in public and charter schools, teaching them how a large variety of vegetables are grown, how they can be prepared, their nutritional value and the importance of pollination. A take home coloring/activity book will be developed and distributed to reinforce the information presented.	$11,700.00
Delaware Department of Agriculture	$342,020.44	5. Farm to Child and Adult Care Food Program (CACFP)/Summer Food Service Program (SFSP)	Boys & Girls Clubs of Delaware will plant, maintain and harvest vegetables, fruits, berries and herbs at its Seaford Mini-Farm operation to be used to supplement daily meals prepared on-site at its self-prep kitchen operation. The kitchen provides more than 1,000 meals daily for youth at sites throughout Kent and Sussex counties, in conjunction with the state sponsored CACFP and SFSP nutrition programs.	$25,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Delaware Department of Agriculture	$342,020.44	6. First in Flowers: Increasing Awareness and Availability of Delaware Grown Specialty Cut Flowers	Spectrum Farms LLC seeks to partner with industry leaders, technical experts, and fellow flower farmers to enhance the competitiveness of Delaware's specialty cut flower crop industry through a multifaceted approach of increasing consumer awareness and interest in Delaware grown specialty cut flowers as well as establish a cohort of Delaware specialty cut flower growers in order to develop a community of support amongst members that can share in growing practices, experience and technical knowledge.	$47,604.00
Delaware Department of Agriculture	$342,020.44	7. Impact of Eca on Root-Knot Nematode Populations and Longevity of Fumigant Applications in Lima Bean	The University of Delaware project team consisting of Drs. Alyssa Koehler and Emmalea Ernest will assess the potential of using apparent soil electrical conductivity (ECa) to predict elevated root-knot nematode populations and monitor longevity of fumigant applications in lima bean production fields. Findings from this research will be shared with producers through meetings and publications while providing a foundation to develop predictive models to improve efficiency of nematode management in lima bean and vegetable production.	$26,500.00
Delaware Department of Agriculture	$342,020.44	8. Operation Home Grown Let's Grow Together - Bridging Homes and Community	Annually, Operation Home Grown (OHG): Let's Grow Together - Bridging Homes and Community will incrementally increase the number of seasonal and year-round specialty crop growers starting in two pockets of New Castle County by implementing a satellite garden program. By equipping the initial 28 growers (14 in each of zone) with small indoor and/or outdoor home gardens, OHG will have the opportunity to educate entire families on the importance, growing processes, and distribution of specialty crops, along with their uses and best storage practices while showcasing the benefits of growing foods communally. OHG's parent organizations, Messiah's Market and The Here We Grow Project (HWG), will provide educational programming, training, and resources for the project on topics ranging from garden planning to cooking the specialty crops grown. Produce safety training will be provided to project participants through a local grower organization.	$37,500.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Delaware Department of Agriculture	$342,020.44	9. School Nutrition Agri-Culture Garden Program	The School Nutrition AgriCulture (SNAC) Garden Program will increase direct education and access to specialty food crops, nutrition and mindfulness programming, and direct horticulture and ecological education to students, parents, and teachers in one additional school in the Indian River School District or surrounding districts with a high level of students on federal reduced or free lunch, above 50 percent. Educational programming will be provided on-site to the school on a regular basis with the SNAC curriculum through the use of permaculture gardens which integrate native horticulture, vegetable gardening, and fruit trees, providing 16 educational lessons for each student every year.	$32,276.10
Delaware Department of Agriculture	$342,020.44	10. Towards Identifying Seedcorn Maggot Risk and Impact to Processing Vegetables	The University of Delaware will identify flight activity periods for seedcorn maggot (SCM) and crop injury patterns associated with SCM activity in early season vegetables, especially processing peas. An SCM fact sheet will be created and distributed to processors and allied farmers.	$5,986.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Delaware Department of Agriculture	$342,020.44	11. Delaware Farm Fresh Initiative Part 2	Delaware Farm Fresh Initiative (DEFF) is a locally grown food facilitation cooperative working to improve local food distribution in Delaware and combat food insecurity. DEFF will provide Delaware farmers from all over the state with a web-based platform and delivery service that will allow them to market and sell their locally grown and curated products to the retail customer, restaurant industry, commercial businesses, farm market stands, and institutions. The cooperative will facilitate the marketing and organization of the web-based platform which will allow small to medium-sized farmers to sell their locally grown and produced food throughout the State of Delaware. This service will allow consumers to specialize their orders, helping reduce food waste for smaller farmers. This web-based system will also create opportunities for small producers to sell their products to larger industry partners looking for local products on demand. In addition, our planned distribution system will serve as an efficient method to get fresh food into food deserts and underserved communities through our donation-based CSA program and markets.	$70,000.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	1. Developing Herbicide-Tolerant Caladiums for Weed Control for the Florida Environmental Horticulture Industry	The University of Florida will develop new caladiums with tolerance to the broad-spectrum herbicide, glyphosate, for the Florida environmental horticulture industry to use as a new and effective tool to control weeds in commercial production. We propose to address this critical need using a three-pronged approach: 1) screening commercial cultivars and breeding lines with glyphosate; 2) inducing and selecting glyphosate-tolerant mutants from tissue cultures; and 3) generating new seeds and conducting chemical mutagenesis to identify caladiums with glyphosate tolerance. Results from this project will have significant benefits to multiple sectors of the industry: Provide growers with a new and effective tool to control weeds cost-efficiently and timely, reduce production costs, and restore their competitiveness, and have a steady supply of caladium tubers to the industry.	$207,267.41

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	2. Integrated Management of Key Pests of Specialty Crops	The University of Florida will develop control strategies for whiteflies and pepper weevil pests of specialty crops. This project proposes to test commercial formulations of Beauveria bassiana and Cordyceps (Isaria) fumosorosea as a stand-alone program and in rotations with conventional insecticides against a standard conventional program to control whiteflies and pepper weevil using tomato and pepper crops, respectively. Biopesticides will be screened against whiteflies, pepper weevil, and natural enemies in the laboratory and tested in the field. Effects on pest population, natural enemies, yield, and production cost will be determined, and findings communicated to the stakeholders through presentations, field days, industry journal articles, and peer-reviewed publications.	$187,952.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	3. Producing High-Quality Ornamental Plants with Reduced Fertilizer Application and N Leaching Using Novel Potting Media	The University of Florida will develop novel potting media for the nursery industry to produce high-quality ornamental plants with reduced fertilizer application and nitrogen (N) leaching. Specifically, N-fixing bacteria and engineered biochars will be incorporated into peat-based potting media at different rates; ornamental plants will be produced in the media applied with different rates of N. Leachates will be collected during plant growth, N and other elements will be analyzed, and plant quality will be evaluated. This project will show that N-fixing bacteria can provide plants with considerable amount of N and engineered biochars can retain N in the media to sustain plant growth, thus reducing fertilizer application and N leaching and protecting surface and ground water resources.	$158,574.14

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	4.Al-Enhanced Sustainable Management of Spider Mites	Researchers at the University of Florida will use recent developments in artificial intelligence (AI), mechatronics, and machine vision to build a low-cost and automated early Spider Mites (SM) detection system in ornamental nursery production. Development and adoption of this technology would greatly enhance the effectiveness and sustainability of ornamental nurseries through early intervention and mitigation of losses from SM. Ornamental nurseries will see enhanced profitability using this technology by reduced SM spread and impact and decreased production costs to manage SM. Training the growers on detecting SM early by using this novel technology will also be addressed.	$178,706.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	5. Breeding for Neopestalotiopsis Resistance in Florida Strawberries	The University of Florida (UF) strawberry breeding program will reduce yield and economic losses from a new fungal disease by developing resistant strawberry varieties through conventional and molecular breeding. In the last four years the Florida strawberry industry has faced the emergence of a new and aggressive strain of Neopestalotiopsis sp., a fungus that causes severe leaf and fruit rot epidemics that reduce yield and even kill plants. Previous work in the UF strawberry breeding program has revealed rare sources of resistance in strawberries that are not well-adapted to Florida production and lack necessary yield and quality. New DNA markers must be developed and utilized in new crosses to combine resistance, yield, and quality in new varieties.	$193,216.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	6. Biological Control of the Invasive Thrips	The University of Florida will mitigate the spread of Thrips (T.) parvispinus and avoid further economic damage to the ornamental industry by providing growers with environmentally friendly tools to manage this pest and ultimately enhance Florida's competitiveness. Research efforts will focus on biological control using predatory mites and insects. Moreover, a field diagnostic tools will be developed to aid the growers with the early and accurate detection of this invasive species. Objectives include evaluations of biocontrol agents under laboratory, greenhouse, and nursery conditions, and development of a field diagnostic guide. Results will be shared with ornamental growers in workshops.	$197,617.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	7. Management of a New Weevil Pest of Celery and Related Apiaceous Crops	In 2020 and 2021, celery and parsley producers in the Everglades Agricultural Area (EAA) reported unusual insect injury in organic and conventional fields. The weevil causing the injury was identified as Listronotus sparsus, which had never been reported as a pest. This weevil is an emerging pest causing substantial losses with limited and costly control options. The University of Florida aims to (1) determine effective weevil management practices using reduced-risk insecticides by conducting field studies, (2) determine weevil biological characteristics for more effective management by conducting laboratory studies, field studies, and field surveys, and (3) develop an educational program disseminating weevil management research results and recommendations. The adoption of these recommendations and gained knowledge are expected to lead to a more effective weevil management strategy, which will enhance the profitability and competitiveness of the Florida celery, parsley, herb, and carrot industries.	$68,501.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	8. Optimizing Blueberry Planting Arrangements for Cross-Pollination and Mechanical Harvesting	The University of Florida will improve pollination and yields of southern highbush blueberries by identifying optimal cultivar planting arrangements for both cross pollination and management, and for optimal fruit quality. We will accomplish this by 1) determining the effects of cultivar planting arrangement on pollination and yields in modern machine-harvestable cultivars, comparing planting designs that alternate cultivars every other row, every two rows, and every four rows; and 2) assessing benefits of cross-pollination for fruit quality traits, including time to ripen, synchrony in ripening, and firmness. We will share results with growers through field days, online extension publications, and presentations at the annual growers meeting.	$180,539.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	9. Improving Sweet Corn Production by Elucidating Novel Dynamics of the Northern Corn Leaf Blight Pathogen	Sweet corn growers in the Everglades region have reported an inability to control northern corn leaf blight (NCLB), caused by Exserohilum turcicum, despite deploying fungicides with different active ingredients as well as increasing the number of applications. There are two hypotheses for the observed NCLB epidemic: 1) the E. turcicum population has become resistant to the fungicides applied; and 2) a new race has emerged in the E. turcicum population. The University of Florida aims to understand fungicide resistance, identify possible sources of NCLB-resistance in maize lines for future breeding projects, and evaluate E. turcicum race structure and distribution. The University of Florida will improve sweet corn production by developing optimized management strategies against NCLB, which will ultimately help sweet corn growers and seed companies.	$193,437.52
Florida Department of Agriculture and Consumer Services	$3,835,063.68	10. Drone-based Smart Monitoring System for Strawberry Using Artificial Intelligence	The University of Florida will develop an automated and integrated drone system that can fly over strawberry fields, take images of strawberry plants, and come back with very important site-specific crop information, including the number of strawberry flowers and fruit, canopy volume, nutrient and water stress of the plants, and an accurate yield forecasting using artificial intelligence.	$169,446.71

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	11. Evaluating Regional Aerial Fungal Spore Sampling Techniques for Improved Early Pathogen Detection in Potato and Watermelon Diseases	The University of Florida will examine how aerial spore samplers utilizing morphological and polymerase chain reaction (PCR) data can improve grower management of late blight and powdery mildew in potatoes and watermelons, respectively. It will also examine the feasibility and utility of adding genetic analysis of fungicide sensitivity traits to the data produced by these systems. The outcomes of this project will strengthen the potato and watermelon industry in Florida through improved fungicide usage and related profits to producers.	$208,513.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	12. Integrated Management of Common Purslane in Leafy Vegetables	The University of Florida will focus on developing an integrated management program for common purslane using the herbicide pendimethalin and other weed control strategies. The project proposes to further evaluate pendimethalin use in leafy vegetables and develop an economically effective integrated management system using the herbicide in combination with other strategies to allow for sustenance and expansion of production to meet growing regional demand. An effective common purslane management program will mitigate its impact and significantly reduce the need for hand labor for weeding while improving leafy vegetables yield and quality.	$112,522.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	13. Improving Florida Radish Consumption and Sales	The Florida Specialty Crop Foundation seeks to increase sales of Florida radishes year over year by 2 percent. This will be accomplished by increasing consumer demand through education about recipes and health benefits. Outreach will occur through sampling in retail stores, a blogger/influencer tour, and a farm tour for South Florida chefs.	$63,300.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	14. Measures to Avoid and Prepare for the Introduction of the Impatiens Necrotic Spot Virus (INSV) in Florida Lettuce	Researchers and statewide extension specialists at the University of Florida Institute of Food and Agricultural Sciences (IFAS) will monitor the Impatiens Necrotic Spot Virus (INSV) in lettuce and other leafy vegetables in the Everglades Agricultural Area, the major producer of lettuce in the state. The team will work with extension agents, producers, and any other stakeholders to understand if the virus causing INSV is present in Florida by sampling leafy vegetables. These partners will sample weeds in nearby fields to lettuce producers and will screen lettuce germplasm adapted to Florida for their resistance to the western flower thrips (Frankliniella occidentalis), the insect vector capable of transmitting the virus. Resistance in lettuce to the insect will provide the opportunity to plant breeders to develop thrips resistance lettuce cultivars adapted to Florida's subtropical environment.	$200,751.00
Florida Department of Agriculture and Consumer Services	$3,835,063.68	15. Developing New Management Tools for the Lychee Erinose Mite in Florida	The University of Florida aims to identify conventional and biorational (i.e. botanical, microbial and mineral) acaricides that, combined with cultural practices, will provide a workable solution for the lychee erinose mite (LEM) (Aceria litchii) pest problem. Research efforts will focus on identifying the best prophylactic and curative treatments against LEM and their combination with different methods of sanitation pruning. Objectives include screening acaricides under greenhouse conditions and the most promising combination of treatments will be field tested under commercial production conditions. This project will have an important extension component to inform lychee growers of the best practices for LEM management.	$189,361.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	16. Evaluation of Exotic Germplasm for Use as Blueberry Rootstocks to Reduce Production Costs and Inputs and Increase Sustainability	The University of Florida will evaluate rare and unique germplasm for use as blueberry rootstocks. The material will be evaluated for its adaptation to nursery practices including propagation by rooted cuttings, graft compatibility, and scion vigor. Established grafted blueberry plants will be evaluated and compared with non-grafted blueberry plants under a low input production system. Information will be shared with growers and industry professionals at field days, grower seminars, and trade publications.	$219,682.65
Florida Department of Agriculture and Consumer Services	$3,835,063.68	17. Application of ClO2 Gas-based Technologies to Control Postharvest Diseases and Enhance Food Safety and Quantity of Strawberry and Blueberry Fruit	The University of Florida will conduct research to develop effective, safe, and commercially applicable and economically sustainable gaseous chlorine dioxide (ClO2)-based treatments to: 1) reduce fruit losses due to fungal decays (such as Botrytis gray mold, Rhizopus rot, and anthracnose); 2) eliminate or reduce E. coli contamination on fruit surfaces; 3) maintain fruit quality; and 4) improve overall fruit shelf life. It is expected that this project will result in new, economically viable and commercially applicable methods to treat strawberry and blueberry fruits for improved shelf life and customer satisfaction.	$207,513.85

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	18. Optimizing Nitrogen Fertigation in Blackberry Production in Florida	The University of Florida aims to develop nitrogen (N) fertigation recommendations for new/young (less than 2 years) blackberry plants of floricane-fruiting `Ouachita' and primocane-fruiting `Prime-Ark Freedom' grown in North and Central Florida. Plant growth and development, cane growth pattern, physiological and biochemical activities in leaves, defoliation/foliation will be measured for two seasons. Leaf tissue analysis for nutrients in particular total N concentration, and the soil will be measured periodically for nitrate concentration and pH; and measured continuously for temperature, moisture content, and electrical conductivity. Optimum moisture level in rootzone required for maximum N use efficiency will also be determined through soil moisture probes. Seasonal patterns of plant growth and development in response to the N fertigation rates, will result in recommendations on optimal N fertigation rate and application timing for blackberry that optimize plant health, productivity/fruit quality while minimizing leaching and ground water contamination.	$291,872.08
Florida Department of Agriculture and Consumer Services	$3,835,063.68	19. Improving Hibiscus Bud Weevil Tolerance Through Germplasm Evaluation and Advanced Plant Breeding	The University of Florida Tropical Research and Education Center will evaluate the cytogenetic variability, genetic diversity, and tolerance of hibiscus bud weevil (HBW) in the newly established tropical hibiscus germplasm collection. The specific objectives are: 1) performing ploidy characterization and chromosome counts, 2) evaluating the HBW tolerance of tropical hibiscus germplasm collection, 3) assessing the genetic diversity within the tropical hibiscus collection, and 4) selecting elite breeding lines and developing new varieties. The evaluation results will aid breeding parents selection and facilitate successful hybridization efforts to develop HBW resilient tropical hibiscus varieties that will allow significant reduction of pesticide use and increase the quantity and quality of tropical hibiscus for sale, thus minimizing environmental pollution and maximizing the competitiveness and profitability of Florida's hibiscus industry.	$176,796.90

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Florida Department of Agriculture and Consumer Services	$3,835,063.68	20. Survival of Pathogens on Work-In-Process Fresh-Cut Produce Ingredients	The Center for Produce Safety will partner with U.S. Department of Agriculture, Agricultural Research Service - Eastern Regional Research Center to evaluate the microbial risks associated with the holding of fresh-cut produce. Work-in-process (WIP) fresh-cut produce, prepared as ingredients of commercial salad products, is held in containers for various times before being utilized. This project will evaluate the survival and growth of Listeria monocytogenes, Escherichia coli O157:H7, and Salmonella on WIP produce ingredients during holding, and the potential for cross contamination between the produce and the holding containers. Models will be developed to predict the survival of pathogens on the WIP ingredients and containers, and to evaluate the cross-contamination risk between the WIP ingredients and holding containers. Results of this study will be summarized in project reports, published in peer-reviewed journals, and presented at the annual Center for Produce Safety Research Symposium.	$282,811.04
Florida Department of Agriculture and Consumer Services	$3,835,063.68	Grant Administration	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.	$127,786.33
Georgia Department of Agriculture	$1,426,271.94	1. Georgia Grown Marketing Project for Promotions: Georgia's Harvest Huddle	Georgia's Harvest Huddle is a coordinated effort by the Georgia Dept. of Agriculture (GDA) to promote fall Georgia grown specialty crops during college football games. The initiative partners with major college football programs to develop menus showcasing these crops and create promotions to increase awareness. Outcomes include increased demand and sales for farmers, awareness of Georgia agriculture, and a strengthened connection between consumers and local farmers. The project aims to create a sustainable and thriving agricultural economy in Georgia while highlighting the state's unique specialty crops.	$104,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	2. Georgia Grown Satsuma Education Project	Georgia Department of Agriculture will partner with local farmers and produce distributors to increase the availability of Georgia grown satsuma oranges in supermarkets, grocery stores, and other retail locations. The project will work closely with retail buyers to educate them about the unique characteristics of satsuma oranges and the benefits of carrying locally grown produce in their stores.	$103,225.38
Georgia Department of Agriculture	$1,426,271.94	3. Increasing Georgia Grown Marketing to Reach National Retail Wholesalers (GPFS show-Anaheim)	This project addresses a simple marketing principle for profitability, 'to increase market revenue you must increase sales to your current customer base while adding new customers'. Georgia Fruit & Vegetable Growers Association will provide Georgia specialty crop growers with the opportunity to 'get in front of' wholesale buyers and accomplish this marketing principle with west coast buyers. Each fall over 20,000 retail grocery and food service wholesale buyers gather for the Global Produce and Floral Show (GPFS) to reconfirm supplier contacts and find new suppliers. This project will provide Georgia specialty growers the opportunity to interact with thousands of wholesale buyers attending GPFS and present a focused message from the Georgia Grown Pavilion as to the diversity and high quality of Georgia Grown products.	$49,991.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	4. Increasing Spec Crop Prod Profitability [by] Access to the Most Current Best Practices (SERFVC)	The Georgia Fruit and Vegetable Growers Association will plan and coordinate the 2024 Southeast Regional Fruit and Vegetable Conference (SERFVC), an educational conference and trade show. The Conference is considered by growers/packers/shippers, to be the premier educational event in the Southeast. The Conference will provide specialty crop producers access to the most up to date information related to specialty crop production, pest management, labor relations, operations, marketing choices and compliance with FSMA food safety regulations. All educational sessions at the Conference will be professionally recorded and posted on the GFVGA YouTube channel and the searchable archives page of the SE Regional Conference website. This will allow growers to be able to review the educational presentations and materials. Additionally, GFVGA will offer a reimbursement stipend for a few growers that qualify as underserved, beginning, or veteran. These reimbursement stipends will cover the cost of travel to and registration for the Conference.	$99,976.00
Georgia Department of Agriculture	$1,426,271.94	5. Innovative Online Marketing to Drive Consumers to Purchase Georgia Grown	The Georgia Fruit & Vegetable Growers Association (GFVGA) will engage and drive consumers to buy and consume Georgia, southeastern, and US fresh fruit and vegetable specialty crops when they are available. Nearly 150 million shoppers used retailer apps or online fulfilment services in 2022. As more and more consumers shop for their household online and using retail apps, it is critical that GFVGA emphasize the need to be specific about their food choices and that we do not miss this audience in our marketing. A survey of more than 1500 discovered that more than 60% of respondents had bought something because an influencer recommended it, per online marketing company SheSpeaks. This grant will allow the GFVGA to market to and educate consumers in online spaces like InstaCart and/or retail shopping apps such as Kroger, and to partner with social media influencers to encourage consumers to purchase Georgia grown produce.	$103,380.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	6. Beyond the Pie: A Targeted Marketing Campaign Promoting Georgia Pecans	Georgia Pecan Growers Association (GPGA) will execute a marketing campaign to get Georgia Pecans directly into the hands of consumers through a collaboration with Georgia-grown Yom Ice Cream based in Atlanta, Georgia. The goal of this project is to raise awareness and create demand for the unique flavor and premium quality of Georgia Pecans by hosting unique sampling opportunities with food and health enthusiasts over the 5-day period around the 4th of July in the metro Atlanta market. This market totals more than 6 million people in population and is the 9th largest metro region in the U.S. The campaign emphasizes Georgia Pecan usage beyond the pecan pie. The goal of this campaign is to create demand for Georgia Pecans beyond the times of year when the pecan is traditionally purchased and used in dessert holiday traditions. GPGA works to create opportunities and buyer partnerships to assist growers in selling their product.	$44,645.00
Georgia Department of Agriculture	$1,426,271.94	7. Managing Citrus Leafminer and Impact on Citrus Canker in Georgia	The University of Georgia Research Foundation and Georgia Department of Agriculture will conduct research work on citrus leafminer (CLM) population dynamics and its management in Georgia citrus that will benefit growers with insecticide application decision-making. Region specific research is critical for efficient insect pest management, as both plant and insect growth are influenced by climatic differences, cultivars grown, and other landscape factors. Seasonal abundance of CLM in relation to citrus growth phenology, level of CLM infestation and resultant crop damage in citrus varieties will be established to determine threshold levels for insecticide intervention, which will reduce unnecessary applications of insecticides on groves.	$96,304.45

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	8. High Density Peach Production in Georgia	The University of Georgia will establish research plots to address the current need for information about high density training systems in peach. High density training systems for fruit production has increased yield efficiency and economic gains. In the U.S., peaches are being tested in high-density systems in Northern and Western states. No trials are currently available in the Georgia and the Southeast using high density plantings. The objective of this project is to test different high-density training system in peaches using various rootstock available in the U.S. and scions with unique architecture characteristics. The idea is to evaluate if using these kinds of scions and/or rootstocks will make feasible high-density peach production. This information will greatly help the Georgia peach industry that has been growing peach trees the same way for the last century and will help create new opportunities to increase efficiency and automatization. All the results obtained from this project will be provided to growers to help with future planting and management needs.	$97,046.00
Georgia Department of Agriculture	$1,426,271.94	9. The Hygiene Status of Conventional vs. Modified Blueberry Machine Harvesters	The University of Georgia will work collaboratively with Oregon State University to compare using the conventional vs. the modified over-the-row (OTR) machines to harvest fresh blueberries. The hard surfaces of OTR machines create significant damage to harvested berries. Attempts have been made to modify standard OTR harvesters by replacing the hard surfaces with softer materials. This project will monitor the hygiene conditions of 9 different sites on the conventional vs. the modified OTR machines cleaned/sanitized with different approaches in Georgia/Oregon in two harvest seasons. Microbial loads on the two types of harvesters will be compared and better cleaning/sanitation approaches identified.	$99,272.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	10. Chemical Constituents of Pine Bark for Nematode Control	The University of Georgia aims to suppress plant-parasitic nematode (PPN) populations in vegetable and blueberry production. Previous studies confirmed that pine bark mulch layered on the soil surface suppresses blueberry PPNs, suggesting water-soluble compounds leaching out of the pine bark are responsible for PPN suppression. Two well-known pine compounds, α-pinene, and d-limonene, have not been evaluated for their impact on blueberry and tomato PPN populations. The project proposes to evaluate: 1) the efficacy of α-pinene, and d-limonene in suppressing tomato and blueberry PPNs; 2) determine the optimal concentration for nematode suppression with little to no phytotoxicity; and 3) evaluate the cost/benefits compared to non-fumigant nematicide. The research findings can potentially increase blueberry and tomato yields at a lower cost by suppressing PPN, as well as provide an effective management option for organic and conventional vegetable and blueberry growers against PPNs.	$99,249.79
Georgia Department of Agriculture	$1,426,271.94	11. AI-Based Tools for Disease Detection in Vidalia Onion	A University of Georgia team will apply artificial intelligence (AI) and machine learning (ML) to create a series of disease management decision support tools (DSTs) for Vidalia sweet onion. The DSTs will allow onion growers to increase the yield and quality of marketable onions while reducing production costs. Our disease management DSTs will range from smartphone apps to robotic solutions that will enable growers and their consultants to scout entire fields rapidly and target prophylactic and curative sprays to areas in the field where disease may be emerging or has emerged. This project will enhance the competitiveness of Vidalia onion growers in Georgia by providing them with the ability to confidently detect onion diseases early and enabling them to make management decisions, which will help with increased yield and quality of marketable onions and an overall increase in efficiency and profitability.	$97,508.50

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	12. Whitefly-transmitted Viruses Overcome Resistance Against TYLCV in Commercial Tomato	There are reports of tomato yellow leaf curl virus (TYLCV) resistance in commercially available tomato varieties in Georgia. The University of Georgia Research Foundation's project is a comprehensive investigation into multiple viruses vectored by whitefly affecting tomato production. We hypothesize that there are virus mutations or interactions between multiple viruses that are responsible for overcoming host-resistance. Our research will allow us to have a better understanding of viruses in our area and make science-based variety selection recommendations to vegetable growers in southern Georgia through UGA extension networks (county extension meetings, the Southeast Regional Fruit and Vegetable Conference, and UGA extension publications). The fundamental knowledge about dominant virus strains and gene resistance during multiple virus infection will facilitate grower adoption of improved tomato varieties and will decrease virus incidence and pesticide sprays while increasing yields and profitability.	$99,988.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Georgia Department of Agriculture	$1,426,271.94	13. Detection and Characterization of Candidatus Liberibacter Asiaticus in Commercial Citrus	Among the challenges encountered by Georgia's emerging citrus industry are diseases, especially citrus greening/huanglongbing (HLB). HLB is caused by the bacterium Candidatus Liberibacter asiaticus (CLas). Early detection of the bacterium is critical to prevent spread and establishment in commercial plantings. The University of Georgia Research Foundation will select commercial citrus groves where HLB has been confirmed and conduct molecular testing of asymptomatic plant tissues. This will facilitate the rapid removal of infected, pre-symptomatic trees. Detection of infected psyllid vectors has proven useful to monitor disease spread in Florida, so ACP traps will be installed and regularly monitored. Finally, to investigate the origin and adaptations of CLas strains causing HLB in Georgia, their genetic diversity will be characterized and compared against populations in other locations. This project will benefit Georgia's citrus industry by providing updated information on the best strategies for early CLas detection in trapped psyllids and in asymptomatic plant samples.	$99,990.80
Georgia Department of Agriculture	$1,426,271.94	Grant Administration	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.	$227,538.00
Hawaii Department of Agriculture	$534,282.75	1. Education and Accessibility of Hawaii Floriculture Products	The Hawaii Floriculture and Nursery Association (HFNA) will educate an estimated 400 members of the floral industry on how to acquire Hawaii flowers and foliage as well as how to use them in everyday designs and other topics of interest to the industry. Growers and shippers of Hawaii flowers and foliage will exhibit their wares in trade booths, giving the attendees a tremendous opportunity to view their products, discuss with them the virtues of using Hawaii flowers in design, how they can acquire them, and potentially discuss future orders.	$46,825.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Hawaii Department of Agriculture	$534,282.75	2. Providing Elite and Locally Adapted Cacao Varietals to a Fledging Cacao Industry in Hawaii	Hawaii is the only US state where Theobroma cacao (cacao) is cultivated and is an emerging origin for “fine flavor” cacao, the main ingredient in fine chocolate. Cacao cultivation and research activities in Hawaii have steadily increased over the last decade, led by efforts to identify and select high performing clones adapted to local conditions. Hawaii cacao growers, chocolate makers and agronomists work in proximity, allowing for close collaboration resulting in effective research and extension. Recent attrition of faculty from the local land grant college (University of Hawaii at Manoa’s CTAHR) and the effects of COVID19 including a hiring freeze and travel restrictions have stalled research and extension efforts, placing the burden of advancement on independent growers and agronomists. The authors are requesting funds for a project that will increase competitiveness of this promising specialty crop industry through the identification, release, and proliferation of elite local cultivars. The project will also shed light on the understudied relationship between growing environment and cacao flavor, commonly known as “terroir” in the fine wine industry.	$49,763.16

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Hawaii Department of Agriculture	$534,282.75	3. Improving Banana and Taro Local Production with Plantlets/Hulies and Education Program	The University of Hawaii will distribute statewide 1,000-2,000 disease-free plantlets and hulis of local/commercial taro varieties and conduct training of good agricultural practices (GAP) and Integrated Pest management (IPM) practices to prevent banana bunchy top virus (BBTV) infection (No known banana variety with resistance to both diseases) and the Taro leaf blight (TLB). This project is expected to improve taro and banana local production, through increasing availability of disease-free plantlets and local/commercial taro huli, reduce the reliance on imports by providing large number of banana tissue culture seedlings to revitalize the declining local production, prevent BBTV and TLB infection through training on GAP/IPM practices, reduce the chance of new diseases introduction to Hawaii by providing disease free seedlings and improving the local production, which will lead to less imports.	$50,000.00
Hawaii Department of Agriculture	$534,282.75	4. Supporting the Expansion of Local Coconut Production by Evaluation and Distribution of Dwarf Coconut Seedlings	The University of Hawaii at Manoa Cooperative Extension will support the expansion of local dwarf coconut production by evaluating established seedling populations to develop practical tools for farmers using easily observed physical characteristics of young trees that can help in the early identification of true dwarf trees, thus reducing the variability and costs incurred in establishing new orchards. Seedlings from intentional crosses of elite dwarf trees will be distributed statewide, and project results will be shared with stakeholders through publications, workshops, and webinars.	$49,607.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Hawaii Department of Agriculture	$534,282.75	5. Improving the Ornamental Industry of Hawaii Through the Evaluation and Distribution of Temperate Cut Flower Crops	The University of Hawaii at Manoa College of Tropical Agriculture and Human Resources (CTAHR) will evaluate and distribute temperate cut flower crops that producers can grow to improve and diversify floriculture production in Hawaii. First, the University of Hawaii CTAHR extension agent will conduct growth trials of at least seven temperate cut including but not limited to: lilly (Lilium sp.), Gloriosa lilly (Gloriosa superba), chrysanthemum (Chrysanthemum sp.), anemone (Anemone sp.), lisianthus (Eustoma grandiflorum), snapdragon (Antirrhinum majus), and yarrow (Achillea millefolium) at two different locations to ascertain best-growing conditions within the first year. During the trials, we will collect growth, harvest, and vase life data.	$36,332.25
Hawaii Department of Agriculture	$534,282.75	6. Technology Transfer to Farmers: Rooting Hermaphrodite Papayas for Their Fields	Hawaii's papaya industry relies primarily on planting seeds that must be procured from trustworthy seed producers. Reliance on seeds increases the cost of production due to the need to rogue female plants in favor of hermaphrodites, making farmers susceptible to disruptions in seed supply. Hawaii Agriculture Research Center (HARC) proposes to train Hawaii island and Oahu farmers to propagate hermaphrodite papayas using rooted cuttings methods developed at HARC.	$49,874.22

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Hawaii Department of Agriculture	$534,282.75	7. Increasing Production of Hawaii-Grown Eucalyptus Through Best Management Practices and Outreach	The University of Hawaii team of extension agents, entomologist specialist and researchers will increase high-value cut foliage eucalyptus production in the State of Hawaii by developing best management practices (BMP) for seed germination, vegetative propagation, pruning, nutrition and pest and disease management. Management practices for older plantings have yet to be determined for each of the sites, since the plants at each location are 1-2 years old. Nutrition, harvesting, handling and seed-harvesting practices will be developed for each of the locations and/or microclimates. To generate BMP recommendations, increasing the number of plants of the most promising species for further characterization is desired. Alternative vegetative propagation methods for eucalyptus will be investigated to ultimately educate propagators with BMP to produce plant material for cropping.	$49,705.00
Hawaii Department of Agriculture	$534,282.75	8. Hawaii Integrated Pest Management Program for Diamondback Moth to Increase the Sustainability of Crucifer Crops	The University of Hawaii at Manoa will conduct bioassay and field tests on Diamondback moth (DBM) insecticide resistance to develop an insecticide rotation schedule using the most effective insecticides for the management of DBM in conventional and organic farms. Also, this program will develop other sustainable management strategies for the control of DBM on crucifer crops. This project's results will mitigate insecticide resistance on DBM leading to an increase in farmers' net profitability by minimizing DBM damage in brassica crops in Hawaii.	$50,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Hawaii Department of Agriculture	$534,282.75	9. Enhancing the Competitiveness of Hawaii Specialty Crop industry Through a State-Wide Media Campaign	In Hawaii, more than 60% of the 7,000 farms are relatively small by size with less than 10 acres of land growing diversified agriculture crops, and 93% of them are operated by family members, according to the 2017 Census of Agriculture. While the State of Hawaii aims to increase food security by supporting Hawaii specialty crops farmers, most of the farmers lack resources, especially for marketing purposes. Thus, there is a need for marketing assistance for the Hawaii specialty crop industry. This project will feature Hawaii specialty crops/farms/farmers in media channels, either traditional or digital media, or both, depending on the RFP, to increase the visibility of the Hawaii specialty crops to build a sustainable agriculture industry in Hawaii.	$106,495.00
Hawaii Department of Agriculture	$534,282.75	Grant Admin	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.	$44,660.00
Idaho State Department of Agriculture	$2,103,808.93	1. Development of Cold Atmospheric Pressure Plasma to Improve Seed Quality and Safety	Boise State University will focus on the development of cold atmospheric pressure plasma (CAPPs) for application in inactivating human and plant pathogens found on seeds. The overarching purpose of this project is two-fold: 1) to develop CAPP technology for use in agricultural processing of crop seeds to improve germination and subsequent yields by decreasing losses due to plant pathogens, and 2) to improve food safety derived from sprouted seed products by inactivating human pathogens responsible for foodborne illness.	$97,429.00
Idaho State Department of Agriculture	$2,103,808.93	2. Collect and Identify Pollinators that Enhance Special Crops 2.0	The College of Idaho will identify specimens collected near to or from specialty crop fields as well seeking to determine if adjacent lands also contain pollinator habitat. Building with data collected in the previous grant period, we will continue selectively to collect specimens with intention of expanding the database.	$62,081.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Idaho State Department of Agriculture	$2,103,808.93	3. Enhancing Carrot Seed Production Through UAS Precision Applications of Fertilizers and Pesticides	The College of Southern Idaho Agriculture Department will create guidelines for industry seeking to employ UAS pesticide applications on specialty crops (carrot seed in this study) and training to individuals seeking careers as UAS Remote Pilots conducting agriculture pesticide applications.	$63,450.00
Idaho State Department of Agriculture	$2,103,808.93	4. Developing a Database of Seed Testing Services to Facilitate Export of Idaho Seed	The Idaho-Eastern Oregon Seed Association through the University of Idaho will develop a comprehensive database of seed health testing services which shall be made available to the Idaho Seed Industry. This will include testing services available from diagnostic laboratories based in Idaho as well as public labs across the whole US.	$35,000.00
Idaho State Department of Agriculture	$2,103,808.93	5. Evaluating Sustainable Approaches for Managing Bacterial Diseases of Onion in Idaho	The Idaho Eastern Oregon Onion Committee through the University of Idaho seeks to conduct replicated field trials in 2024 and 2025 investigating potential disease management approaches for bacterial diseases of onions.	$73,558.00
Idaho State Department of Agriculture	$2,103,808.93	6. Increasing Sales and Demand of IEOOC Onions through VIP Tour, Trade Missions, and Trade Shows	The Idaho-Eastern Oregon Onion Committee (IEOOC) will conduct a VIP Tour that will bring in new buyers annually to visit the Eastern Idaho and Oregon Onion region, where they can witness first-hand the growing and packing practices of the local growers and handlers.	$100,000.00
Idaho State Department of Agriculture	$2,103,808.93	7. Building Demand and Awareness for Idaho Hops through Tours, Social Media, Promotions, and Conventions	The Idaho Hop Growers Commission will provide tours and advertising. Hops are an interesting crop for the public, and the Commission will offer visits to hop fields during harvest for all interested parties. These tours along with other domestic promotions continue to build awareness of Idaho Hops.	$50,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Idaho State Department of Agriculture	$2,103,808.93	8. Agronomic and Herbicide Management Practices for Irrigated Culinary Mustard Grown for Spice	The Idaho Oilseed Commission will work with researchers at the University of Idaho to research the agronomic and sustainable management of irrigated culinary yellow, oriental, and brown mustard grown for spice by conducting field studies to evaluate the optimal seeding rates, nutrient rates (nitrogen, phosphorus, sulfur, copper, manganese, boron, and zinc), and nitrogen application timings.	$183,084.00
Idaho State Department of Agriculture	$2,103,808.93	9. Driving the Demand for Specialty Crops and Diversifying Producer Income Streams through Omni-Channel Marketing	Idaho Preferred will amplify consumer awareness and create demand of specialty crops throughout the State through streamlined sourcing directories, unique in-person experiences, digital and print resources, and direct connection between consumers, their food and agricultural experiences, further increasing the long-term sales of Idaho-grown specialty crops.	$397,000.00
Idaho State Department of Agriculture	$2,103,808.93	10. Idaho Has Great Wine, Don't Be So Surprised!	The Idaho Grape Growers and Wine Producers Commission (IWC) is committed to promoting and championing all Idaho wine grape growers and winemakers. The IWC will focus resources on four main areas - promotion and execution of in-person experiences, brand activation opportunities that include hosting media tours, updating print and digital assets and strategic advertising placement. Through these targeted efforts, the IWC will strengthen consumer and media knowledge of the Idaho wine industry and expand sales and production within the region.	$240,000.00
Idaho State Department of Agriculture	$2,103,808.93	11. What They Don't Teach You in Viticulture and Enology School – The Business of Wine	The Idaho Wine Grape Growers and Wine Producers Commission (IWC) is committed to helping wine grape growers and wine producers in the state of Idaho produce the best quality wine. We will provide educational experiences in growing grapes, producing wine as well as marketing, sales and management so members are better equipped to promote their product to consumers and the media. This grant will offer additional educational viticulture & enology educational opportunities.	$60,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Idaho State Department of Agriculture	$2,103,808.93	12. Showcasing Local Farm Stands in North Idaho while Highlighting Specialty Crops	The Panhandle Farm Corridor in conjunction with all its member farms will use resources provided by this grant to increase awareness of specialty crops available in North Idaho at local farm stands. This will be completed through the creation of an app, updated website, an active social media presence, paid digital and newspaper ads, printed, disbursed materials (fliers and brochures), and experiential education farm tours.	$35,000.00
Idaho State Department of Agriculture	$2,103,808.93	13. Sustainable Alternatives to Fumigation for Managing Potato Early Die	The University of Idaho will develop a set of practical tools/recommendations/practices that Idaho potato growers will be able to use to effectively manage potato early die (PED). This tool kit will be based on soil testing to determine risk from multiple potential causal agents, variety resistance and biopesticide/fungicide alternatives to fumigation.	$145,027.00
Idaho State Department of Agriculture	$2,103,808.93	14. Seed Transmission and Management of High Plains Wheat Mosaic Virus in Sweet Corn Seed Crops	The University of Idaho will develop better and optimal management strategies for High Plains wheat mosaic virus (HPWMoV) disease in sweet corn by studying its epidemiology and transmissibility through seeds, and by examining the effectiveness of various seed disinfection treatments.	$100,000.00
Idaho State Department of Agriculture	$2,103,808.93	15. Developing and Promoting Best Practices for Managing Grapevine Trunk Diseases in Idaho	The University of Idaho will develop and promote best practices for managing grapevine trunk disease (GTD) in the state of Idaho by evaluating control measures, determining sources of inoculum in the environment, and raising awareness through extension and outreach activities.	$92,223.00
Idaho State Department of Agriculture	$2,103,808.93	16. The Role of Co-Infection in Onion Bulb Rot in the Treasure Valley	The Treasure Valley of Idaho and Eastern Oregon produces approximately 30% of the nation's onions. Despite the dry climate, a wide range of bacteria are present in onion crops and cause bulb rot both within the field and in storage. It is thought that the presence of multiple pathogens will increase the severity of onion bulb rot. The University of Idaho will quantify the contribution of various bacterial and fungal pathogens, in combination, to the development of onion bulb rot.	$124,598.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Idaho State Department of Agriculture	$2,103,808.93	Grant Administration	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.	$237,192.50
Illinois Department of Agriculture	$545,731.87	1. A Solar Powered Mobile Cooler for Improving Food Safety and Shelf Life of Strawberry	Southern Illinois University of Carbondale will develop a solar powered mobile system for postharvest strawberry handling to improve shelf life and prevent food born disease. The system will include an enclosed trailer fitted with a CoolBot controlled AC unit, UVC light dome, and shelves for holding strawberry packaging. This system will be powered with clean energy from solar power system that will be mounted overthe cooler trailer and equipped with real time monitoring system for vibration, temperature, and humidity.	$74,980.00
Illinois Department of Agriculture	$545,731.86	2. Gardeneers' Growing Food + Equitable Justice	Gardeneers partners with a network of partner schools, primarily on the West and South sides of Chicago, in low-income, under-resourced communities of color that face barriers to fresh, healthy food access. Our school farm and garden programs contribute positively to the larger food system by building students' awareness, habits, knowledge, and skills to directly address food inequality and become leaders who care for themselves, their communities, and their environment.	$50,000.10
Illinois Department of Agriculture	$545,731.86	3. Illinois Specialty Crop Conference & Educational Series	The Illinois Specialty Growers Association (ISGA) will offer specialty crop farmers educational programs through their Illinois Specialty Crop Conference, virtual educational library, and educational workshops to create in-depth educational resources for the specialty crop industry year-round. To maintain a successful and thriving operation, proactive farmers search for educational opportunities to improve farm viability.	$100,800.00
Illinois Department of Agriculture	$545,731.86	4. Expanding Knowledge Among Low-Income Clients of Specialty Crops Sold at the 61st Street Farmers Market	The 61st Street Farmers Market, a program of Experimental Station, seeks to enhance and expand further its educational programming to rebuild local knowledge of the nutritional benefits and pleasure of consuming foods on the Illinois Specialty Crops list, as well as how to access, grow and prepare them.	$44,529.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Illinois Department of Agriculture	$545,731.86	5. Increasing Access to Specialty Crops Among Underserved Communities Through Culturally Appropriate Market and Educational Opportunities in Rockford	Angelic Organics Learning Center will increase access to and utilization of specialty crops among low income and underserved communities in Rockford, IL by expanding market opportunities for the specialty crops, enabling use of SNAP benefits for the purchase of specialty crops at market stands, and broadening our suite of educational opportunities to educate consumers about producing, procuring, and preparing specialty crops, with special focus on racial and ethnic minorities, and members of the LGBTQ+ community.	$44,985.00
Illinois Department of Agriculture	$545,731.86	6. Cooking Up Community: Highlighting Chicago-Grown Produce in Interactive Nutrition Education	Common Threads, a nonprofit with a 20-year history serving Chicago communities, will increase nutrition knowledge, consumption, and preparation of Illinois specialty crops among underserved communities by expanding community-based nutrition and culinary education programs that feature produce from urban farms, reaching 250 students, in alignment with our organization's local procurement initiative.	$63,266.00
Illinois Department of Agriculture	$545,731.86	7. Creating Food Safety Culture Among Specialty Crop Growers in Illinois – A Community-Based Boot Camp Approach	In this project, the University of Illinois researchers and extension professionals will build a comprehensive food safety program that will instill a “food safety culture” among resource-limited small specialty crop growers, beginning farmers, and socially disadvantaged farmers in Illinois to comply with FDA’s Food Safety Modernization Act (FSMA) Produce Safety Regulations (PSR) and USDA’s Good Agricultural Practices (GAPs) audit requirements.	$74,999.00
Illinois Department of Agriculture	$545,731.86	8. Determining Susceptible Stages of Leaves and Fruits of Cucurbits to Xanthomonas cucurbitae Incitant of Bacterial Spot Disease	University of Illinois will investigate susceptible growth stages of leaves and fruits of cucurbit crops to Xanthomonas cucurbitae, incitant of bacterial sport disease of cucurbits, to optimize effective management of the disease. Result of this study will be presented to growers, industry personnel, extension educators, students, and scientists in local, statewide, regional, and national meetings, and be published in bulletins, newsletters, websites, and refereed-journals. The results are expected to have significant positive impact on production of cucurbits crops in Illinois and nationwide.	$74,942.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Illinois Department of Agriculture	$545,731.86	Grant Administration	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.	$15,723.00
Indiana State Department of Agriculture	$485,809.82	1. Education and Outreach Activities to Improve Food Safety	Purdue University Extension will develop and deliver produce food safety programming for small fruit and vegetable growers in Indiana. In addition to current educational offerings that assist specialty crop growers in achieving compliance with the Food Safety Modernization Act Produce Safety Rule (21 CFR 112), educators will develop practical, research-based trainings that may be offered at the Purdue Student Farm, the Purdue Extension Food Safety Training Hub, and across the state. These two locations will allow for hands-on training to use equipment that will improve food safety practices for small growers. Course materials will be developed, and outreach will be conducted based on stakeholder input that will address real time needs.	$155,966.00
Indiana State Department of Agriculture	$485,809.82	2. Enhancing the Indiana Honey Market: NMR as a Tool for Honey Characterization and Authentication	Purdue University Food Science and Entomology Departments will collect honey samples from beekeepers around Indiana to develop a fingerprinting methodology utilizing nuclear magnetic resonance to assess quality and authenticate the origins and purity of honey produced in Indiana. The information generated through the honey testing will allow us to A database for adulteration and origin testing through NMR fingerprinting will be established to allow honey producers to ensure the quality of their honey and increase the marketability of Indiana honey.	$126,523.00
Indiana State Department of Agriculture	$485,809.82	3. Safe Harvest and Processing of Traditional and Ground Harvest Apples for Hard Cider	Slaughter Orchard and Cidery will demonstrate to orchards, cider mills, cideries, and wholesale buyers that ground harvested apples can be safely and legally harvested, processed, and fermented into hard cider by creating a HACCP Plan, demonstrating the HACCP Plan for stakeholders during multiple field days, and writing a position paper explaining how the process can be achieved safely and legally by others in the apple, cider, and hard cider industries.	$163,680.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Indiana State Department of Agriculture	$485,809.82	Grant Administration	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.	$38,797.71
Iowa Department of Agriculture and Land Stewardship	$355,771.22	1. Helping Iowa Farmers Get Sweet Corn to Market Earlier: Evaluating Sweet Corn Cultivars for Emergence & Vigor in Cold Soils	Iowa State University will evaluate cold soil vigor in early season plantings of super sweet and synergistic sweet corn cultivars. The purpose of this research is for growers to be able to better plan their first plantings and produce earlier sweet corn. Researchers will disseminate the results to Iowa's sweet corn growers through grower meetings, Extension publications, and replicated on-farm trials with collaborating growers.	$29,782.00
Iowa Department of Agriculture and Land Stewardship	$355,771.22	2. Winter, Spring, Summer & Fall: Investigating Strategies for Growing Through it All	Practical Farmers of Iowa (PFI) will support specialty crop growers to test and share about season extension strategies for successfully growing and marketing horticultural crops on the shoulders of the typical growing season. This project will directly serve vegetable farmers who wish to learn how to extend their offerings into fall and early spring.	$30,000.00
Iowa Department of Agriculture and Land Stewardship	$355,771.22	3. Pest & Pesticide Resistance Monitoring for Iowa Fruit Growers	Dr. Xiochen Yuan and Dr. Suzanne Slack of the Iowa State University project aims to provide fruit growers in Iowa with information that is severely lacking regarding disease management in their orchards and vineyards. This information includes which pests are currently problematic and their levels of resistance to antibiotics or fungicides. The general tasks for this project are to survey as many orchards and vineyards as possible to identify Iowa diseases and their pesticide resistance level so growers can make informed decisions for pesticide applications.	$30,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Iowa Department of Agriculture and Land Stewardship	$355,771.22	4. On-Farm Food Safety Upgrades for Fruit & Vegetable Growers to Access More Markets	Practical Farmers of Iowa's (PFI) mission is to equip farmers to build resilient farms and communities. The central objective of this project is to improve the competitiveness of specialty crops in Iowa by supporting on-farm food safety improvements through a financial reimbursement program and by sharing that knowledge at a field day. Expected outcomes include farmers implementing new/improved practices, tools, or technologies to mitigate food safety risks or purchase food safety equipment using grant funds; and an in-person training focused on farm food safety practices.	$30,000.00
Iowa Department of Agriculture and Land Stewardship	$355,771.22	5. Use of Grape Stems to Improve the Quality of Iowa Red Wines	The Department of Food Science and Human Nutrition at Iowa State University will evaluate the use of grape stems, a common by-product rich in tannins, throughout the winemaking process and its impact on the chemistry and quality of red wines. Grape stems will be added back fresh to red grapes at crushing, will be added back after drying and grinding and will be compared with red grapes being processed without removing stems. The goal of this project is to identify the best stem inclusion technique to allow extraction of compounds responsible for astringency mouthfeel, color stability and overall high quality of red wines made from cold-hardy grape varieties in Iowa.	$29,983.00
Iowa Department of Agriculture and Land Stewardship	$355,771.22	6. Developing Accurate Yield Estimation Methods for Iowa Vineyards & Wineries	Iowa State University Extension and Outreach will develop accurate ways to estimate vineyard yields and correlate growing degree days to berry phenological stages to assist in pest management. Current methods of vineyard yield estimation are not readily used due to inaccuracies between predicted and actual yields. This project will track berry growth on a minimum of five commercially important wine grape cultivars in several locations in the state. This will provide accurate yield estimations to allow for more efficient vineyard crop load management and provide growers and wineries with accurate yield estimations to better handle the variable supply and demand between seasons. Being able to provide an estimate on when important berry phenological stages occur will allow for better and more efficient pest control.	$29,947.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Iowa Department of Agriculture and Land Stewardship	$355,771.22	7. Iowa Specialty Producers Conference	The Iowa Wine Growers Association will work with the Iowa Specialty Crop Growers Association, Iowa Department of Agriculture and Land Stewardship, and other industry members and connections to plan, prepare and carry out the 2024 Iowa Specialty Producers Conference. Tasks include, but are not limited to; date, venue, and speaker selections, creating conference materials, exhibitor and sponsor connections, and marketing and outreach to potential conference attendees.	$29,450.00
Iowa Department of Agriculture and Land Stewardship	$355,771.22	8. Increasing Markets for Specialty Cut Flowers in NE Iowa Through Development of a Regional Flower Hub Toolkit	Northeast Iowa Resource Conservation and Development (RC&D) will partner with local producers to develop a Regional Flower Hub Toolkit that will expand the market for specialty cut flowers for producers in Northeast Iowa. The RC&D will partner with three flower farms in NE Iowa - Canoe Creek Produce, Oak & Olive Flowers, and River Root Farm - all of which have been successful direct-to-consumer producers. The toolkit created with direct input from area producers and retailers will consist of three chapters that will focus on 1) producers, 2) retailers, and 3) marketing. At the conclusion of the project the Regional Flower Hub Toolkit will be made available to farms for free.	$29,963.75
Iowa Department of Agriculture and Land Stewardship	$355,771.22	9. Increasing Wholesale Markets for Refugee Specialty Crop Producers in Iowa	Lutheran Services in Iowa's (LSI) Global Greens (GG) program will increase the sale of specialty crops by equipping 25 immigrants and refugee farmers to sell wholesale through in person classes, individualized support, and strengthening partnerships with food hubs in Iowa, as a result at least 300 under-served community members that regularly purchase from GG farmers will have increased access to specialty crops in addition to the wider society.	$30,000.00
Iowa Department of Agriculture and Land Stewardship	$355,771.22	10. Vegging Out to Increase Nutrition & Agriculture Knowledge	The Iowa Agriculture Literacy Foundation will develop new specialty crop resources to include an elementary nonfiction book featuring Iowa specialty crop farms and production, corresponding lesson and activities to encourage nutrition learning, and will disseminate results to stakeholders through professional development and school programs.	$30,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Iowa Department of Agriculture and Land Stewardship	$355,771.22	11. Iowa Kids Garden Day: Launching a Statewide Celebration of Specialty Crop Gardening at Iowa K-12 School & ECEs	Iowa State University Extension and Outreach Farm, Food, and Enterprise Development Program will work with partners to launch a statewide celebration of edible gardening at educational sites, called "Iowa Kids Garden Day," promoting the on-site growing and eating of specialty crops by K-12 school and early care and education (ECEs) communities. This statewide celebration will be collaboratively planned and piloted with local food, nutrition, and outdoor education specialists and implemented by at least 200 school and ECEs, which will increase knowledge and intent to access specialty crops in 100% of participating sites and increase consumption of specialty crops adults and children at participating school and ECE communities.	$14,480.50
Iowa Department of Agriculture and Land Stewardship	$355,771.22	Grant Administration	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.	$35,787.83
Kansas Department of Agriculture	$328,330.06	1. Montgomery County Farm of the Future	Coffeyville Public Schools will increase students' knowledge of specialty crop production along with the number of leafy greens produced and consumed by our students by placing an indoor farm classroom at our high school.	$45,923.96
Kansas Department of Agriculture	$328,330.06	2. Expanding Fruit Production Among Small Scale Beginning Farmers in Kansas City, KS	Cultivate KC will increase the variety, diversity, and resilience of specialty crops grown and sold in Kansas City by providing education, training, and resources to produce & sell more fruit. Through this grant, we aim to increase the number of beginning and small-scale farmers in the Kansas City metro that are growing fruit. Specifically, we will focus on increasing the production of strawberries, blackberries, and raspberries.	$65,267.20

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Kansas Department of Agriculture	$328,330.06	3. Specialty Crop Video Series Highlighting Unique Specialty Crops in Kansas	The Kansas Department of Agriculture will partner Kansas Tourism and a local marketing entity with proven specialty crop experience, to facilitate a Specialty Crops video series. The video series will showcase different regions across the state, featuring 4 different specialty crops, their locations, and producers. The Specialty Crop video series will provide specialty crop growers and consumers with tools to help spread awareness and excitement of Specialty Crops and the unique on-farm experiences they provide throughout the state.	$36,958.68
Kansas Department of Agriculture	$328,330.06	4. Exploring Mungbean Production for Kansas	Kansas State University, in collaboration with Crop Quest Inc. and a farmer (Neville), will establish baseline recommendations for mungbean production and assess crop adaptability to different environments across Kansas.	$58,800.60
Kansas Department of Agriculture	$328,330.06	5. Continued Safety for Produce Growers: Worker Protection Standard Training And Gaps Certification Funding and Outreach	Kansas State University will assist at least 10 Kansas specialty crop producers to receive training and certification as a US Environmental Protection Agency (EPA)-recognized Worker Protection Standard (WPS) pesticide safety train-the-trainer (TTT) so that they can train the workers on their farm. In addition, at least 8 Kansas fruit and vegetable producers will earn Good Agricultural Practices (GAPs) certification during the project, which will help growers access new markets. This will help improve worker safety, produce safety, and profitability of Kansas specialty crop producers.	$58,371.84
Kansas Department of Agriculture	$328,330.06	6. Cultivate Maize: Growing Toward Educating Future Farmers with Sustainable School Meals Through School Gardens	The goal of "Cultivate Maize" is to provide Maize USD 266's 7,590 students grades preschool through twelfth grade with hands-on opportunities to plant, maintain, harvest, and consume produce from a sustainable hydro garden. Cultivate Maize will give all 7,590 students in the district the opportunity to participate in and appreciate sustainable gardening, taste and experience school-grown produce, and explore specialty crop farming as a hobby or career.	$51,426.50

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Kansas Department of Agriculture	$328,330.06	Grant Administration	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.	$11,221.03
Kentucky Department of Agriculture	$332,492.58	1. Sustainable Horticulture Practices, Fruit, and Vegetable Crop Diversification	Kentucky Ag Development Advocacy trains specialty crop producers by implementing a curriculum that addresses the needs of beginning and historically underserved farmers for long-term sustainability. The curriculum will demonstrate sustainable horticulture for climate-smart management of fruits, vegetables, and culinary herb crops for consumers purchase and consumption and this will be demonstrated to producers through a cohort program and workshops which will results in reducing agriculture barriers.	$47,614.11
Kentucky Department of Agriculture	$332,492.58	2. Institutional Purchasing Markets Through Food Is Medicine	Through this project, the Kentucky Equal Justice Center will work with members of the Kentucky Food Action Network (KFAN) to support the establishment of sustainable Food is Medicine practices across Kentucky, which will lead to a decrease in food insecurity and increase in positive health outcomes. Our project will only focus on medical/health claims that are backed by the FDA and/or the Dietary Guidelines for America.	$53,062.10
Kentucky Department of Agriculture	$332,492.58	3. Improve Product Labeling for Kentucky Honey Consumers and Expand Honey Production in Kentucky	Through its Certified Kentucky Honey Producers program, the Kentucky State Beekeepers Association will improve product labels for Kentucky honey producers and consumers while expanding honey production through increased education for beekeepers to implement best practices in their apiaries. Online resources such as newsletters and classes through the KSBA website (KYBEES.ORG) will supplement the in-person demonstrations and beekeeper education provided by the Certified KY Honey Producers manager and KSBA Officers and Volunteers.	$25,109.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Kentucky Department of Agriculture	$332,492.58	4. Expanding Consumption of Kentucky Proud Produce in Food Desserts During the Shoulder Seasons	Rootbound Farm and New Roots, Inc. will collaborate to bring fresh Kentucky Proud “farm shares” to families facing food insecurity in the traditional “off season” months of November - January. The project will support consumer engagement with local produce outside of the traditional summer season, helping to grow the market for year-round local produce and provide a more robust and secure local food supply.	$43,761.00
Kentucky Department of Agriculture	$332,492.58	5.Defining Best Production Practices for Fortified Wines Made from 'Norton' Grapes	The University of Kentucky will define best practices for producing fortified wines made from the wine grape cultivar ‘Norton’, including performing experiments at the University of Kentucky Winery and at participating commercial wineries in Kentucky to test the effect of various grape derived spirits and aging practices on product quality.	$50,339.06
Kentucky Department of Agriculture	$332,492.58	6. Suppression of Fruit and Vegetable Fungal Rotting by Plant Natural Products	At the Department of Plant and Soil Sciences, University of Kentucky, we will test whether specific plant natural products can suppress the microbial rotting of fruits and vegetables. Our aim is to increase the shelf life of fresh produce safely and naturally.	$25,269.47
Kentucky Department of Agriculture	$332,492.58	7. Ribes Evaluation for Eastern Kentucky	University of Kentucky Department of Horticulture will research other varieties of Ribes (Hinnomai Red Gooseberry, Titania Black Currant, Viking Red Currant and Primus white currant) that are more resistant to White Pine Blister Rust and Mildew limiting potential disease issues. They will determine the suitability of these crops for eastern Kentucky growth.	$17,155.26

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Kentucky Department of Agriculture	$332,492.58	8. Utilizing Abandoned Coal Mine Infrastructure for Sustainable Mushroom Cultivation	The University of Pikeville proposes to determine the potential of transforming abandoned coal mines into productive and sustainable mushroom farms by duplicating growing conditions in a controlled environment; develop and implement a method for testing the feasibility of recycled waste streams in the production of mushroom growth substrate, develop and test regional mushroom varieties for use in cultivation, and investigate best methods for growing specialty mushrooms in controlled systems that will entail site assessments, substrate preparation, controlled environment agriculture, development of mushroom strains and varieties of native mushrooms, economic analysis as well as outreach and education to the community.	$41,129.51
Kentucky Department of Agriculture	$332,492.58	Grant Administration	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.	$25,896.75
Louisiana Department of Agriculture and Forestry	$355,925.38	1. Tea Terrior: Tailored Soil Fertility and Microclimate Management for High Quality Louisiana-Grown Tea	The Louisiana State University Agricultural Center will conduct field and laboratory research studies to evaluate the effects of soil fertility and microclimate management practices on the growth of tea plants, Camellia sinensis, a new specialty crop for Louisiana, and additionally, the quality of processed tea sampled from these treatments at Year 3. Soil fertility and shade treatments will be applied to a newly established research field at Burden Botanic Gardens (Baton Rouge). In addition, a newly released design of a selective harvester will be investigated at Hammond Research Station (Hammond) and a commercial tea farm (Fleur de Lis Tea Co., Amite) to compare its efficiency on harvesting from mature tea plants grown under full sun and partial shade.	$83,279.20

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Louisiana Department of Agriculture and Forestry	$355,926.38	2. Evaluation of the Effects of Raw Poultry and Cattle Manure Application in the Production of Bell Pepper and Radish Crops with Two Different Land Ap	The Louisiana State University Agricultural Center will establish field plots to determine how the usage of manurers (cow and poultry) affect soil health and food safety. Two crops will be produced, bell peppers in the spring and radish in the summer/ early fall. These crops were selected as one is in direct contact with the ground during production (radish) and the other is trellised above ground (bell pepper). Manure will be top dressed or incorporated into the plots. Additional plots without manure will be evaluated as a control. Before, during and at harvest, soil samples will be collected for human pathogen detection. Soil samples will be collected to test microbial populations and mineral availability in the soil. At harvest, the edible portion of the crop (radish - root) (bell pepper - fruit) will be tested for the presence of human pathogens. This project aims to find a balance of using organic or sustainable-based manures in a safe manner to protect humans from disease but also enhance soils on existing farms. These production practices will be demonstrated and extended to the commercial industry and hobby gardeners via field days and printed and online extension publications.	$61,424.00
Louisiana Department of Agriculture and Forestry	$355,927.38	3. Examine the Application of Organic Friendly Antimicrobial Agents Such as Propionic and Lactic Acid Against Microbial Risks on Specialty Crops	The Louisiana State University (LSU) Agricultural Center will investigate and identify generally recognized as safe (GRAS) levels of propionic acid, lactic acid, or a mixture of propionic acid/lactic acid that decontaminate Louisiana specialty crops (bell pepper, cucumber, or cantaloupe) against pathogenic bacteria by preventing Gram-negative and Gram-positive bacteria to attach, grow, and form film on the surface of produce. The minimum inhibitory concentration of propionic acid or combination of propionic acid and lactic acid that produces at least 95% bacterial growth reduction and the minimum bactericidal concentration that does not allow bacterial growth will be determined.	$37,058.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Louisiana Department of Agriculture and Forestry	$355,928.38	4. Cold Plasma Reduction of Microbial Loads and Maintenance of Fresh Produce Quality Retention	The Louisiana State University Agricultural Center will determine the effectiveness of cold plasma (CP) in reducing Salmonella enterica, Listeria monocytogenes, and Escherichia coli O157:H7 levels on the surface of strawberries and in reducing spoilage microbial loads, thereby extending the shelf life. Non-pathogenic bacteria Enterococcus faecium, L. innocua B-33016, and E. coli ATTC 25922 will be used as surrogates to evaluate the effectiveness of the CP. We will inoculate strawberries with pathogenic bacteria surrogates (non-pathogenic bacteria); subsequently, we will apply CP on the surface of strawberries for various exposure times and determine the effectiveness of the CP. The application of CP is expected to assist growers in reducing pathogen loads, enhancing safety, and extending the shelf life without compromising the overall quality of strawberries during refrigerated storage.	$59,765.00
Louisiana Department of Agriculture and Forestry	$355,929.38	5. Development of Sustainable Nanoparticle Coating Materials to Reduce Sweet Potato Postharvest Deterioration and Maintain Market Quality	The Louisiana State University Agricultural Center will utilize nanoparticle technology to develop sustainable and edible coatings to reduce Louisiana-grown sweet potato postharvest deterioration, weight loss, sprouting, and decay, while maintaining root market quality. This new and innovative postharvest technology can have broad and practical uses for extending the postharvest life of several Louisiana specialty crops, in addition to sweet potato. The beneficial effects of the nanoparticle coatings on sweet potato external quality will be complemented by quantification of the root internal composition and quality, including individual sugar content, vitamin C, nutraceutical compounds, and total antioxidant values. The combination of the beneficial external effects and internal root quality maintenance effects will be useful in future sweet potato marketing programs. Collaborating growers will be asked to evaluate the nanoparticle coating performance in terms of sweet potato market quality, applicability, and other relevant issues for the technology.	$85,461.30

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Louisiana Department of Agriculture and Forestry	$355,930.38	Grant Administration	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.	$28,433.70
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	1. Building Specialty Crop Markets through Immigrant Education Programs	Farms for Food Equity, a 501(c3) non-profit agricultural organization and its partners will work with ethnic organizations to develop the market for Maine specialty crops through a comprehensive program of awareness, education, and promotion of crops that are suitable for multicultural cooking traditions.	$86,700.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	2. How to Mitigate the Effects of Leaf Spots on Wild Blueberry Health, Yield, and Climate Resilience	This University of Maine project continues a project started in spring 2023, which is examining the effects of leaf spot diseases on wild blueberry health and yield, and the use of fertilizer, fungicides and irrigation to mitigate the effects of leaf spot infection under the current and a warming climate. Outcomes will include recommendations on effective leaf spot control and that will be disseminated in grower meetings, field days with demonstration plots, fact sheets and other publications.	$83,648.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	3. Quantitative Detection and Management of Powdery Scab and Mop-Top Virus of Potato	The University of Maine proposes to conduct laboratory and field studies to develop a tool for the detection and quantification of potato powdery scab. The outcome will be expected to improve soil potato production by avoiding heavily infested soil and applying appropriate soil treatment. We will team up with potato extension specialists and collaborate with Maine Potato Board. Field trials will be conducted on Aroostook Farm in Presque Isle, ME. A full-time technician will operate the cultivation. A graduate student will focus on laboratory and greenhouse work, data collection, and analysis. The generated information will be disseminated to stakeholders through field days, Maine potato conferences, Extension meetings, and academic conferences.	$80,624.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	4. Fresh Maine Wild Blueberries: Industry, Extension, Academic Collaboration to Protect and Enhance Safety and Quality	The University of Maine College of Natural Sciences Forestry and Agriculture and Cooperative Extension will partner with Maine wild blueberry growers to enhance food safety and quality of fresh product by assessing its sanitary quality throughout small scale fresh pack processing environments, developing improved handling techniques to extend fruit shelf life and developing educational materials to be disseminated to industry members through grower meetings, factsheets and webinars.	$38,433.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	5. New Tools for Increasing Apple Production Profitability	The University of Maine at Highmoor Farm will test and implement strategies for reducing the risk of growing Honeycrisp apples. We will test three methods to predict the risk of bitter pit storage losses so that growers can determine which orchards can be safely cold stored until they can be marketed. We will also test a new product, Protone®, for prevention of bitter pit. Apple growers involved in the testing and implementation will be directly informed of results. Results will be disseminated to apple growers through a newsletter, grower meetings and demonstrations with individual growers.	$36,355.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	6. MOFGA's Maine Produce Safety Improvement and FSMA PSR Certification Project	The Maine Organic Farmers and Gardeners Association will continue its successful work, funded by the SCBG program, to enhance food safety and increase the number of farms able to come into compliance with the Food Safety Modernization Act (FSMA) Produce Safety Rule, and/or a GAP/GHP audit, by providing educational trainings that incorporate FDA-approved content and a certificate that is needed to comply with FSMA, workshops, demonstrations about food safety, one-on one technical assistance, and financial resources to Maine farmers.	$87,309.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	7. Meeting House Herb Farm Increasing Sustainability of Maine Farms with Herbs	Meeting House Herb Farm and Maine Organic Farmer's and Gardeners Association, MOFGA, will work together to educate and support business development for over 25 women owned/operated Maine farms. The purpose is to increase sustainability of Maine farms by adding medicinal herbs to farm crop plans. This will result in increased revenue, sustainability and biodiversity on these farms as well as increasing the market share of the medicinal herb market for US growers.	$86,886.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	8. Grow Operations for the Maine Flower Collective (MFC): Pilot a New In-Person Wholesale Flower Market	The Maine Flower Collective will launch a pilot program to create an in-person, wholesale flower market in 2024 to strategically provide local flower growers with a dynamic new channel by which to sell their Maine-grown floral products to a wider consumer base of Maine wholesale buyers, who are eager to preview available floral varieties and add further products to their existing MFC pre-orders.	$83,316.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	9. DACF Developing a Farmers Market Price Reporting Tool for Maine Specialty Crop Growers	Maine Department of Agriculture, Conservation and Forestry (DACF), in collaboration with experienced agricultural service providers, will support the development and expansion of a farmers market price reporting tool to provide direct-market growers with a better understanding of market trends, potential opportunities for growth and expansion, and essential insight into enterprise profitability.	$10,500.00
Maine Department of Agriculture, Conservation, and Forestry	$655,134.94	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$52,279.68

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Maryland Department of Agriculture	$457,697.50	1. Optimizing Propagation and Drying Techniques for Medicinal Plant Production	The University of Maryland Eastern Shore proposes a project to optimize propagation and drying techniques for herbs and medicinal plants to enhance the competitiveness of Maryland herb growers and provide them with avenues for profitable production. Specific objectives for the project include comparing seed propagation and tissue culture methods to identify superior techniques that produce high biomass yield; and comparing different drying methods to identify the best drying method for high quality dry herb production. Clean stock plant material produced through tissue culture can be distributed to farmers and nurseries to produce high-quality herbs and medicinal plants. Additionally, generating information on the use of superior drying techniques that are approved by the Maryland Department of Health will provide the impetus for the development of a robust herbal industry.	$25,000.00
Maryland Department of Agriculture	$457,697.50	2. GroupGap for Maryland Farmers to Sell to Schools	Moon Valley Farm, a certified organic farm and food hub that sells to Frederick County Public Schools, will become the group leader for Group GAP certification for dozens of area farmers to expand our school sales to other counties and teach beginning farmers how and why they should prioritize food safety and GAP certification in their operations through field days and webinars.	$64,000.00
Maryland Department of Agriculture	$457,697.50	3. Managing Stubborn Soil Borne Diseases in High Value Vegetable Crops	University of Maryland Extension will investigate novel approaches to managing critical soil borne diseases in high value specialty crops including watermelon, tomatoes, and high tunnel vegetables. The research project will include replicated and randomized field experiments conducted on 24 sites over two years to evaluate and develop recommended protocols for commercial steam soil sterilization and grafting of watermelon tomatoes to manage soil borne diseases. Research results will be disseminated through field days, twilight hours, publications, and winter meetings.	$25,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Maryland Department of Agriculture	$457,697.50	4. Produce Safety GAP/GHP Program Market Access and FSMA Produce Safety Rule Compliance	The Maryland Department of Agriculture, Food Quality Assurance Program along with the University of Maryland Plant Sciences and Landscape Architecture Department, University of Maryland Extension and the University of Maryland Agricultural Law Education Initiative will partner to provide a coordinated educational food safety program that continues to build off lessons learned from previous projects. Collaborated work will help to continue to assist specialty crop producers in complying with the FSMA Produce Safety Rule and gaining/maintaining market access through successful completion of GAP audits. Program will accomplish these goals by providing formal and informal training, webinars, videos, educational materials, certification of compliance of food safety plans and practices, food safety technical assistance, cost share funds to assist in the implementation of effective food safety practices and verifying efficiency of food safety practices through inspection and certification of compliance.	$126,000.00
Maryland Department of Agriculture	$457,697.50	5. Compatibility and Risks of Pesticide Tank Mixes Used on Maryland's Specialty Crops	The University of Maryland will assess the compatibility of pesticide tank mixes and evaluate its environmental risk to effectively manage pests and diseases with minimal non-target effects. Specifically, we will employ integrated approaches to 1) evaluate if biological fungicides in tank mixes are compatible with conventional fungicides and insecticides, 2) assess the toxicity and risk of pesticide mixtures on butterfly pollinators, and 3) share findings and measure outcomes (participant knowledge gain and intended changes in practice) at extension meetings. The project will inform pesticide mixtures for the effective management of fungal diseases and insect pests while allowing growers to choose the least hazardous options to protect pollinators and endangered/threatened species.	$25,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Maryland Department of Agriculture	$457,697.50	6. Maryland's Best - Promoting Maryland Specialty Crops to Consumers and Distributors	Maryland Department of Agriculture's Marketing Section will promote local specialty crops to consumers and distributors through advertising, a podcast highlighting specialty crops and the farmers who produce them, the website Marylands.Best.net, Maryland Public Television, business to business meetings, and point of sale.	$148,268.00
Maryland Department of Agriculture	$457,697.50	Grant Administration	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.	$43,622.13
Massachusetts Department of Agricultural Resources	$459,737.34	1. A Multidimensional Program Celebrating the Sustainability and Nutritional Culture of the Massachusetts Cranberry	The Cape Cod Cranberry Growers' Association (CCCGA) will improve public knowledge and awareness on the Massachusetts cranberry and communicate the importance and relevance of sustainable agriculture. This will be accomplished through the development of comparative tasting workshops, educational visuals like a cranberry bog cross-section terrarium, the development of brochures highlighting sustainable agriculture within the cranberry industry and neighbor relations to cranberry bogs, a stand-alone graphic display, and through the development of pertinent relationships with local businesses and business organizations. Together, these unique educational experiences communicate how cranberries coexist with the planet through the symbiotic relationship of growers, the environment, and society to overall improve general knowledge on the cranberry industry.	$68,477.87
Massachusetts Department of Agricultural Resources	$459,737.34	2. Promoting the Purchase of Native Plants Through the Creation and Dissemination of Engaging Ecology Curriculum	Massachusetts Native Plant Growers will promote the purchase of native plants by creating and sharing curriculum about the importance of native plants for students in grades k- 8. A website, titled "Heal the Field: Teaching Ecology through Native Plants" will be created to promote native plants for their educational value. It will include links to MA purveyors of native plants and downloadable curriculum units about the different ecosystems created by native plants.	$59,280.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Massachusetts Department of Agricultural Resources	$459,737.34	3. Empowering Farmers: Harnessing Microbes for Improved Soil Health and Crop Production	The goal of this project is to increase farmers' understanding of soil microbes as a part of a sustainable specialty crop production system and help them adopt new tools and practices to support soil microbes and soil health. To address this goal, NOFA/Mass will provide farmers with (1) the education to help them understand the value of soil microbes and utilize best management practices to support diverse microbial populations, (2) the technology and tools to evaluate soil microbes in support of these sustainable practices, and (3) the knowledge to sustainably and effectively amend and manage soils to reduce fertilizer and pesticide use. To accomplish these outcomes in support of the project goal, NOFA/Mass will develop education events geared towards urban and rural farmers across Massachusetts, provide project farmers with novel tools and technology to evaluate soil microbe populations, and help farmers sustainably and affordably manage and amend their soils to promote soil microbes and soil health.	$79,681.00
Massachusetts Department of Agricultural Resources	$459,737.34	4. School Based Farmers Markets: Engaging Children and Families in the Massachusetts Food System	The Regional Environmental Council's Mobile Market and School Gardens program will build children's awareness of and enthusiasm for specialty crops while promoting farmers markets and the Healthy Incentives Program to parents. We will accomplish this by bringing on site “mini markets” to Head Starts and Worcester Public Schools where children will have the opportunity to explore new foods, “shop” for their families, and bring home educational resources on local farmers markets and the Healthy Incentives Program. In parallel, we will sustain and expand access points for the purchase of specialty crops designed to be more accessible for parents, such as the Mobile Market online Pre-Order program.	$75,418.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Massachusetts Department of Agricultural Resources	$459,737.34	5. Meet the Farmer & Nutritionist - Promoting Specialty Crops and Farmers Market Nutrition Incentives to Schoolchildren/Families	Sustainable CAPE will increase child and adult nutrition knowledge and families' consumption of specialty crops by developing and implementing Meet the Farmer curriculum to promote fresh, locally-sourced, Barnstable County produce. Children, their families and teachers in local schools, plus a regional after-school children's community garden, and program participants through community organizations, will meet local farmers, educators and nutritionists. Specialty crops will be promoted through experiential education focused on growing, harvesting, sampling and understanding nutritional value.	$72,631.00
Massachusetts Department of Agricultural Resources	$459,737.34	6. Creating Novel Extension Resources to Support MA Cut Flower Growers, and Promote Local Flowers	The University of Massachusetts Extension Vegetable Program will support and promote cut flower producers in Massachusetts by hosting virtual and in-person programs on key flower growing topics. Will also create marketing resources to help local flower growers promote their products, assemble enterprise budgets for one or more key flower species, and establish a cut flower email list. This is a first step towards creating Extension resources to support this growing and promising local industry.	$66,856.00
Massachusetts Department of Agricultural Resources	$459,737.34	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$36,725.55

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	1. International and Domestic Promotion of Michigan Specialty Crops	The Michigan Department of Agriculture & Rural Development's (MDARD) International Marketing Program will continue to collaborate with the Cherry Marketing Institute, Michigan Bean Commission, Michigan Apple Committee, the Michigan Blueberry Commission, the Michigan Asparagus Advisory Board, the Michigan Vegetable Council, and the Michigan Potato Industry Commission to promote Michigan specialty crops both domestically and internationally. The purpose of this project is to increase international and domestic marketing and sales opportunities for Michigan specialty crop companies and commodity groups through participation in buyers' missions and trade shows.	$158,395.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	2. Demand for Blueberries: Understanding Consumers' Preferences to Increase Michigan Growers' Market Competitiveness	Faculty at Michigan State University will conduct empirical research to understand the factors that affect consumers' demand for blueberries, utilizing national-level longitudinal data from consumers and retailers. The findings will be disseminated to the industry via a partnership with MBG Marketing, with the goal of assisting growers increase their market competitiveness and resilience	$97,878.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	3. Decision Support to Improve Asparagus Yield, Quality, and Industry Competitiveness Under Weather Extremes	The Michigan Asparagus Advisory Board, in cooperation with Michigan State University, seeks to develop decision support tools and mitigation strategies to address critical challenges to asparagus production, profitability, and industry competitiveness in the face of changing and extreme weather conditions. This project will develop models to predict asparagus spear emergence and understand temperature and soil moisture thresholds for spear quality reductions during harvest. We will also pursue research-based practical recommendations for integrated irrigation and nutrient management strategies to limit the negative impacts of high temperatures and drought conditions during all phases of asparagus production.	$100,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	4. Improving Irrigation and Fertilizer Management in New and Established High-Density Apple Orchards	The Michigan Tree Fruit Commission plans to improve irrigation and fertilizer management in new and established high-density apple orchards, ultimately improving apple quality and production and increasing the resiliency of apple production to climate change. Michigan apple growers have adopted high-density planting systems, which utilizes dwarfing trees (small and shallow root systems), making irrigation management a necessity for achieving maximum tree growth and yield. Our project proposes to: 1) Evaluate the performance of multiple sensing technologies in monitoring soil moisture levels, tree water stress, canopy temperature, and soil electrical conductivity, 2) Determine the optimal irrigation scheduling method and nutrient application strategy to support tree establishment, shoot growth, stub renewal, and fruit quality for high-density apple production, and 3) Promote efficient irrigation and fertilizer management to apple growers.	$98,237.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	5. Time for Alternatives to Glyphosate: Post- and Pre- Herbicide Combos	The Michigan Nursery and Landscape Association (MNLA) will develop science-based environmentally responsible weed control practices that foster skilled job creation, sustainable business practices, employee wellbeing and health. The goal of this trial is to evaluate two timings of the same 10 selective and non-selective postemergence liquid herbicides on traditional and non-traditional MI nursery crops as alternatives to glyphosate.	$100,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	6. Advancing Etiology, Detection, and Management of Michigan Blueberry Viruses	The Michigan Blueberry commission is requesting funding from the MDARD/USDA Specialty Crop Block Grant Program in collaboration with the Small Fruit and Hop Pathology Laboratory at Michigan State University. As the Michigan blueberry industry is changing, more research on the presence, diagnostics, and management of viruses needs to be done to protect the grower's investments. This proposed research will evaluate the current status of Michigan viruses and develop new management resources by 1) conducting a statewide survey of blueberry viruses, 2) performing sequencing analysis of blueberry virus A, 3) evaluating the transmission effectiveness of aphid vectors, and 4) communicating findings to growers and technology to diagnostic clinics.	$99,000.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	7. A New Leaf Disease and a Seedling Root Rot Require Solutions for Celery Growers	Celery Research, Inc., in partnership with Michigan State University and Mary Hausbeck, Ph.D., will conduct the needed activities to solve two recently identified celery diseases and will be responsible for this project. The overarching goal of this project is the development of leaf blight and root rot mitigation strategies and extension outreach and programs for Michigan celery growers. Outcomes of this project are that growers will gain knowledge about: 1) The newly identified leaf blight of celery caused by Stemphylium vesicarium and necessary mitigation measures and 2) New fungicides including biorational and conventional fungicides to lessen Pythium root rot on celery greenhouse transplants for field production.	$97,451.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	8. Sustainable Dry Bean Production Systems: Improving Production for an Evolving Market Place	The Michigan Bean Commission (MBC) will work to improve environmental and economic sustainability of dry bean production in Michigan while reducing the reliance on synthetic crop inputs to better meet the demands of a changing marketplace.	$100,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	9. Can New Cultivars be the Answer to Rhizomania, the New Table Beet Disease?	The Michigan Vegetable Council, along with Michigan State University, seeks funding to investigate a newly reported disease, Rhizomania, on Michigan table beets. In 2017, a significant percentage of the beets were infected with the beet necrotic yellow-vein virus (BNYVV) and Rhizomania disease was confirmed. Rhizomania results from a partnership between a long-lived soil-borne organism (Polymyxa betae) and BNYVV. Symptoms include proliferation of secondary roots and petioles; beets are unmarketable. Genetic resistance is a practical control but is not currently used as resistant varieties may not have desirable horticultural traits. We will assess resistant cultivars for root quality and horticultural traits in greenhouse and field trials with grower cooperators.	$98,084.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	10. Discovering and Targeting Key Buyers for Michigan Sweet and Tart Cherries	In this project, the Michigan Cherry Committee (MCC) will partner with cherry marketers /processors to exhibit and attend various ingredient, foodservice and retail focused tradeshows. Collectively, we will promote and highlight the many attributes and year-round availability of Michigan-grown processed tart and sweet cherries to key decision makers at popular food tradeshows. This project will allow the cherry industry to assess various trade shows and identify new potential buyers to increase the sale and use of Michigan grown cherries and expand the market domestically to improve Michigan specialty crop sales.	$125,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	11. Influence of Tip/Leaf Burn and New Fungicides on Onion Stemphylium Leaf Blight	The Michigan Onion Committee has partnered with MSU researcher, Dr. Mary Hausbeck, to develop new strategies to protect the state's onions from the leaf blighting pathogen, Stemphylium vesicarium. Stemphylium leaf blight annually threatens the state's crop, displacing other leaf-spotting pathogens that were easier to manage. Early and frequent fungicide sprays are necessary to limit disease and preserve yield, but pathogen resistance has been noted. Our goal is to improve leaf blight control by identifying new products and control programs and determine the impact of tip and/or leaf burn on the incidence and severity of Stemphylium leaf blight. Outcomes will include new tools and strategies to optimize crop protection and yield; guidelines for limiting leaf blight when tip and/or leaf burn is present will also be developed.	$98,780.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	12. Enhancing the Competitiveness of the Michigan Hop Industry	The Hop Growers of Michigan (HGM), a not-for-profit growers group representing 85% of the Michigan hop acreage, will enhance the competitiveness of the Michigan hop industry by developing and implementing a targeted promotion/marketing campaign to increase the overall annual sales of Michigan grown hops within the state and to the greater Great Lakes region (Indiana, Ohio and Wisconsin).	$105,549.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	13. Use of Biostimulants to Improve Fresh Market Blueberry Quality and Value	The Michigan State Horticultural Society in collaboration with the Berry Crops Physiology Laboratory at Michigan State University will utilize biostimulants to improve fresh market blueberry quality and value and disseminate results to stakeholders through grower meetings and field days. Most varieties grown in Michigan lack characteristics that would make them suitable for fresh market production, such as fruit size, fruit firmness, and harvest date. The use of horticultural interventions to improve these characteristics (increasing fruit size and firmness, advancing harvest date) would increase the market value for these varieties and revenue for most Michigan blueberry growers.	$100,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	14. Social Media Marketing to Engage Target Audience and Enhance Competitiveness of Michigan Apples	The Michigan Apple Committee is continuing efforts to increase consumer brand awareness and apple consumption through online engagement with our target audience. This grant project is a top priority for the Michigan Apple Committee. MAC proposes to spend $125,000 on a consumer brand awareness campaign using social media marketing tactics to educate consumers and increase demand for Michigan Apples. The project will build engagement with consumers to drive a deeper connection to the brand, resulting in increased apple movement in the retail marketplace.	$125,000.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	15. Determining Action Thresholds and Management Strategies for Two Root Lesion Nematode Pests of Michigan Carrot Production	The Michigan Carrot Committee and Applied Nematology laboratory will determine action thresholds and effective management strategies for two species of root lesion nematode (Pratylenchus penetrans and P. crenatus) by establishing and conducting both experiments in microplot trials at the Michigan State University Entomology Farm. The project aims to determine at what point these two species cause damage to carrot production so growers can make informed decisions on nematode management. At the same time, we seek to find chemical or biologically based nematicide product(s) that would provide farmers with an effective, less hazardous alternative to Vydate for root lesion nematode control.	$100,000.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	16. Expanding Michigan Wine Demand Across the US Utilizing Consumer and Industry Wine Education	The Leelanau Peninsula Vintners Association will lead and execute this project in partnership with wineries and AVAs to make this a statewide effort directly benefiting the more than 140+ wineries and 250+ farms growing 3,375 wine grape acres in Michigan. The goal of the project is to build credibility for Michigan wine with wine industry professionals and consumers and start to become part of the national wine conversation. To accomplish this, the project will establish a Michigan Wine Region Guide, an online 101 Course and a detailed Region Map for the State of Michigan and it's five American Viticulture Areas (Leelanau Peninsula, Old Mission Peninsula, Fennville, Lake Michigan Shore, Tip of the Mitt) on an internationally recognized platform, Wine Folly.	$125,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	17. Advancing Fruit, Vegetable and Farm Market Grower Knowledge and Efficiency Through the Great Lakes Expo	The Great Lakes Fruit, Vegetable and Farm Market Expo will bring cutting-edge specialty crop education to Grand Rapids, Michigan through industry-leading speakers and innovative technology. Additional marketing funds will enable the Great Lakes Expo to reach more fruit and vegetable growers. Exposure to new ideas and technology will improve on-farm efficiency, profitability and sustainability, helping to ensure a vibrant and secure Michigan specialty crop industry.	$80,000.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	18. Market and Promote the Expansion of Specialty Crops to Enhance Increased Consumption in West Michigan	Through a regional marketing campaign, Kids' Food Basket (KFB) will promote, market and generate publicity for the expansion of its local specialty crop farm offering food education in West Michigan. Funding from MDARD Specialty Crops grant program will support a regional marketing and promotion campaign to increase awareness of the farm expansion and its specialty crops grown.	$125,000.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	19. Improving Establishment of Christmas Tree Plantations Through Research and Education	The Michigan Christmas Tree Association (MCTA) will work in collaboration with Michigan State University to establish on-farm trials around the state to investigate methods to improve establishment of Christmas tree plantations, which is often a bottleneck in the Christmas tree production cycle in Michigan. We will develop webinars, articles for the MCTA Great Lakes Christmas Tree Journal, and presentations for the MCTA winter and summer meetings to educate growers on best practices based on our results and existing knowledge.	$89,081.00
Michigan Department of Agriculture and Rural Development	$2,255,304.56	20. Educating Food Insecure and Non-English-Speaking Audiences on Michigan Potatoes as a Healthy and Affordable Option	The Michigan Potato Industry Commission (MPIC) will work toward providing nutritional education and inspiration on how to best utilize Michigan-produced potatoes to food insecure and bilingual audiences across Michigan, with a focus on Metro Detroit and high Hispanic geographic areas. Our goal is to increase awareness of Michigan potatoes as a healthy, nutrient dense, and accessible food while also providing education on how to prepare healthy, budget friendly recipes, in English and other languages.	$93,795.50

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	$2,255,304.56	Grant Administration	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.	$130,972.00
Minnesota Department of Agriculture	$1,357,506.24	1. On-farm Produce Safety Improvement Grants and Produce Safety Rule Grower Training	Minnesota produce growers have a strong interest in strengthening on-farm food safety systems, but lack resources. The Minnesota Department of Agriculture will help produce growers implement on-farm food safety improvements through a mini-grant opportunity and help growers understand the FSMA Produce Safety Rule by offering grower trainings at a reduced cost.	$125,000.00
Minnesota Department of Agriculture	$1,357,506.24	2. Development of a New Biocontrol Agent for Japanese Beetle in Minnesota Wine Grapes, Hops, Berries, and Apples	The goal of this project is to establish the native biocontrol, soil-dwelling pathogen Ovavesicula popilliae at specialty crop farms to reduce Japanese beetle damage. Japanese beetle has become more problematic within the last decade, particularly in high-value specialty crops, such as wine grapes, raspberries, hops, and apples. This proposal will support research in grapes, hops, raspberries, and apple crops and will assist in the establishment of this pathogen to multiple commodity groups to reduce reliance on insecticides, support crop yield and quality, and conserve pollinators by decreasing insecticide use.	$125,000.00
Minnesota Department of Agriculture	$1,357,506.24	3. Statewide Promotion of Minnesota Grown Specialty Crops	This project will address Minnesota's specialty crop producers and related organizations lack financial resources and human capital to take full advantage of marketing opportunities to efficiently promote and market their products. By coordinating their marketing efforts through the Minnesota Grown Program, these producers can reach a large audience of interested consumers and convert them into new (and hopefully repeat) customers. Minnesota Grown can produce content that is tailored to each platform and the people who are best reached there, and drive them to a central resource, the online directory, where they can find specialty crop producers statewide.	$94,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Minnesota Department of Agriculture	$1,357,506.24	4. Jumping Worm Management in Container Nursery Crops	The University of Minnesota intends to evaluate both chemical and thermal treatments for control efficacy of jumping worms in production areas, in containers, and with bagged substrates in order to provide guidance for growers and the green industry. At this time, there are no pesticides labeled for use with jumping worms, leaving only the prevention of spread as the main management strategy for the green industry. Amynthas spp. And Metaphire spp., also known as jumping worms, impact greenspaces by rapidly consuming leaf litter and reducing nutrient levels in surface soils (Qiu and Turner, 2017), ultimately altering soil texture and exacerbating soil erosion.	$125,000.00
Minnesota Department of Agriculture	$1,357,506.24	5. Field Conditions & Price Reporting for MN Specialty Crops in Multiple Languages	The Minnesota Farmers' Market Association will develop a reporting system for specialty crops that captures growing conditions and supply chain issues across the state year-round, as well as prices on the numerous specialty crops sold at strategic MN farmers' markets. There is no national or statewide field conditions or price reporting for specialty crops like the USDA and Minnesota Agriculture Statistics Service (MASS) do for commodity farmers biweekly during the growing season in MN.	$124,779.60
Minnesota Department of Agriculture	$1,357,506.24	6. Identifying Best Management Practices for Red Star Rust, Invasive Pathogen of Apple & Nursery Crops	The Minnesota Department of Agriculture (MDA) will establish a contractual agreement with Regents of the University of Minnesota led by researchers Dr. Brandon Miller, Dr. Matt Clark, Dr. James Luby (collaborator), and Dr. Bob Blanchette in the Departments of Horticulture and Plant Pathology at the University of Minnesota to identify best management practices for red star rust in nurseries and apple orchards. This project will develop research-based spray recommendations for juniper, apple, and crabapple, and will evaluate resistance levels on common cultivars of apple and crabapple.	$124,710.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Minnesota Department of Agriculture	$1,357,506.24	7. Training Hmong Farmers to Access New Markets and Increase Availability of Locally Grown Tree Fruits	The Hmong American Farmers Association (HAFA) will implement a bilingual, bicultural training and research program to teach Hmong farmers how to plant and nurture fruit trees; compare planting, fertilizing, and growing techniques and evaluate their impact on crop yields; and use best practice harvest and post-harvesting techniques. HAFA will train low-income, immigrant and first-generation Hmong farmers on best practices for tree fruit production and identify farmers who will implement a specialty crop growing program over the course of the 27-month project.	$96,578.00
Minnesota Department of Agriculture	$1,357,506.24	8. Improving Dry Bean Profitability in Minnesota by Optimizing Nutrient Management	The University of Minnesota will provide more current fertilizer guidelines for dry bean production. Initial research on optimal fertilizer management was conducted over 20 years ago. Many growers are applying rates of nutrients without considering potential differences among dry bean classes and there is little data in Minnesota on nitrogen, phosphorus, and potassium application comparing difference classes. While under application of fertilizer can impact dry bean yield over application can also be detrimental reducing yield and potentially increasing nutrient loss to surface and ground water. This project will revise the current dry bean fertilizer publication.	$124,533.00
Minnesota Department of Agriculture	$1,357,506.24	9. Specialty Crop Value Education and Marketing Expansion for Rural Communities	Sprout MN will increase specialty crop marketing and promotion alongside educational programming of specialty crop nutrition knowledge for children and adults. Activities will include collaboration with longstanding community partnerships (school districts, community college, U of M Extension, food cooperatives and farmers markets) to market and promote specialty crops via targeted marketing of where our food comes from, and who is growing it - alongside resources of the value to self and economy of the regional food system.	$110,473.84

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Minnesota Department of Agriculture	$1,357,506.24	10. Assessing Rubus Wild Crop Relatives for Caneberry Genetic Improvement	The University of Minnesota will Collect native (wild) Rubus in Minnesota and Wisconsin for use in pre-breeding evaluation. Specifically target and assess the genetic diversity of Rubus pensilvanicus (syn R. wisconsinensis¸R. minnesotanus) for introgression of cold hardiness and short growing season traits. A population genetics study will be conducted on up to 96 R. pensilvanicus assessions using genotyping-by-sequencing approaches. This information is useful in assessing the diversity of plant materials and can be exploited for selecting which assesions or populations to use in breeding. We will also assess the ploidy (genome size) of assembled germplasm using flow cytometry.	$107,110.00
Minnesota Department of Agriculture	$1,357,506.24	11. Harvest of the Month for Minnesota's Youngest Eaters	The Institute for Agriculture and Trade Policy (IATP) seeks to coordinate the adaptation of existing K-12 Harvest of the Month (HOTM) resources and the creation of new culturally specific resources for early care settings. Easy-to-use, affordable-to-implement HOTM resources will allow early care sites to highlight local products and build familiarity for kids, so they can start school excited for further opportunities to try local foods. HOTM will support further integration of specialty crops in early care meals, influencing children's taste preferences and opening a new potential market for specialty crop producers. This project will fill a resource gap in the state and support a new group of potential customers in sourcing and serving specialty crops.	$60,095.00
Minnesota Department of Agriculture	$1,357,507.24	Grant Administration	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.	$125,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Mississippi Department of Agriculture and Commerce	$429,066.16	1. Evaluation of Weather Conditions on Aphid Distribution in Mississippi Certified Sweet Potato Fields	Mississippi State University will investigate the effects of localized weather conditions on aphid distribution in Mississippi certified sweet potato fields. Weather conditions have been found to have dramatic effects on aphid reproduction and population (Johnson 1957, Weisser et al., 1997). Aphids are a concern to certified Mississippi sweet potato growers because of their ability to transmit potyviruses in a nonpersistent manner (Clark et al., 2013). Sweet potato plants infected with one or more potyviruses can reduce yield up to 44% when compared to clean, non-infected plants.	$30,526.00
Mississippi Department of Agriculture and Commerce	$429,066.16	2. Queen Banking in Mississippi: The Health and Reproductive of Banked Queens in Producer Operations	Mississippi State University in collaboration with queen breeders in Mississippi will scientifically assess queen banking practice among queen producers to optimize handling and evaluating the health status and ovary development of queens under different banking regimes. Utilizing established methods in combination with advanced diagnostic tools in the upstream level of apiculture industry (queen breeding) will help to apply new management strategies and keep stored queens healthy in queen cages even long after queen production season. The goal is to increase knowledge and enhance market opportunities for MS queen breeders by retaining the quality of banked queen and reducing honeybee colony mortality.	$65,442.00
Mississippi Department of Agriculture and Commerce	$429,066.16	3. Evaluation of Sweet Potato Practices on Nutritional Quality During Long-Term Storage	Mississippi State University will collaborate with local, conventional and organic, sweet potato growers to assess the impact on sweet potato nutrient quality during extended storage. This project is to: 1) determine the impact of long-term storage on select macro and micronutrients and 2) compare farm management practices (conventional/organic) impact on soil quality, damage (quantification of visual damage), root weight loss, and fungal decay percentage.	$50,509.30

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Mississippi Department of Agriculture and Commerce	$429,066.16	4. Honey Production and Honeybee Health Seminar	The Mississippi Beekeepers Association will provide two seminars over two years to relay current research and best management practices of honey bee colonies to enhance and increase productivity of honey for sale and distribution throughout the state, including effects of honey bee health on honey production, food safety practices, marketing, and production efficiencies to increase honey sales for all beekeepers whether their target market is a farmers market, mid-size retailers, or retail giants.	$14,346.00
Mississippi Department of Agriculture and Commerce	$429,066.16	5. Use of Specialty Cultivars and Sustainable Practices for High Quality Sweet Pepper Production	Peppers (Capsicum annuum) of various types are important specialty crop for vegetable growers in Mississippi and also of the most popular items through local markets including farmer's market, on-farm stands, community supported agriculture, and local restaurants. There lies a critical need to evaluate bell pepper and other specialty sweet pepper cultivars for successful sweet pepper production in Mississippi. The use of sustainable product including various types of biostimulants is an innovative approach to enhance plant productivity and reduce production input in horticulture.	$33,635.00
Mississippi Department of Agriculture and Commerce	$429,066.16	6. Evaluating Leafy Green Vegetables and Cultivars for Winter Production in High Tunnels	Leafy green vegetables are high value specialty crops and an essential part of vegetable production in Mississippi, which are in high demand at local marketing outlets such as farmers' market, road-side sale, on-farm stands, Community Supported Agriculture (CSA) programs, and local restaurants. Cool season leafy greens have the potential to be produced during the mild winter in Mississippi with season extension tools like high tunnels. Winter production during the holiday season from November to February presents a great opportunity for growers to receive premium market prices and maximize profitability.	$41,008.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Mississippi Department of Agriculture and Commerce	$429,066.16	7. Evaluation of the Suitability of Sweet Potato Leaves as a Novel Agricultural Product in Mississippi	The University of Mississippi will determine the effects of leaf harvest on sweet potato yield and the overall revenue potential of procurement of the entire sweet potato plant. Additionally, taste tests with regional chefs to determine palatability of leaves and survey farmer's markets to determine the interest in selling sweet potato leaves. To accomplish this goal sweet potatoes will be planted, and leaves subjected to four levels of harvest.	$9,669.00
Mississippi Department of Agriculture and Commerce	$429,066.16	8. Use of Mechanized Selective Plucking to Improve Harvest Efficiency and Productivity in Tea Production	Tea is one of the most widely consumed beverages worldwide, and the United States is the second-largest tea importer. Despite the increasing interest in tea production in the US in recent years, the labor-intensive process of hand-harvesting has made tea production economically challenging. To address this issue, Mississippi State University will collaborate with tea growers in Mississippi to investigate the potential of utilizing mechanized selective tea plucking to enhance efficiency, yield, and quality in tea production. This project aims to assist tea growers in identifying and adopting innovative mechanical harvesting methods, reducing labor costs, optimizing tea yield and quality, and enhancing production efficiency. Ultimately, the research findings will contribute to the development of a more sustainable and efficient tea industry, making it more viable for tea growers in the US.	$42,452.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Mississippi Department of Agriculture and Commerce	$429,066.16	9. Containerized Organic Production of Turmeric in Mississippi	Turmeric is a widely used spice known for its anti-inflammatory, antioxidant, and anti-cancer properties. In recent years, the demand for turmeric has been increasing rapidly worldwide due to its numerous health benefits and culinary uses. While turmeric is primarily produced in countries such as India, the climate in Mississippi is suitable for growing turmeric. Local Mississippi growers are interested in incorporating turmeric into their productions to diversify crop profiles to meet increasing consumer demands and improve farm incomes. However, there is a lack of research-based recommendation on cultivar selection and production practices specific to Mississippi. To address the needs of local growers, Mississippi State University will conduct research to investigate the feasibility of growing turmeric as an alternative crop for specialty crop growers in Mississippi.	$36,624.00
Mississippi Department of Agriculture and Commerce	$429,066.16	10. Public Relations and Marketing Campaign to Promote Buying Mississippi grown Sweet Corn	Farm Families of Mississippi will develop and implement a promotional campaign educating consumers on the benefits of buying Mississippi grown sweet corn. We will establish a baseline figure from the 2022 campaign of consumers who gained knowledge of specialty crops through the television advertisement Farm Families of Mississippi produces and airs on local television stations across the state.	$65,000.00
Mississippi Department of Agriculture and Commerce	$429,066.16	Grant Administration	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.	$39,236.90
Missouri Department of Agriculture	$409,966.54	1. Develop Grower-Friendly Test Kits Preventing Grapevine Crown Gall Disease	Missouri State University will develop grape grower-friendly test kits for reducing significant losses caused by crown gall disease. Since crown gall disease cannot be chemically controlled, the most effective strategy is to implement preventive measures.	$25,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Missouri Department of Agriculture	$409,966.54	2. Genetic Study of Botrytis Bunch Rot Resistance in 'Norton' Grape	Missouri State University will focus on the exploration of the molecular mechanisms related to Botrytis bunch rot resistance by establishing phenotyping protocols, localizing quantitative trait loci (QTLs) and disseminating results to growers through annual Show-Me Grape and Wine Conference.	$49,353.00
Missouri Department of Agriculture	$409,966.54	3. Food Safety Training for Safe and Resilient Food Systems	The University of Missouri (MU) Extension will provide food safety education and training for beginners, small and medium scale fruit and vegetable processors operating in Missouri. We will offer continued resources in the form of Applied Food Safety Microbiology and Hazard Analysis and Critical Control Points (HACCP) certificates to at least 60 (30/ year: 15 in each category) Missouri fruit and vegetable producers and/or processors.	$44,378.00
Missouri Department of Agriculture	$409,966.54	4. Revitalization of Pecan Research and Breeding for Missouri	The University of Missouri Center for Agroforestry (UMCA) will revitalize pecan research and breeding at HARC to provide the Missouri pecan industry with reliable performance data and to initiate progress towards the identification and development of new well-adapted, high-yielding cultivars with high-quality kernels, appropriate cold hardiness, early nut ripening, low alternate bearing index, and durable pecan scab resistance.	$47,704.00
Missouri Department of Agriculture	$409,966.54	5. Farmer Trainings to Support Specialty Crop Production in the Ozarks	Springfield Community Gardens (SCG) will have 340 participants attend 16 workshops on specialty crop production at four farms. Workshops will concentrate on biosolarization, specialized tilling and soil health (Box Turtle Farms), high tunnel growing, specifically ventilation (Urban Roots Farm), flower farming (Gooseberry Bridge), and economical season extension (East Stanford Farm).	$49,700.00
Missouri Department of Agriculture	$409,966.54	6. Comparative Performance of Commercial and Native Hops in Missouri	ArchGen LLC will conduct a randomized field trial utilizing four diverse native varietals from the southern range of hop's distribution along with three commercially known comparatives. Results will be provided to the industry at the Missouri Craft Brewers Guild Annual Meeting and Conference.	$36,983.91

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Missouri Department of Agriculture	$409,966.54	7. A Statewide Survey Assessing Sweet potato Safety Due to Soilborne Pathogens	Researchers at the University of Missouri propose to survey 90 Missouri farms across the state for the presence and severity of Fusarium species in the soils. Fusarium is a genus of ascomycete fungi, and their numerous species are often detected in plants and soils worldwide as pathogens, endophytes, and saprobes. Results from this project will be disseminated through growers meeting, field days, extension fact sheets and social media.	$41,767.00
Missouri Department of Agriculture	$409,966.54	8. Muscadine Grapes: A Potential New Specialty Crop for Missouri	The University of Missouri's Southwest Research, Extension, and Education Center at Mt. Vernon will evaluate six of the most cold-hardy muscadine cultivars in a southern Missouri location. The goal is to determine if the newer cold-hardy cultivars can survive or even thrive in the region, potentially setting the stage for development of an entirely new specialty crop for southern Missouri.	$28,248.36
Missouri Department of Agriculture	$409,966.54	9.“Reel” Heartland - The Trailhead Farm	“Reel” Heartland - The Trailhead Farm film project will educate and inspire viewers to grow blueberries, start a farm of their own, promote other regional farms, teach growing techniques and tips and about the benefits of eating blueberries. The expected outcome will be a valuable resource to develop interest in specialty crop farming.	$30,149.00
Missouri Department of Agriculture	$409,966.54	10. Columbia Farmers Market’s Specialty Crop Food Insecure Educational Marketing Campaign	Columbia Farmers Market (CFM) will increase consumption and consumer purchasing of specialty crops through increased sales at CFM by developing a specialty crop-focused food-insecure educational marketing campaign.	$23,360.06
Missouri Department of Agriculture	$409,966.54	Grant Administration	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.	$32,751.59

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Montana Department of Agriculture	$3,071,633.94	1. Preserving Pulse Crop Acres by Solving Soil Erosion Risk	Montana State University is proposing to study soil erosion risk after pulse crops. A new harvesting technique may help provide a solution. Pulse crop yields increase linearly with cereal stubble height, due mainly to increased water use efficiency. We will conduct this study near Bozeman and Moccasin, including short (4”) and very tall (>16”) replicated strips of contrasting cereal crop stubble heights bisected with rolled and unrolled treatments for pea, lentil, and chickpea. Five mature pulse crop plants per plot will be randomly selected and removed for subsequent measurement of: a) length of 5th internode, b) height to bottom pod, c) plant height, d) pods per plant, and e) total seed weight. After harvest we will measure representative samples of all soil-attached crop biomass (pulse crop stems and cereal crop stubble). The following spring we will score plots for % cover.	$55,839.00
Montana Department of Agriculture	$3,071,633.94	2. Variety and Seeding Date Evaluation of Cowpea in Montana	Montana State University (MSU) is proposing to study cowpea adaptation as a specialty crop in Montana. This project will examine genetic adaptability and the optimal spring seeding window for cowpea [Vigna unguiculata (L.) Walp.] across three contrasting Montana rainfall environments during 2024-25. This information will provide new knowledge about genetic adaptation and agronomic management of a new potential warm-season, drought-tolerant pulse crop for Montana farmers.	$123,867.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Montana Department of Agriculture	$3,071,633.94	3. Control of Soilborne Disease Using Beneficial Bacteria for Organic Pea Growers	Researchers at Montana State University (MSU) propose this research to provide an effective and environmental-friendly biocontrol approach for the organic pea and lentil growers to control soilborne diseases, specifically Aphanomyces root rot caused by Aphanomyces euteiches. In this project, our goal is to find at least 5 bacterial antagonists that are highly effective to control the disease under controlled greenhouse conditions. We will also evaluate the impact of the bacterial isolates on seed germination to exclude the ones that inhibit pea seed germination. Further, bacterial genome of the selected top 10 effective isolates will be sequenced and analyzed which will provide valuable information of how to better use these beneficials to control the soilborne disease.	$200,627.00
Montana Department of Agriculture	$3,071,633.94	4. Pea Ascochyta Blight-Resistant Variety Development by Genomic Approaches	The Department of Plant Sciences and Plant Pathology, Montana State University, proposes using genomic approaches to develop Ascochyta blight-resistant pea varieties. From an MDA-SCBG-funded project led by Li Huang, one old variety and six pea mutants have been identified to have high levels of resistance to two species of Ascochyta blight pathogens. This proposed research will use these resistances as a resource for breeding Ascochyta-resistant pea varieties. This project will: 1.) identify the locations and sequences of the Ascochyta blight resistance genes available; 2.) develop molecular markers for the genes; and 3.) combine different resistance genes into elite cultivars to develop varieties resistant to the Ascochyta species prevalent in Montana.	$328,949.00
Montana Department of Agriculture	$3,071,633.94	5. The Wild Bees of Montana 3, Research for Specialty Crop Pollination Security	Researchers at Montana State University will conduct years 7-8 of the 15-year Wild Bees of Montana Project, building on the previous SCBGs to continue bee surveys, curation and identification to produce new databased collections, taxonomic resources and public outreach toward the project goal of a guide to Montana's 700+ species of native bees and selected associated parasites and inquilines.	$386,105.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Montana Department of Agriculture	$3,071,633.94	6. Exploring Intercropping and Essential Oils to Control Fusarium Root Rot of Pea	Montana State University EARC proposes to conduct field research comparing EOs with commercially available seed treatments and testing intercropping schemes for control of Fusarium root rot of pea. This includes greenhouse research exploring which potential intercropping partners may decrease root rot damage while not decreasing yield. We will conduct small plot research measuring the effects of intercropping and essential oils in inoculated trials. This will form the basis for future work integrating these two management practices to give more IPM options for both organic and conventional farmers.	$142,326.00
Montana Department of Agriculture	$3,071,633.94	7. Expanding Specialty Crop Education and Marketing Through Harvest of the Month	The National Center for Appropriate Technology aims to increase the sale of direct-to-consumer specialty crops and educate Montanans on specialty crop nutrition, seasonality, preparation, preservation, and purchasing using the Harvest of the Month (HOM) platform. Objectives of the project include: 1) increase the number of specialty crop producers promoted through HOM by adding new specialty crops; 2) expand specialty crop sales opportunities through farmers markets using the HOM platform; and 3) education consumers on specialty crop seasonal availability, sources, preparation, and preservation.	$60,000.00
Montana Department of Agriculture	$3,071,633.94	8. Managing Grasshoppers Damaging Pea, Lentil, and Chickpea Crops in Montana	Montana State University will conduct research and Extension to improve the management of grasshopper pests that economically damage pea, dry bean, lentil, and chickpea crop production. The outcome will be updated best practice recommendations to reduce yield loss based on new research results and consistent with Integrated Pest Management (IPM).	$328,857.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Montana Department of Agriculture	$3,071,633.94	9. Investigating Novel Approaches to Improve PVY Detection in Dormant Tubers	Montana State University (MSU) Potato Lab's project will explore sustainable methods for overcoming tuber dormancy in order to improve our ability to accurately detect PVY in tubers. Traditional strategies for overcoming dormancy often rely on toxic compounds, which are not safe or sustainable for the high throughput environment of the MSU Potato Lab. For those reasons, the purpose of this project will be to explore emerging strategies using smoke, hormone applications, and temperature variation.	$83,031.00
Montana Department of Agriculture	$3,071,633.94	10. Characterization of the Ecological and Epidemiological Factors Driving Pathogen Spread in Chickpeas	Montana State University Eastern Agriculture Research Center proposes to 1) measure the effect of geographic location on maturation and survivability of A. rabiei overwintering structures, 2) determine environmental conditions required for initial spore release both in the field and under laboratory conditions, and 3) perform a fungicide study comparing traditional spray timings with fungicide applications performed at spore release. This project will allow us to accurately predict initial spore release and determine if this can be used for improved disease control by farmers.	$113,585.00
Montana Department of Agriculture	$3,071,633.94	11. Testing Dibutyldithiophosphate as a Fertilizer to Improve Yield of Pulse Crops	Montana State University will carry out research to test the response of pulse crops to varying levels of dibutyldithiophosphate (DBDTP) applied at planting and identify an optimal DBDTP concentration to boost plant growth and yield. Specifically, experiments will be carried out to optimize a seed treatment delivering ideal concentrations of DBDTP to improve growth of peas, lentils, and chickpeas. Further tests will determine any potential interactions between DBDTP and inoculant that may positively impact nitrogen fixation for each crop. Potential antimicrobial properties of pulses treated with DBDTP and disease responses of pulse crops will be examined in another objective. Finally, field tests at multiple locations will be carried out to identify the optimal DBDTP concentration to improve growth and yield of each pulse crop.	$254,174.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Montana Department of Agriculture	$3,071,633.94	12. Enhancing Innovation Service Capability and Offering Extrusion Training for Specialty Crops Stakeholders	The Food Product Development Lab and Extrusion Unit at Montana State University propose to upgrade our innovation capacity and offer extrusion training to create comprehensive services in product development and extrusion processing for specialty crops. With this SCBG funding, we anticipate offering at least three specialty crop innovation services annually, with each service generating over $30K in contracted income. Each year, we anticipate delivering extrusion workshops to a minimum of 15 Montana specialty crop stakeholders and engaging 15 students in hands-on specialty crop innovation.	$373,949.00
Montana Department of Agriculture	$3,071,633.94	13. Evaluating Desiccants for Crop Dry Down and Weed Seedbank Management in Pulses	The Montana State University Southern Agricultural Research Center (SARC) proposes a three-year research project aimed at integrating preharvest desiccants to manage weed populations and reduce weed seedbank pressure in chickpea and lentil crops. Through field, lab and greenhouse studies, researchers will evaluate the impact of various application timings and herbicides applied alone or in a tank-mix on dry-down and seed yield of pulse crops, as well as weed seed quantity, viability, and germinability of problematic species like kochia and common lambsquarters. The project will also explore the use of remote sensing and machine learning to assess crop and weed phenology.	$186,353.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Montana Department of Agriculture	$3,071,633.94	14. Salsa 2.0: High Value Vegetable Variety Screening and Quality Optimization	Montana State University will conduct applied horticultural research across two production environments (Bozeman and Corvallis, Montana) to screen and identify production practices and varieties that optimize vegetable quality of three core salsa ingredient crops (tomato, tomatillo, and peppers) in cool climate conditions. By examining these core crops across two locations, in conjunction with high tunnel and greenhouse evaluations of vegetable characteristics, this project will generate results concerning optimal variety selection for different regions and production situations in Montana addressing concerns of small farmers in the state. Additional work identifying non-destructive predictive metrics of vegetable chemistry (sugar and acid content in tomatillos and pungency in peppers) will improve capacity for harvest decision making by isolating ideal quality conditions through novel cost saving methods.	$193,028.00
Montana Department of Agriculture	$3,071,633.94	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$235,719.14
Nebraska State Department of Agriculture	$823,368.53	1. Improvement of Nebraska Common Dry Bean Cultivars by CRISPR-Mediated Gene Editing	The University of Nebraska-Lincoln (UNL), in a contractual relationship with the Nebraska Department of Agriculture, will develop gene-edited dry bean cultivars for quick and targeted development of next generation of improved common dry bean genotypes able to mitigate adverse effects of diseases, drought and other adverse conditions stabilizing and improving productivity and availability of this nutritious food crop. The production of gene-edited dry bean plants using a Clustered Regularly Interspaced Short Palindromic Repeats/ CRISPR Associated System (CRISPR/Cas) is a game changer as it will open numerous possibilities to modify and improve dry bean varieties.	$55,761.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Nebraska State Department of Agriculture	$823,368.53	2. The Benefit of Tillage for Improving Soil Applied Herbicide Efficacy in Nebraska Dry Edible Bean	The University of Nebraska-Lincoln (UNL), in a contractual relationship with the Nebraska Department of Agriculture, will evaluate the benefit of pre-plant tillage as a means of improving control herbicide-resistant pigweeds within Nebraska Dry Edible Beans. Results from this project will be disseminated to growers through Extension publications, grower meetings, and field days with the goal of improving grower adoption of best practices.	$15,651.00
Nebraska State Department of Agriculture	$823,368.53	3. Evaluation of a POST Direct and Wick Wiper Herbicide Applicator for Control of Herbicide Resistant Weeds in Nebraska Dry Edible Bean	The University of Nebraska-Lincoln (UNL), in a contractual agreement with the Nebraska Department of Agriculture, will evaluate the benefit of wick wiper and post-direct herbicide applicators as a means of improving control herbicide-resistant pigweed within Nebraska dry edible beans. Project results will be disseminated to growers through extension publications, grower meetings, and field days with the goal of improving grower adoption of best practices.	$23,478.00
Nebraska State Department of Agriculture	$823,368.53	4. Growing Community Demand and Knowledge of Nebraska Specialty Crops Through Local Food Showcases	The University of Nebraska-Lincoln (UNL), in collaboration with local farmers markets and specialty crop producers, will enter into a contractual relationship with the Nebraska Departtent of Agriculture (NDA) to host Local Food Showcases across the state increasing knowledge and consumption of specialty crops through: (1) nutrition education through mini workshops on preparing, storing, and using specialty crops, (2) exposure to specialty crops through tastings prepared by local chefs and (3) educational activities on the diversity, seasonality, and accessibility of Nebraska grown specialty crops.	$62,977.00
Nebraska State Department of Agriculture	$823,368.53	5. Potato Cyst Nematode 2023	This project is designed to maintain Nebraska's Potato Cyst Nematode (PCN) pest-free status by the Nebraska Department of Agriculture (NDA) conducting comprehensive soil surveying throughout Nebraska to confirm the presence or absence of PCN in Nebraska.	$97,014.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Nebraska State Department of Agriculture	$823,368.53	6. Evaluation of Current Fungicides for Inhibiting Rhizopus In Vitro	The University of Nebraska-Lincoln's (UNL) Panhandle Research and Extension Center (PREC), in a contractual relationship with the Nebraska Department of Agriculture, will identify those fungicides that may or may not effectively manage the sunflower disease, Rhizopus head rot. This could be important information for producers by knowing and understanding which fungicides would inhibit pathogen growth in the lab prior to costly applications in field production. Our results from this project could be applicable and useful for any sunflower type - confection and/or ornamental (floriculture). Resulting findings would then be shared with stakeholders at winter grower meetings and summer field days.	$47,000.00
Nebraska State Department of Agriculture	$823,368.53	7. Evaluation of Determinate Tomato Varieties for Yield, Consumer Preference, and Nutritional Quality	The University of Nebraska-Lincoln (UNL), in a contractual agreement with the Nebraska Department of Agriculture, will evaluate performance of determinate tomato varieties in terms of yield, consumer preference, and nutritional quality in order to assist Nebraska vegetable producers and home horticulturists in selecting effective varieties.	$36,286.00
Nebraska State Department of Agriculture	$823,368.53	8. Enhancing Yield and Quality for Varieties of Dry Edible Beans Grown in Nebraska	The University of Nebraska-Lincoln (UNL) Panhandle Research and Extension Center (PHREC) and Food Science and Technology Department (FST), in a contractual relationship with the Nebraska Department of Agriculture, will evaluate the effects of applied nitrogen on the quality of selected bean varieties grown in Nebraska. Dr. Bijesh Maharjan and Carlos Urrea at UNL PHREC and Dr. Kaustav Majumder at FST will conduct this study. Knowledge gained regarding the effects of nitrogen on bean yield and quality by varieties will be shared through various Extension events and publications.	$52,684.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Nebraska State Department of Agriculture	$823,368.53	9. Developing a Regulated Deficit Irrigation Technology to Improve the Fruit Quality of Nebraska Aronia Berry	The University of Nebraska Aronia Berry Research Lab, in a contractual relationship with the Nebraska Department of Agriculture, will develop a customized regulated deficit irrigation (RDI) technology to improve the fruit quality of Nebraska aronia berry. By collaborating with Nebraska aronia berry farm (Berries on the Hill Aronia Farm), the lab will perform a 3-year experiment to optimize RDI protocol for maximizing aronia berry fruit quality with less irrigation water and cost.	$79,634.00
Nebraska State Department of Agriculture	$823,368.53	10. Impact of Intercropping Vegetables and Cut Flowers on Economics and Conservation Biological Control	The University of Nebraska-Lincoln (UNL), in a contractual relationship with the Nebraska Department of Agriculture, will evaluate the impact of intercropping of peppers and cut flowers on yield and quality of vegetable production, economic value of production in terms of land equivalent ratio, and populations of pest and beneficial insect species.	$56,849.00
Nebraska State Department of Agriculture	$823,368.53	11. Evaluating Soil Nitrogen Mineralization and Greenhouse Gas Emissions for Climate Smart Dry Bean Production	The University of Nebraska-Lincoln Panhandle Research and Extension Center (UNL PHREC), in a contractual relationship with the Nebraska Department of Agriculture, will evaluate the effects of applied nitrogen on net soil nitrogen mineralization and greenhouse gas emissions to achieve optimized fertilizer nitrogen practices for profitable and climate-smart dry edible bean production. Dr. Bijesh Maharjan will lead this project that will include field and lab components and disseminate results to stakeholders through various Extension events and publications.	$68,990.00
Nebraska State Department of Agriculture	$823,368.53	12. Exploring the Feasibility of Vinifera in High Tunnel Grape Production (Phase II)	The University of Nebraska Viticulture Program, in a contractual relationship with the Nebraska Department of Agriculture, will continue its resolute pursuit of the project aimed at investigating the practicability of cultivating cold-sensitive vinifera wine grapes in a high tunnel within the austere climatic conditions of Nebraska. The project requires meticulous scientific analysis to evaluate the feasibility of this approach, taking into account the many factors that may affect grapevine physiology, fruit yield, and wine quality within a high tunnel.	$80,220.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Nebraska State Department of Agriculture	$823,368.53	13. Using Available Soil Moisture at Planting to Drive Field Pea Planting and Inoculation Decisions of Field Peas	The University of Nebraska - Lincoln (UNL), in a contractual relationship with the Nebraska Department of Agriculture, will conduct a field experiment to investigate the effect of initial or prior soil moisture at field pea seeding on final yield, yield components, and physiological response variables. The study will simulate various soil moisture levels using irrigation water prior to planting. Inoculation of field pea seeds with the right strain of rhizobium is important to achieve the desired level of nitrogen fixation and contribute to the realization of field pea yield potential. We will evaluate how each type of inocula interacts with initial soil moisture contents to influence field pea yield, yield components, and variables related to field pea physiology. The results from this study will allow producers to make an informed decision of whether to plant field peas based on the initial soil moisture level and inoculate seeds with the inoculant appropriate for a particular soil moisture level with the aim of enhancing sustainable utilization of the production inputs.	$79,130.00
Nebraska State Department of Agriculture	$823,368.53	Grant Administration	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.	$65,710.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Nevada Department of Agriculture	$267,238.83	1. The Farm2Food Accelerator: Energizing Growth for Nevada's Female Specialty Crop Producers	The National Association of State Departments of Agriculture (NASDA) Foundation will partner with the Nevada Department of Agriculture, Oregon State University Food Innovation Center, and Union Kitchen to continue to develop the Farm2Food accelerator project to equip female specialty crop producers in Nevada to grow their value-added businesses. NASDA Foundation and the project team will help Nevada producers expand production of food products and enter new regional markets. The team will adapt the Farm2Food Accelerator to meet the needs of Nevada producers and integrate them into the program. The Farm2Food Accelerator is a 15-week program that equips female specialty crop producers and food entrepreneurs using specialty crop ingredients to safely process their raw production into value-added specialty crop products and enter new statewide and regional markets.	$105,214.47
Nevada Department of Agriculture	$267,238.83	2. Nevada State Beekeepers Conference	The Mason Valley Beekeepers (MVB) is organizing the 14th, 15th and 16th annual Nevada State Beekeepers Conferences. The Nevada State Beekeepers Conference addresses the need for quality, research-based education, and information for experienced beekeepers as well as people new to the industry. The opportunity to gather and learn from nationally renowned researchers, scientists and speakers provides a platform to ask in-depth questions and explore the best management practices to operate healthy hives. Since Nevada beekeepers face an average loss of 53% (Bee Informed Partnership [BIP] average annual colony loss for Nevada 2019/2020) education is critical to the sustainability of beekeeping. The caliber of the Nevada State Beekeepers Conference directly benefits the registrants and indirectly educates the public through advertising on social media, print and broadcast media and has the ultimate result of better informed and educated citizens.	$79,500.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Nevada Department of Agriculture	$267,238.83	3. Expanding Consumption and Production of Pomegranate Cultivars Through Marketing and Research	The University of Nevada Extension Northeast Clark County Pomegranate Cultivars Project proposes to enhance the competitiveness of specialty crops by increasing the number of cultivars of pomegranates desired by, and available to, the consumer. The crimson fruit, native to the Mediterranean basin and the Middle East, also thrives in the desert Southwest. Pomegranates are widely grown and marketed in Northeast Clark County, but the market is dominated by two cultivars: Wonderful and Utah Sweet. With the current emphasis on antioxidants and the other health benefits of pomegranates, this project is timely. It could potentially increase health benefits for the public, and benefit both established and new specialty crop producers economically.	$25,283.76
Nevada Department of Agriculture	$267,238.83	4. Lavender Days Workshops in 2024, 2025 & 2026	The Great Basin Lavender Association will conduct a series of three annual workshops and field tours in Mason Valley, Nevada designed to provide outreach and quality education to the public regarding the many benefits of lavender to include medicinal, culinary, environmental, and economic values. Workshops and tours will focus on variety selection, cultural practices, harvesting techniques, processing strategies and marketing of this increasingly popular and environmentally friendly specialty crop. By conducting these workshops, we hope to develop a cohesive regional resource to promote the effective and economical production of this valuable specialty crop.	$37,550.00
Nevada Department of Agriculture	$267,238.83	Grant Administration	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.	$19,490.20

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Hampshire Department of Agriculture, Markets and Food	$294,761.60	1. Genetic Enhancement of Squash for Powdery Mildew Resistance	Researchers at the University of New Hampshire will help NH growers combat cucurbit powdery mildew in squash and pumpkins through the development and commercialization of new cultivars with enhanced genetic resistance to the pathogen. Additionally, new tools, DNA markers, will be developed to enhance breeding efforts.	$61,868.31
New Hampshire Department of Agriculture, Markets and Food	$294,761.60	2. Pink Lady Beetle Husbandry: Piloting a "NH Made" Biological Control Industry	The University of New Hampshire will provide training and support to local stakeholders who wish to produce their own biological control agents, Coleomegilla maculata, commonly known as pink lady beetle, and will evaluate predator performance of pink lady beetles through the year, to ensure that in-house rearing techniques are appropriate for wintertime aphid management.	$49,100.00
New Hampshire Department of Agriculture, Markets and Food	$294,761.60	3. Buy New Hampshire Specialty Crops: Driving Consumers to Specialty Crops Through Targeted Social Media and Waze Advertising Campaign in Partnership	The New Hampshire Department of Agriculture, Markets & Food will increase sales of all New Hampshire specialty crops through a targeted social media campaign (Facebook, Instagram, and YouTube Video Ads) and through innovative digital platforms directed at tourists and drivers in NH (Waze, Google Discovery Ads and YouTube Shorts).	$130,000.00
New Hampshire Department of Agriculture, Markets and Food	$294,761.60	Grant Administration	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.	$19,277.37
New Jersey Department of Agriculture	$817,417.05	1. Garden State Wine Growers Association (Women In Wine-Supporting the Emerging Role of Women in the NJ Wine Industry)	The Garden State Wine Growers Association, through its Diversity Equity and Inclusion Committee, will empower Women in the NJ Wine Industry by: providing educational programs, training and accessibility into the industry for women specifically; supporting a collaborative wine product that showcases the collective talents of women in the NJ Wine Industry; creating high-level awareness of the role of women in the wine industry.	$40,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Jersey Department of Agriculture	$817,417.05	2. Jersey Fruit Cooperative Assn., Inc. (Expand Local Market Distribution to Increase Availability and Access of Specialty Crops Grown by Family Run F	The Jersey Fruit Cooperative will expand market opportunities for its grower-members by developing a direct delivery program to service farm markets and small, independent retailers throughout New Jersey and into surrounding states. This here to for untapped market niche will benefit Jersey Fruit growers and other specialty crop producers throughout the state by expanding availability of "Jersey Fresh" peaches and blueberries.	$40,000.00
New Jersey Department of Agriculture	$817,417.05	3. Mercer County Community College (To Fund the JKC Garden Project & the Horticulture Programs)	Mercer County Community College will play a pivotal role in educating the next generation of urban and underrepresented farmers through the implementation of a program that allows youth in Trenton the opportunity to gain hands-on experience and exposure to vegetable production, food safety, and urban forestry. In Trenton, issues like food insecurity and dying shade trees continue to be a concern. Mercer County Community College's James Kerney Campus (JKC) sits poised to be an educational hub for Trenton for both training and education within the areas of urban agriculture. Community based programs within the city along with college-based programs, like Upward Bound, will serve as feeder programs for the identification of youth to participate in on-campus vegetable production along with training, seminars and farm visits on topics like food processing, food safety and urban forestry.	$18,998.04

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Jersey Department of Agriculture	$817,417.05	4. New Jersey Agricultural Society (FarmVoice Studios: Telling the Stories of NJ's Specialty Crop Farmers)	The NJ Agricultural Society would establish an agreement with the NJ Department of Agriculture to lead and execute the project. This project will design/launch the NJAS FarmVoice Studios to serve as the new, innovative hub for producing and celebrating the stories of NJ's farmers with a focus on the state's specialty crop farmers. Giving voice to the farmer through storytelling is a powerful communication tool for changing perceptions of farming and engendering deeper understanding and support for NJ's farming community. It is through this medium of storytelling that we will engage the public on a deeper level with our farmers through their lived stories. The project will develop a communication structure to increase specialty crop farmer visibility through compelling new content and selected curated content.	$40,000.00
New Jersey Department of Agriculture	$817,417.05	5. New Jersey Blueberry Growers Association ("Advertising Jersey Fresh Blueberries – 2024")	As part of a more extensive research and promotion program, The New Jersey Blueberry Growers Association seeks Specialty Crop Block Grant funding for a project to promote awareness and purchase of local, New Jersey grown blueberries in season via a digital billboard campaign as part of a larger overall media campaign that also includes trade ads, aerial beach banners and digital marketing.	$40,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Jersey Department of Agriculture	$817,417.05	6. New Jersey Peach Promotion Council (NJPPC)(Jersey Fresh Peaches Buy Jersey- Buy Local Marketing Campaign)	The New Jersey Peach Promotion Council will enhance the sustainability of the New Jersey peach industry by implementing a comprehensive marketing campaign that focuses on the theme Buy Jersey-Buy Local. Effective promotional tools will be utilized, including social media, press releases, trade and consumer advertising, and promotional events. Expert consultants will be contracted to be able to implement the most effective campaign. Findings from previous marketing campaigns will be used to improve the efficiency of campaigns moving forward. The marketing campaign will be focused in New Jersey, Philadelphia, PA and suburbs, New York City, NY and suburbs and Boston, MA and suburbs. Additionally, a market survey will be implemented to better understand why peach buyers may purchase peaches from other states. The findings of the survey will be used to inform the industry to develop action plans to be the preferred peach for New Jersey and regional wholesalers and retailers.	$40,000.00
New Jersey Department of Agriculture	$817,417.05	7. Project to Maximize the Effectiveness of the Jersey Fresh Advertising Program in 2024 and Beyond	The New Jersey Department of Agriculture seeks Specialty Crop Block Grant funding to raise awareness of locally grown specialty crops and to drive sales through a multi-faceted marketing campaign. The Department seeks to increase the overall effectiveness of the marketing of all specialty crops in New Jersey through the continuation of the proven successful efforts of the Jersey Fresh program. This will be accomplished using outdoor advertising (aerial banners, digital billboards and bus sides), print ads, radio in English and Spanish, point of sale materials and social media and other online promotions.	$399,531.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Jersey Department of Agriculture	$817,417.05	8. Rowan University - Nguyen, Early Detection and Mapping of Carolina Redroot in Cranberry Bogs using AI and Autonomous Drones	Rowan University in collaboration with Rutgers Philip E. Marucci Center for Blueberry and Cranberry Research, and Influential Drones will mitigate the spread of Carolina redroot in cranberry bogs by developing artificial intelligence (AI) software which allows an aerial drone to fly over cranberry bogs to perform early detection of the weed and create a map of affected areas. Results will be disseminated to stakeholders through demonstrations of the developed technology at cranberry grower meetings. The technology will also be deployed at cranberry bogs at Rutgers P.E. Marucci Center for Blueberry and Cranberry Research and selected cranberry farms in New Jersey to assess its effectiveness.	$39,991.00
New Jersey Department of Agriculture	$817,417.05	9. Nickel Nutrient to Mitigate Blossom End Rot Abiotic Stress in Tomato and Bell Pepper	The Soil Fertility research group at Rutgers University evaluates Nickel (Ni) micronutrient application to mitigate Blossom End Rot (BER) in tomato and sweet bell pepper specialty crops. To meet this goal, the project outcomes include: 1.) determine the nickel requirements for common tomato and bell pepper varieties in NJ; 2.) disseminate Ni application recommendations to NJ growers; and 3.) utilize key finding to expand specialty crop research into Ni nutrient application for abating abiotic stress.	$39,733.00
New Jersey Department of Agriculture	$817,417.05	10. Tri-County Cooperative Auction Market (Specialty Crop - Outreach, Advertising, and Website Development Project)	The Tri-County Cooperative Auction Market will increase our customer and grower base to increase sales of specialty crops grown in New Jersey through outreach, marketing, and sales strategies. The project will have four major components: 1) Outreach/sales through events, conferences, and county board of agriculture meetings 2) Website re-design 3) Special events at the market 4) Advertising and promotion.	$40,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Jersey Department of Agriculture	$817,417.05	11. Urban Agriculture Co-op (Improving the Aggregation and Transportation to Newark and expanding to Jersey City for Rural and Urban Specialty	Urban Agriculture Cooperative will provide aggregation and distribution services on behalf of 20 specialty crop growers (both urban and rural) to new markets in Newark and also Jersey City, NJ. Over 800 customers will be served specialty crops distributed in the form of farms-to-families share boxes to schools and non-profit partners, and also wholesale to farmers markets.	$40,000.00
New Jersey Department of Agriculture	$817,417.05	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$37,406.71
New Mexico Department of Agriculture	$611,735.91	1. Agri-Nature Center Demonstration Kitchen	The Agri-Nature Center will educate farmers, students, and adults on food processing and preservation techniques through the development of a demonstration kitchen that will provide classes to the public.	$27,500.00
New Mexico Department of Agriculture	$611,735.91	2. VetCorps Veteran Farmers Beekeeping and Extended Season Crops Program	Not Forgotten Outreach, Inc. trains VetCorps members and community members to perform the maintenance of honeybee colonies and hives, in order to collect their honey and other products that the hive produces (including beeswax, propolis, pollen), while protecting and improving pollinator health. Additionally, VetCorps members will be trained to grow and harvest extended season crops through hydroponics, hoop houses, and low tunnel row crop systems.	$56,691.78
New Mexico Department of Agriculture	$611,735.91	3. Phase 2: Increasing Access and Expanding Opportunities for the Success of New Mexico-Grown Specialty Cut Flowers	In Phase 2, the New Mexico Flower Collective will expand the network of cut flower producers, increase sales opportunities, and improve distribution throughout the state. It will increase support for New Mexico's cut flower farmers and buyers through farmer education, aggregation and distribution channels, and promotion of local farmers and flowers across the state.	$139,724.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New Mexico Department of Agriculture	$611,735.91	4. New Mexico LandLink: Enhancing New Mexico's Specialty Crop Industry with Land Access, Technical Training, and Digital Marketplace Development	New Mexico LandLink is a project of the NMSU Department of Extension Economics and a coordinated effort of NMSU county Extension agents and specialists to increase the supply of specialty crops across the state and increase market access for consumers. The NM LandLink project is designed to address three of the most critical challenges for NM's specialty crop industry: access to agricultural lands, education and technical assistance for producers, and the digital infrastructure that connects specialty crop supply to meet market demand. The land access component will provide specialty crop producer with the technical assistance needed to successfully access and obtain the agricultural land needed for their operation. Building upon the first component, NM LandLink will organize five, in-person, NMSU specialists led, Specialty Crop Master Class series across the state to provide producers with the education and training for their specific operation needs. The third component will be to create Path-to-Plate, an online local food marketplace that will allow New Mexico specialty crop producers to seamlessly connect with buyers across the state.	$223,128.35
New Mexico Department of Agriculture	$611,735.91	5. Improving Access to Specialty Crops in Early Childhood on the Navajo Nation	The BEN Initiative will collaborate with other indigenous farmers to build an agricultural cooperative that provides education about and access to locally grown, specialty and traditional Navajo produce and value-added products.	$114,482.30
New Mexico Department of Agriculture	$611,735.91	Grant Administration	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.	$48,828.38

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New York State Department of Agriculture and Markets	$1,281,067.02	1. Understanding the Potential and Feasibility of Using Supplemental UV Light for Apple Disease Management	Cornell University will conduct research to develop a better understanding of how to effectively use supplemental germicidal light (UV-C) to reduce reliance on multi-site fungicides (copper, captan, and mancozeb) and antibiotics while managing fungal and bacterial diseases in young, high-density orchards and not compromising the productivity of apples or placing additional financial or labor burden on the grower.	$99,960.00
New York State Department of Agriculture and Markets	$1,281,067.02	2. Seed Treatment Packages That Protect Bulb Onions From Early-Season Pests and Diseases	Cornell University will identify the most effective combination of insecticides and fungicides to protect the onion crop against early-season maggot infestations and seedling diseases and disseminate this information to growers.	$99,993.00
New York State Department of Agriculture and Markets	$1,281,067.02	3. Determining Efficient and Effective Inoculation Methods for Arbuscular Mycorrhizal Fungi in NY Vineyards	Cornell University will research how to best inoculate grapevines with arbuscular mycorrhizal fungi (AMF) to improve nutrient and water acquisition. Growers are interested in potentially adopting AMF inoculation but have many questions about how to best apply these products. The goal of this project is to have 15 growers report an intent to adopt a specific inoculation practice.	$100,000.00
New York State Department of Agriculture and Markets	$1,281,067.02	4. Defining Maturity and Storage Conditions for Emerging Apple Varieties	Cornell University will conduct research over a two-year period to define appropriate maturity indices and storability of the emerging apple varieties Ambrosia, Pink Lady, EverCrisp and Wild Twist. The outcomes will define the optimum harvest dates and storage conditions that will result in high quality fruit that will result on consumer satisfaction. Conclusions will be shared with growers and storage operators in order to maximize the commercial success of these emerging varieties grown under NYS conditions.	$50,661.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New York State Department of Agriculture and Markets	$1,281,067.02	5. Development of Sugar Kelp Gametophyte Cultures to Promote Kelp Aquaculture in New York State	While climate change threatens the sustainability of kelp farming in NY, Stony Brook University will develop gametophyte kelp cultures to overcome this obstacle. Yields of kelp will be measured during the growing season and quantified in terms of biomass, length, carbon, and nitrogen. Approaches will be iteratively refined via an adaptive management approach over the course of the project. Results and successful approaches will be socialized to aquaculturists and organization promoting aquaculture in NY such as New York Sea Grant, NYSDEC, and Lazy Point kelp farmers using workshops and regular project committee meetings.	$82,619.00
New York State Department of Agriculture and Markets	$1,281,067.02	6. Evaluation of Apple Cuticle Amendments for Mitigation of Scarf Skin and Late-Season Russet	Cornell University will field test several potential field mitigation sprays on NY1(SnapDragon) that have been shown to impact fruit cuticle function in other apple cultivars. Using time series collections throughout the growing season from multiple grower cooperators, growth rate metrics, color, fruit nutrient levels and carbon isotopes will be measured, as well as, incidence of late season russet and scarf skin to determine any beneficial impacts of sprays on fruit quality and russet suppression.	$92,960.00
New York State Department of Agriculture and Markets	$1,281,067.02	7. Trac Software Upgrade into Trac Cloud for Instantaneous Application Records and Reports	Cornell University will upgrade Trac Software into Trac Cloud and develop a spray card app to sync crop input data directly from phone to spray records. We will combine the six fruit Trac Software types into one modular Trac Cloud. The modular format will pave the way for data sharing between emerging and existing digital agriculture technologies. Trac Cloud, will further enhance record-keeping, traceability, producer-to-market cooperation, pesticide safety, food security, and market access. We will deliver Trac Cloud with a robust database, an easy-to-use interface, and supporting materials.	$75,622.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New York State Department of Agriculture and Markets	$1,281,067.02	8. Amplifying the Power of Natural UV Light to Combat Grape Downy Mildew	The Light and Health Research Center at the Icahn School of Medicine at Mount Sinai will conduct a field study in a vineyard in Claverack, NY to demonstrate that titanium dioxide (TiO2), used in the presence of sunlight, will reduce the severity of grapevine downy mildew better than conventional fungicide treatments. Study results will be shared with stakeholders and government regulators to increase the use of TiO2 as an alternative to current fungicide treatments.	$98,185.00
New York State Department of Agriculture and Markets	$1,281,067.02	9. GAP Reimbursement Program	New York State Department of Agriculture and Markets (NYS AGM) will continue work that previous SCBG Good Agricultural Practices (GAP) projects successfully implemented. The project will promote the GAP audit as the best way to prepare for new regulatory programs and standards to be implemented under the Food Safety Modernization Act (FSMA). We will continue to focus support for first time and potentially subsequent GAP audits as New York GAP program data indicates that a significant number of farms continue participation with GAP audits after having their initial audit. The program will offer producers up to a $2000 reimbursement incentive to obtain a GAP audit, the cost of training, GAP-required water test, and cost of consultancy to prepare a farm food safety plan (consultants for new applicants only.	$70,000.00
New York State Department of Agriculture and Markets	$1,281,067.02	10. Marketing and Promotion of New York's Specialty Crops	New York State Department of Agriculture and Markets will promote New York's specialty crops at trade shows across the country, increasing sales of specialty crops and broadening New York specialty crop producers' sales avenues nationally and via export.	$208,330.35

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
New York State Department of Agriculture and Markets	$1,281,067.02	11. Improving Understanding of Postharvest Water Management, Sanitation, and Traceability to Improve On-Farm Food Safety	Produce Safety Alliance (PSA) personnel, based at Cornell University, will develop and deliver workshops specifically for NY growers focused on postharvest water management, sanitation, and traceability.	$200,000.00
New York State Department of Agriculture and Markets	$1,281,067.02	Grant Administration	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.	$98,183.23
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	1. Developing Polygenic RSWV Resistance in Tomatoes	The NC State University will incorporate polygenic tomato spotted wilt resistance into fresh-market tomato cultivars mitigating the damage caused by the tomato spotted wilt virus (TSWV) and resistant breaking variants of the virus (RB-TSWV) in North Carolina. The resistant-breaking variants of the virus not controlled by the Sw-5b gene have become prevalent in some regions, including tomato production areas, and the use of TSWV-resistant tomato cultivars is the most effective management strategy. We will utilize conventional breeding approaches expedited with marker-assisted selection to develop and release new TSWV-resistant tomato lines and cultivars. An integrated genome-wide approach will be utilized to map the resistant gene/s in a newly identified resistance source (TSW-07). The results will be shared with NC tomato growers and stakeholders through tomato field days and extension conferences.	$185,134.10

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	2. Management of Sweetpotato Southern Blight	North Carolina (NC) is the number one producer of sweetpotato in the United States (US), contributing over 50% of the total production at a value of more than $478 million. Several diseases affect the yield and quality of sweetpotatoes in North Carolina and control options for many of them are limited. North Carolina State University will improve management of Southern Blight in sweepotatoes by evaluating registered and unregistered fungicides for efficacy in the field, determining the fungicide residue levels of products to ensure they are compatible with export market requirements, and disseminating research results to stakeholders through web-based tools and presentations at grower meetings.	$106,729.00
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	3. Quantifying Risk of Colletotrichum on Apple	The fruit pathology lab at North Carolina State University will improve recommendations for management of Glomerella leaf spot and bitter rot on apple. A reassessment is needed to evaluate any population shifts of Colletotrichum spp. to compare how apple variety and management practices influence species diversity and fungicide sensitivity for an orchard and to understand the life cycle of species present with the current climate. A risk-based model will be developed based on survey data on Glomerella leaf spot and bitter rot infection frequencies in relation to cultural and chemical control practices, cultivar and tree age, climatic factors, and Colletotrichum species present. The overall goal of this research is to provide apple grower stakeholders new recommendations for chemical management and findings will be communicated through grower meetings and extension publications.	$110,796.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	4. Optimizing Truffle Orchard Evaluation for Growers	Truffles are the fruiting bodies of a fungus that only grow in association with roots of certain tree species and are a unique specialty crop. Because truffles typically are not produced until at least 7 years after establishment, it is recommended that producers evaluate samples of roots to ensure their trees continue to be colonized by the truffle species of interest. Currently, samples are sent to a lab for evaluation, which is expensive for growers. NC State University aims to reduce input costs for truffle producers to evaluate colonization of their own trees by combining two strategies: teach growers to select roots for evaluation as some mycorrhizae can be excluded based on morphology using dissecting microscopes; and validate the use of FTA cards for growers to selectively sample their roots for lab confirmation of the truffle species present.	$156,505.90
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	5. Increasing Competitiveness for Historically Underserved Farmers	The Carolina Farm Stewardship Association will assist historically underserved specialty crop producers in overcoming challenges transitioning from direct-to-consumer (DTC) markets to wholesale and institutional buyers and food hubs. We will conduct five workshops for 75 specialty crop producers on food safety and post-harvest handling, product specification, and strategies for increasing their competitiveness in new non-DTC markets; conduct five 5-part webinar series on Navigating the GAP audit to 100 specialty crop producers; provide direct technical assistance to 25 specialty crop producers in developing and implementing a food safety plan and GAP certification ; and provide direct technical assistance to 15 specialty crop producers interested in expanding into new wholesale and intermediate markets. This will result in 90 specialty crop producers gaining technical knowledge about producing specialty crops, 15 will report producing more specialty crops, 225 will gain food safety knowledge, 275 will implement practices to mitigate food safety risks, 25 will establish or revise a food safety plan, and 25 will purchase or upgrade food safety equipment.	$135,003.82

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Carolina Department of Agriculture and Consumer Services	$1,261,979.67	6. Development of Viticulture Extension Resources	North Carolina State University will support the state's grape and wine industry by developing a comprehensive viticulture outreach and education program. The NC grape and wine industry had an economic impact of $6.8 billion on the state in 2022, contributing to more than 25,000 NC jobs directly, and more than 45,000 jobs across NC. Despite those impacts, this fast-growing industry lacks appropriate educational resources tailored to NC. For this purpose, we propose to develop the following tools for growers: 1) Comprehensive and detailed online viticulture education resources. 2) On-demand viticulture classes for NC growers and extension agents. 3) In-person training and viticulture practice demonstrations. This project will lead to improved grape growing practices, and to a more educated workforce in industry and cooperative extension, enhancing the footprint of NC for grape and wine production.	$135,003.82
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	7. Rapid Development of Resistant Fraser Fir	The North Carolina State University's Whitehill Lab Christmas Tree Genetics (CTG) Program, in collaboration Tri-Hishtil LLC, will pioneer novel grafting approaches to produce desperately needed Phytophthora root rot (PRR) resistant rootstock. Our goal is to immediately provide short-term solutions to the two biggest challenges impacting NC Christmas tree growers, PRR disease and deer browse. We propose five major project objectives: 1) Generate vectors for use in Fraser fir SE transformation experiments; 2) Generate Fraser fir SE lines that carry the Trichoderma cellulase and/or (+)-limonene synthase gene; 3) Develop high-throughput grafting protocols for Fraser fir SE seedlings in conjunction with industry partners; 4) Evaluate Phytophthora spp. resistance and characterize aromatic profiles of transgenic Fraser fir; and 5) Synthesize and disseminate results and materials to NC Christmas tree stakeholders through Extension activities. We expect project deliverables to accelerate production and distribution of disease resistant Fraser fir to Christmas tree growers.	$199,996.20

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	8. Expansion of NC Potato Markets 2024-2025	he North Carolina Potato Association (NCPA) will continue to build market opportunities for its members/growers in this project through potato marketing/promotions. We are seeking marketing funds to promote NC potatoes at annual meetings, through media, and website to corporate potato buyers/decision makers in the US and Canada, and to consumers and students. By continuing our marketing efforts, we will enhance competitiveness of our potatoes with storage crop potatoes and enhance consumer education of potato nutrition. Additional information for school students and consumers will be added to the www.ncpotatoes.org site for educational purposes. Through this grant funding we aim to increase buyer awareness and increase consumer awareness; increase the volume of NC potatoes moved into the markets; and increase amount of consumer consumption.	$44,123.72
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	9. Boosting Microgreen Production via Science Driven Approaches	The North Carolina A&T State University will enhance the microbial quality and evaluate the sensory profiles of microgreens by studying the impacts of growth substrates and light sources on microgreens' microbiota, metabolomic profiles, and flavor profiles. Microgreens have gained increasing popularity among small produce farms and new growers. Fresh microgreens are highly perishable, and some species have distinct and less appealing flavors. We will: 1) explore the impacts of different growth substrates and light sources on microgreens' microbiota and spoilage quality; 2) Investigate how the growth substrates and light composition impact flavor and metabolomic profile of microgreens; and 3) develop educational materials for growers on best microgreen production practices for yielding improved shelf-life and flavor profiles.	$124,960.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	10. Understanding Natural Grass Sod Purchasing Decisions	NC Sod Producers will gain an understanding of younger consumer attitudes toward natural grass and when and where younger consumers are gathering information that would inform a purchase decision, and then ultimately create an online home to support consumers in the decision-making process. With the insights and website that would be generated, this project will ensure that NC sod producers can effectively invest promotional resources to be top of mind with NC consumers.	$58,063.41
North Carolina Department of Agriculture and Consumer Services	$1,261,978.67	Grant Administration	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.	$45,045.12
North Dakota Department of Agriculture	$3,358,290.40	1. Invasive Horticulture Pest Trapping and Outreach Project	The North Dakota Department of Agriculture (NDDA) will document the presence or absence of specific pests that affect trees and shrubs of North Dakota. The main pests that will be monitored for are Japanese beetle, emerald ash borer, and exotic wood borer/bark beetles.	$135,565.80
North Dakota Department of Agriculture	$3,358,290.40	2. Diagnostics of Nosema Infection in Honeybees	Apiary inspection programs from the North Dakota Department of Agriculture, South Dakota Department of Agriculture and Natural Resources, Massachusetts Department of Agricultural Resources, Montana Department of Agriculture, Maine Department of Agriculture, Conservation and Forestry and Vermont Agency of Agriculture, Food and Markets will collect information on hive health from a total of 1200 colonies (over 2 years) and look for correlations of hive health, Nosema spore counts, and molecular results.	$151,008.80

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Dakota Department of Agriculture	$3,358,290.40	3. Developing a Comprehensive Molecular Diagnostic Panel and Sampling Techniques to Quantify Root Pathogens in Pulse Crop Hosts and the Environment	The National Agricultural Genotyping Center (NAGC) and North Dakota State University Williston Research Extension Center (WREC) will create a comprehensive molecular panel and optimize field collection methods to quantify pathogens causing root rot disease in pulse crops.	$321,804.00
North Dakota Department of Agriculture	$3,358,290.40	4. Increase the Availability of a Diagnostic Panel to Survey for Herbicide Resistance in Kochia Populations	The National Agricultural Genotyping Center (NAGC) will build a diagnostic panel to determine the herbicide resistance (HR) potential of kochia in North Dakota. This project will: 1) provide wider availability of genetic tests to rapidly screen for HR in research programs and grower fields, and 2) deliver the first state map of HR genotypes in kochia collected for an upcoming sampling program.	$271,945.00
North Dakota Department of Agriculture	$3,358,290.40	5. Utilize Messaging and Marketing to Increase Awareness and Sales of North Dakota-grown Potatoes	The Northland Potato Growers Association (NPGA) will coordinate plans and efforts to promote the potato growers and specialty crop potato industry. This grant will utilize a common identity, marketing, communications, and education plan to showcase, promote and increase sales of North Dakota (ND) grown potatoes across the US and international countries.	$150,000.00
North Dakota Department of Agriculture	$3,358,290.40	6. Facilitating International Growth for ND Specialty Crop Producers and Processors	The North Dakota Trade Office (NDTO) seeks to increase the market share of ND specialty crops by strategically expanding opportunities and partnerships internationally.	$382,321.00
North Dakota Department of Agriculture	$3,358,290.40	7. Mitigating Potato Seed Decay and Associated Economic Losses Using Enhanced Suberization Strategy	Potato Research Program of USDA-ARS, Fargo, North Dakota will establish an agreement with the North Dakota State Department of Agriculture to advance research strategies for mitigating potato tuber seed decay and associated crop production losses.	$118,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Dakota Department of Agriculture	$3,358,290.40	8. MetiGROWshe Educational Garden and Orchard at Camp Metigoshe	The MetiGROWshe Garden and Orchard at Camp Metigoshe will educate participants, staff, and volunteers on the production of and nutritional value of vegetable, herb, and fruit crops through interactive learning sessions.	$53,532.24
North Dakota Department of Agriculture	$3,358,290.40	9. Pursuit and Development of a Durable rust-resistant Confectionary Sunflower	North Dakota State University plant pathologists and breeders located in North Dakota will pursue the development of durable rust resistance in confection sunflower hybrids by identifying, mapping, and incorporating potential gene(s) conferring adult plant resistance into a confectionary sunflower hybrid.	$180,859.00
North Dakota Department of Agriculture	$3,358,290.40	10. Toward a Comprehensive Understanding of Pulse Proteins and their Fractions as Affected by Simple Food Processing	North Dakota State University will address the critical needs of pulse proteins to be utilized as “Alt protein” in the food industry, which can directly help increase the market of pulse production in North Dakota (ND). The overall objective of this study is to comprehensively understand how the structural, functional properties, flavor profile of isolated individual pulse protein fractions (globulin, legumin, vicilin and albumin) are affected by a number of moderate and simple processing conditions by (e.g., thermal treatment, pH shift, ultrasound, high pressure treatment).	$170,123.00
North Dakota Department of Agriculture	$3,358,290.40	11. Towards Visualizing Improvements in Management of the Early Die Complex	Plant pathologists from North Dakota State University will improve outcomes from the early die disease complex for growers. Specifically, we will work directly with growers and an industry partner to validate the use of imaging for detection of potato early die disease.	$142,975.00
North Dakota Department of Agriculture	$3,358,290.40	12. Integrated Root Rot Management in Field Peas with Crop Rotation, Planting Date, and Seed Treatment	In this project, the North Dakota State University Carrington and Williston Research Extension Centers seek to evaluate the integrated use of crop rotation, planting date, and fungicide seed treatment for management of field pea root rot.	$97,502.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Dakota Department of Agriculture	$3,358,290.40	13. Post-Harvesting Processing and Quality Effects on Value-Added Cold-Hardy Berry and Stone Fruits	North Dakota State University (NDSU) will lead and execute the project to increase consumption and access to cold-hardy berries and stone fruits. NDSU's Northern Crops Institute (NCI) will identify fresh and frozen harvest and post-harvest conditions' that impacts their optimization for processing and fruit qualities- acidity, phenolic profile, colorimetric, and sensory characteristics of North Dakota indigenous or introduced cold-hardy berry and stone fruits of value-added commercial use or interest.	$121,520.00
North Dakota Department of Agriculture	$3,358,290.40	14. Determining Interactions of Nematode and Fungal Pathogens for Control of Potato Early Die Disease Complex	The Department of Plant Pathology at North Dakota State University will determine the effects of co-inoculation of the root-lesion nematode species Pratylenchus scribneri and fungal pathogen Verticillium dahliae on disease symptoms of potato early die and growth and yield of selected potato cultivars, and determine the nematode and fungal interactions by comparing the effects of co-infection of nematode and fungal pathogens to the infection of nematode or fungal pathogen alone in outdoor microplot field experiments.	$139,600.00
North Dakota Department of Agriculture	$3,358,290.40	15. Development of Dry Bean-based Bakery Products from Stone Milled Flours	The Northern Crop Institute, tasked with growing markets for crops in the northern plains, will develop stone milling process and formulate new bakery products using the most important dry bean classes in North Dakota, promoting dry beans market both nationally and internationally.	$22,330.00
North Dakota Department of Agriculture	$3,358,290.40	16. Building a Better Inoculant and Inoculation Decision Framework for North Dakota Pulse Crops	In this project, North Dakota State University researchers will generate data on which inoculant formulation result in the highest yield when considering field history of pulse production. Their work will lead to a better decision framework for farmers when it comes to choosing inoculant products for their operation and even take the first steps to developing new and improved versions that overcome the rhizobium competition problem.	$189,903.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Dakota Department of Agriculture	$3,358,290.40	17. Development of Pilot Milling Operations and Product Application for Lentils	The Northern Crops Institute will promote the purchase of lentils in global markets by developing low-cost stone milling operations and utilization of lentil flour in foods important to the world's most significant lentil customers.	$20,912.00
North Dakota Department of Agriculture	$3,358,290.40	18. Lentil Root Rot Prediction and Mitigation	The North Dakota State University Williston Research Extension Center will compare one-, two-, three-, and four-year intervals in between lentil crops to determine the effect of these rotation lengths on root rot disease severity and yield in a no-till, dryland cropping system. Intercropping lentils with canola will be evaluated for suppression of root rot in lentils in a short rotation. Finally, a soil root rot potential seedling bioassay will be evaluated for its usefulness in predicting field root rot severity.	$36,930.00
North Dakota Department of Agriculture	$3,358,290.40	19. Breeding by Design to Develop the Next Generation ultra-high Protein Pea Varieties	The North Dakota State University Pulse Crops Breeding Team, in collaboration with NDSU geneticist, agronomist, and food scientists, will aim to develop the next generation, ultra-high protein pea cultivars for sustainable protein production with a minimal carbon footprint.	$272,228.00
North Dakota Department of Agriculture	$3,358,290.40	20. Evaluating Woody Plant Species for Clonal Propagation Methods	The North Dakota State University Woody Plant Improvement Program will evaluate suitable propagation methods for five different woody plant species including: Acer trifloum (threeflower maple), Alnus hirsuta, Manchurian alder, Cercis canadensis (Eastern redbud), Prunus triloba `Multiplex' (double flowering plum) and Tilia cordata (littleleaf linden). This project will focus on best management practices for developing propagation methods utilizing plant tissue culture (micropropagation).	$59,482.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
North Dakota Department of Agriculture	$3,358,290.40	21. Evaluating Hydrangeas for the North Dakota Nursery and Landscaping Industry	The North Dakota State University proposes to evaluate six different species/hybrids and multiple new cultivars of hydrangea including: Hydrangea anomala (climbing hydrangea), Hydrangea arborescens (smooth hydrangea), H. macrophylla (bigleaf hydrangea), H. paniculata (panicle hydrangea), H. serrata (mountain hydrangea) and hydrangea hybrids. These new cultivars will be compared to the industry standards for adaptation and usability in North Dakota.	$67,112.00
North Dakota Department of Agriculture	$3,358,290.40	Grant Administration	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.	$241,767.87
Commonwealth of the Northern Mariana Islands Department of Lands and Natural Resources	$244,569.99	1. Food Safety Training	The Commonwealth of Northern Mariana Islands Division of Agriculture will team up with Public Health Bureau of Environmental Health and train local farmers to become certified food handlers. The importance of this project is to ensure that all of our local farmers complied with the food handler requirements of the Commonwealth of the Northern Marianas Island and ensure that safety is being practiced when handling or processing food. Training will be conducted by officials from Bureau of Environmental Health with the expectation of certifying if not all but most of the local farmers and their employees who are selling specialty crops around the island.	$65,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Commonwealth of the Northern Mariana Islands Department of Lands and Natural Resources	$244,569.99	2. Farmers Market Pilot Education Program	Kagaman and Farm Producer Association (KAFPA) will collaborate with Division of Agriculture to conduct field trainings to promote local produce and educate consumers on the process of producing of locally grown crops or processed food products. The trainings will be based more on a farm to table concept, where farmers will showcase the farm plot and their produce, also process it takes to grow the produce and even provided a recipe for participants to taste so that they can get the whole experience of how food is being produced from farm and straight to the table and into their mouth.	$65,000.00
Commonwealth of the Northern Mariana Islands Department of Lands and Natural Resources	$244,569.99	3. Introduction of Aquaponic Systems	Division of Agriculture will collaborate with local farmers who are interested in aquaponic system method of farming and assisted them in installing an aquaponic system for growing lettuce, and the system will be used as display and inspiration for others to mimic and adapt. The project will be used to determine variety of lettuce that grows best as well as challenges that goes along with maintaining an aquaponic system. After the end of the project, results will be printed on brochures and distributed to schools and communities for educational purposes.	$80,000.00
Commonwealth of the Northern Mariana Islands Department of Lands and Natural Resources	$244,569.99	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$34,560.90

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Ohio Department of Agriculture	$604,523.95	1. Expanding Raspberry Production Options for Acreage Expansion, Long-Term Sustainability, Risk Mitigation, and Season Extension	The Ohio State University will help Ohio growers boost raspberry production by developing innovative production methods, creating comprehensive training curriculum for raspberry growers, and delivering multifaceted grower outreach through webinars, social media, grower meetings, field days and farm visits. The purpose of the project is to develop a sustainable production protocol to grow raspberries from the “recycled” long cane raspberry bushes after they have finished fruiting, test the viability of production system in the greenhouse, and improve the production skills of growers for acreage expansion. The deliverables of the project include a "grower friendly" production protocol of raspberry system utilizing the long cane bushes, a fact sheet on greenhouse production, a comprehensive training curriculum for growers, and eight grower training programs in various forms across Ohio.	$98,000.00
Ohio Department of Agriculture	$604,523.95	2. Demonstrating the Benefits of Companion Planting Using Specialty Crop Cultivation with "FarmBot” Tech	Center for Innovative Food Technology (CIFT), partnering with Sofia Quintero Arts and Cultural Center (SQACC), will demonstrate the use of a FarmBot in raised beds as related to tomato production. This will allow companion planting of basil and carrots thereby impacting yields, pesticides, and labor needs. SQACC will install and operate the FarmBot on their three acres Urban Farm grounds in an area deemed as a food desert due to the poor availability of food to its community's low-income residents. Beneficiaries of this initiative include individuals exposed to the technique, student volunteers interested in the industry, other urban/community operations, small scale specialty crop growers, local extension agents, an assortment of organizations prominent in the area, and social media influencers exploring food system advancements.	$26,350.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Ohio Department of Agriculture	$604,523.95	3. Battery Powered Future: Electric Innovations in Fruit Crop Settings	In recent years, battery powered solutions to horticultural challenges have become increasingly accessible, opportune as the price and availability of labor has become a primary constraint for many operations. Adoption of these technologies in the Ohio fruit crop sector has been notably absent. A team of The Ohio State University (OSU) researchers and extension personnel will implement a program of trials and outreach aimed to reduce the information, familiarity, and skill barriers constraining the adoption of battery powered technology in specialty fruit crop settings. Our project will conduct a series of trials evaluating the efficacy and economics of battery powered horticultural tools. The OSU team will leverage its extension resources to create a portfolio of outputs including a video series, a horticultural technology field day at Ashtabula Agricultural Research Station, and an Ohio-based support and networking group for operators of emerging technologies in specialty crop settings.	$97,923.00
Ohio Department of Agriculture	$604,523.95	4. On-farm Cultivation of Goldenseal, a High Value Ohio Specialty Crop	Rural Action and United Plant Savers will conduct research into multiple cultivation methods for the commercially valuable forest crop goldenseal, Hydrastis canadensis. Goldenseal is a high-value specialty crop; the root portion of the plant wholesales for $60/dry pound and retails for over $400/dry pound. Project leaders will compare goldenseal grown from seed, from rootlet (or rhizome), and from fibrous roots, and grow the plants out in three environments. The objective of the study is to provide farmers and members of the herbal products industry with guidance on best propagation practices that will support the sustainability of the goldenseal supply chain. Findings from the project will be shared through four hands-on workshops, presentations at the 2024 and 2025 OEFFA conference, and a publication in the Journal of Medicinal Plant Conservation.	$99,996.91

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Ohio Department of Agriculture	$604,523.95	5. Intercepting Invaders: Keeping Spotted Lanternfly out of Ohio Grapes	Spotted Lanternfly (SLF) is a new invasive insect recently detected in four counties and model forecasting estimates rapid expansion of this pest across Ohio. SLF has a particular affinity for grapes, and high infestations can lead to complete crop loss without timely management. Grape production supports a diverse retail market in Ohio that includes wineries, commercial sales, and associated 'agritainment' businesses. The Ohio State University will partner with wineries and vineyards statewide to 1) Monitor vineyards for SLF infestations using eDNA, in person scouting and circle traps, 2) identify variables that may predispose vineyards to SLF infestations and 3) develop extension resources that outline best practices for managing SLF in grape. We will increase the monitoring of SLF at OH vineyards, boost specialty crop grower awareness and knowledge of SLF and improve preparedness toward managing SLF populations in all of Ohio's vulnerable specialty crops.	$74,744.00
Ohio Department of Agriculture	$604,523.95	6. Next Generation Advances in Seed Health Fortifying Ohio Specialty Crop Resilience	This project will build a platform for specialty crop seed health testing and pathogen diagnostics for Ohio producers. This goal will be achieved through the combined expertise of three research and Extension teams at The Ohio State University. Seed-borne pathogens are a major limitation to specialty crop production, from vegetables to ornamentals. Producers may not know if their seed is certified as clean, which can lead to complete crop losses before transplanting. We propose to expand the capacity of our diagnostic platform by establishing a seed health program. This project will define methodology for pathogen seed testing and microbiome-based seed health of major specialty crops. This will increase access to seed testing for Ohio producers and create new training opportunities for future plant health professionals in Ohio and nationally. This project will establish a standard and novel culture-independent protocols for detection of bacterial seedborne pathogens and core seed health.	$98,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Ohio Department of Agriculture	$604,523.95	7. Wholesale for All Scales	FairShare CSA Coalition will coordinate peer-to-peer training on vegetable crop production, training and guidance on wholesale packaging standards and practices, food safety requirements, and host farm and facility tours for diversified vegetable growers seeking to sell to wholesale outlets. Many small to mid-scale diversified vegetable growers do not have the knowledge or skills necessary to modify their operations to participate in a wholesale marketplace. This project sets out to address this by creating a day-long workshops to introduce growers to market opportunities through targeted presentations, peer-to-peer production skills training and development, current food safety requirements, standards and practices of packaging for specific wholesale outlets and guidance on how to meet them. By introducing growers to these opportunities, providing them with knowledge, and highlighting successful examples we set out to increase the number of small to mid-scale farms participating in these markets.	$44,049.00
Ohio Department of Agriculture	$604,523.95	Grant Administration	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.	$63,567.66
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	1. Tapping Value from Oklahoma Maples	Scientists at Oklahoma State University propose to document quality, devise and demonstrate procedures to streamline processing and assist in development of a new maple syrup industry in Oklahoma. Our project seeks to provide critical syrup quality specifications and market comparisons, as well as processing improvements, needed to unlock value contained in millions of unutilized Oklahoma maples and by doing so bring about a new Oklahoma maple syrup specialty crop industry.	$96,899.00
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	2. Investigating Goji Berry and Seaberry as Ornamental and Edible Crops for the Oklahoma	Researchers at Oklahoma State University will determine if test species will prove aesthetically acceptable (ornamental) but also yield fruit for fresh and/or dried consumption and/or for other commercial uses.	$96,971.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	3. Improving Soil Health in Pecan Orchards Leading to Increased Profitability	Noble Research Institute, LLC will demonstrate soil-centric management of pecan orchards that improve the overall soil health and ecosystem services, leading to increased profitability. Multiple orchards across Oklahoma will be monitored for soil, tree, and orchard health. Results will be disseminated to stakeholders through grower meetings and a free, publicly available scorecard for tracking progress of soil-centric management.	$85,000.00
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	4. Evaluating the Portable Sequencer Minion to Detect Viruses of Solanaceous Crops	Oklahoma State University will explore the use of a portable DNA sequencer called MinION to detect multiple viruses that infect Solanaceae plants, which include widely grown crops like tomatoes and peppers. This will help growers make informed decisions to manage their crops effectively, leading to improved yields.	$72,000.00
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	5. Oklahoma Specialty Crop Card Games	Oklahoma Ag in the Classroom will create six educational card games with the main focus on Oklahoma Specialty Crops, while covering other core academic standards. The purpose of this project is to provide meaningful and relevant materials for professional development for Oklahoma educators.	$58,500.00
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	6. Oklahoma Local Ag Summit	The Oklahoma Department of Agriculture, Food and Forestry (ODAFF) will undertake a project to assist members of the specialty crop supply chain incorporate innovative and sustainable growing practices, learn new marketing techniques, and connect with consumers more effectively.	$91,117.11
Oklahoma Department of Agriculture, Food, and Forestry	$545,237.77	Grant Administration	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.	$43,500.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Oregon Department of Agriculture	$1,936,304.00	1. Boosting Oregon Specialty Crops with Grocery Partnerships and Trade Shows	The Good Food Foundation (GFF) project will connect small and midsized Oregon specialty crop businesses with national buyers through strategic trade show access and training and enhance customer sales with in-store displays and sampling demos. Together, these programs will elevate national awareness of Oregon's unique specialty crop industry and strengthen sales for value-added food producers and the farmers growing their ingredients.	$134,978.00
Oregon Department of Agriculture	$1,936,304.00	2. Horticulture Education and Workforce Development in Oregon Correctional Facilities	Growing Gardens will partner with the Department of Corrections, dedicated volunteers, local food leaders, potential employers, community partners, and local universities to implement workforce development programming and job connections for incarcerated youth and adults. Program participants learn diverse horticultural skills through a 4-class series with curriculum developed in partnership with OSU Extension and Chemeketa Community College. The curriculum includes learning to grow and manage specialty crops in prison gardens and greenhouses and is accompanied by post-release assistance in joining the labor pool through partnerships with Oregon Nursery Association and many smaller horticultural businesses and organizations.	$155,235.00
Oregon Department of Agriculture	$1,936,304.00	3. Oregon Craft Cideries Exploring and Developing Market Access in Japan	The Northwest Cider Association (NWCA) project aims to address international market development and access issues that will benefit up to 80 Oregon cideries. The objectives of this project are to increase Oregon cidermakers' understanding of trade barriers and/or regulatory constraints to selling cider in the Japanese market; to gain market information and product exposure through an outbound trade mission to Japan that includes buyer and media meetings as well showcasing Oregon cider at the 2024 Japan Cider Cup awards festival in Tokyo and taproom takeovers in Osaka; and media/public relations activities to improve buyer and consumer awareness of Oregon cider as a premium product in Japan and Oregon.	$175,800.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Oregon Department of Agriculture	$1,936,304.00	4. Specialty Crops Through the Seasons	Oregon Agriculture in the Classroom (AITC) will collaborate with Oregon teachers to increase knowledge of specialty crops in kindergarten through high school classrooms across the state by developing and distributing standards-aligned curriculum and supplies. Throughout this project, Oregon AITC will provide 70 classrooms monthly with an engaging science, technology, engineering and math (STEM) lesson related to a seasonal Oregon specialty crop. Grant resources will provide participating teachers with all the supplies and background information necessary to bring Oregon specialty crops to their classroom and engage students with interesting lessons on some of Oregon's most important crops.	$128,049.00
Oregon Department of Agriculture	$1,936,304.00	5. Articulating Caneberry Sensory Characteristics for Product Development: The Flavor Wheel	The Oregon Raspberry and Blackberry Commission coordinating with the OSU Food Innovation Center will investigate the sensory characteristics of caneberry varieties, working towards the creation of standardized lexicons that are compatible with the practices and language used by professionals in culinary product creation. Mutual understanding of the complex nature of the caneberry flavor profile through a common terminology will open communication between product developers, marketers and consumers.	$144,866.00
Oregon Department of Agriculture	$1,936,304.00	6. Develop A Centralized Seed Labeling Regulatory Database	The Oregon Seed Association (OSA) will develop a database of state and federal seed labeling requirements that will improve efficiency and transparency, facilitate trade, and reduce the risk of noncompliance. The database will house information on all turf-type grasses and vegetable seeds produced in Oregon.	$114,750.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Oregon Department of Agriculture	$1,936,304.00	7. DeepSeed: A Computer-Vision Network for Onsite, Real-Time Seed Analysis	Oregon State University Seed Services will develop a Computer Vision based tool to receive seed sample images, label each seed, send results to a seed analyst for verification and electronically report back to the turf grass seed conditioner at first semi-automatically and then leading to real time processing. Project objectives include plans to build an inexpensive imaging system to capture and label tens of thousands of seed images for training of a Convolutional Neural Network (CNN) for both pure seed and weed seeds; develop a computer vision enabled user-friendly web tool that processes images for classification; have seed lab researchers review classification and generate reports; develop turf grass seed grower and seed laboratory partnerships to test early prototypes; and share results of the final product and demonstrations at industry conferences and meetings.	$175,267.00
Oregon Department of Agriculture	$1,936,304.00	8. Cost of Regulatory Compliance and Its Impact on Market Outcomes	Oregon State University will gather farm-level cost of regulatory compliance data and develop an analysis of the evolving regulatory environment facing agricultural producers in the state. This will be used to evaluate the economic impacts of these regulatory pressures on profitability and market outcomes. The end goal of the project is to provide data and guidance for nut and tree fruit growers with respect to their long-term planning and investment decisions. The project team will achieve this through assessments of compliance costs based on analysis of regulations, data, and interviews with growers. This data will be used to develop an economic model that takes into account consumer price sensitivity and competition from producers in other regions.	$120,541.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Oregon Department of Agriculture	$1,936,304.00	9. Microencapsulated Essential Oils As Potato Sprout Inhibitors in Storage	Oregon State University (OSU) will develop new products for sprout inhibition or suppression in potato. This is a continuation of our research on sprout inhibitors or growth suppressants in potato. In this proposed project, OSU aims to microencapsulate the previously identified whole oils, blends, and fractions in various materials and sizes and evaluate the release rate of the essential oils at storage temperatures. These new products will become alternatives to the currently used chemical Chlorpropham (CIPC), which was banned in the European Union, presenting challenges for U.S. potato exports.	$166,106.00
Oregon Department of Agriculture	$1,936,304.00	10. Cover Cropping and Reduced-Tillage Systems for Onion in Eastern Oregon	The Oregon State University will identify the adaptability and compatibility of various cover crops and tillage practices for onion and evaluate their impact on soil fertility, nutrient uptake, weed and pest control, water quality, crop yield, and economics. The project outcome will be the identification of beneficial cover crops and integration within a conservation tillage system in the onion rotation to increase soil health, reduce pest pressure, and enhance economic returns for Eastern Oregon onion growers.	$174,373.00
Oregon Department of Agriculture	$1,936,304.00	11. Multidisciplinary Investigation of Plant Probiotic Effects on Strawberry Plant Soil	The Department of Food Science and Technology at Oregon State University will grow strawberries supplemented with a combination of mycorrhizae that consists of beneficial fungi at a local strawberry farm to evaluate the effects on the soil and strawberry quality. The proposed research project activities include identification of the most effective mycorrhizae for strawberry plant soil; effects of mycorrhizae on mycobiome (the overall fungi population) in strawberry plant soil; analysis of metabolites and macronutrients in strawberry plant soil; and evaluation of strawberry quality (sweetness, sourness, color, volatile compounds, etc.) grown with mycorrhizae supplementation. Upon successful completion of the proposed research, the researchers will be able to delineate the interaction between mycorrhizae and mycobiome in soil as well as effects of mycorrhizae on strawberry quality.	$174,996.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Oregon Department of Agriculture	$1,936,304.00	12. Oregon Productive Partnerships (OPP): Nurturing the Local Food System	Willamette Farm and Food Coalition will develop multiple partnerships in support of Specialty Crop producers throughout Lane County Oregon to increase access to and consumption of locally grown food by both individual consumers and institutions, particularly school districts. This will facilitate ease of access into, and sustainable competition, within the national edible, specialty crop market.	$110,984.00
Oregon Department of Agriculture	$1,936,304.00	Grant Administration	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.	$153,586.55
Pennsylvania Department of Agriculture	$1,028,940.13	1. PA Preferred Culinary Connection with Focus on Promoting Specialty Crop	Strategic Contracting, Inc. will plan and coordinate the 2024 Pennsylvania (PA) Preferred Culinary Connection at the PA Farm Show, allowing local farmers and food suppliers to showcase their specialty crops to local consumers. The project will connect consumers with specialty crops through inviting their representatives to directly participate in stage demonstrations, promote their products and distribute product samples and literature to the patrons, by which expanding their availability and access.	$70,780.00
Pennsylvania Department of Agriculture	$1,028,940.13	2. Development of Biocontrol Techniques to Control Mushroom Flies on Mushroom Farms	The Pennsylvania State University (Penn State) Mushroom Fly research team will establish a biocontrol management system to control mushroom sciarid (Lycoriella ingenua) and phorid (Megaselia halterata) fly populations using novel natural enemies and to train PA growers in a proper implementation technique. This project will establish protocols for nematode use on commercial mushroom farms. Ntomopathogenic nematodes (EN) application training will be implemented for growers in both Spanish and English, focusing on underrepresented minorities, including women and Latinx workers. The EN management system will be integrated into the ongoing IPM program and disseminated through training courses.	$70,749.76

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Pennsylvania Department of Agriculture	$1,028,940.13	3. Monitoring Viral Threats for PA Tree Fruit Nurseries	The Pennsylvania State University will establish a reliable protocol to quickly screen budwood and rootstocks of Pome and Prunus for common viruses, viroids, and phytoplasmas. We propose to use a new method called MonsterPlex to precisely identify the most common viruses, viroids, and phytoplasmas found in Pome and Prunus tissues. This will aid in the early detection of issues and prevent the introduction of pathogens, especially phytoplasmas. Results will be disseminated to stakeholders through grower meetings and Extension publications.	$98,756.00
Pennsylvania Department of Agriculture	$1,028,940.13	4. Advancing the Sustainability of Indoor Urban Agricultural Systems	Penn State University will improve the Water-Energy-Food-Nutrition security components of Indoor Urban Agricultural systems developing Precision Agriculture solutions aimed at improving resource use efficiency, crop yield and quality and will transfer the knowledge and solutions developed to PA urban farmers and industry stakeholders. Using leafy greens as test crop, our interdisciplinary team will focus on 1) evaluating the efficiency of alternative indoor soilless growing systems and LED artificial lighting recipes to produce high quality leafy greens examining the impact on water, energy, and nutrient use efficiency, crop yield, and nutritional quality; 2) developing sensor-based internet of things (IoT) and imaging technologies and artificial intelligence (AI) solutions for improving the efficiency and sustainability of indoor urban agricultural systems; 3) assessing and improving the microbial quality and safety of water and produce in indoor urban agricultural systems; and 4) disseminating research-based knowledge on sustainable indoor urban vegetable production systems and their implementation and efficient management through a series of Extension and outreach activities targeting urban farmers and industry stakeholders.	$97,760.70

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Pennsylvania Department of Agriculture	$1,028,940.13	5. Developing Plasma Agriculture Solutions to Improve Vegetable Yield and Quality	Penn State University will develop, and test new Plasma Agriculture solutions aimed at improving vegetable yield and quality performances and will transfer the knowledge and solutions developed to PA specialty crop growers and industry stakeholders. Using microgreens as test crop, our interdisciplinary team will focus on 1) optimizing devices to generate non-thermal plasma (NTP) and plasma activated water (PAW) and characterize PAW properties; 2) evaluating the effects of NTP and PAW on seed germination, physiology and microgreens yield and nutritional quality; 3) evaluating the efficacy of NTP and PAW as food safety treatment on seeds and microgreens for control of food borne pathogens; and 4) disseminating and transferring research-based knowledge and Plasma Agriculture solutions to the vegetable industry through a series of Extension and outreach activities.	$74,518.88
Pennsylvania Department of Agriculture	$1,028,940.13	6. Novel Fire Blight Biopesticide Field Validation	Penn State University will validate the efficacy of a novel and experimental biopesticide active ingredient used for the mitigation of fire blight in apple trees over the course of three growing seasons from 2024 – 2026 in multiple locations and communicate the results to stakeholders at grower meetings.	$63,447.00
Pennsylvania Department of Agriculture	$1,028,940.13	7. Weed Management Strategies for Organic High-Density Apple Orchards	Rodale Institute aims to identify effective alternatives to chemical herbicides for weed management in organic high-density apple orchards in Pennsylvania. This project will evaluate the viability and horticultural effects of different organic-certified weed management strategies on weed community composition and suppression, measures of soil and tree health, and fruit quality. The project team will compare applications of organic bark chip mulch, a novel thermal weed control technique using hot foam and water, and a combination of the two treatments. The results of this study will be disseminated through field days, in-person workshops, online seminars, and regional conferences.	$127,207.80

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Pennsylvania Department of Agriculture	$1,028,940.13	8. Evaluate Potato Varieties for Their Tolerance to Heat Stress in Pennsylvania	Pennsylvania Cooperative Potato Growers, Inc. will work with Sterman Masser, Inc. and Penn State University Potato Research Team to assess potato varieties for their tolerance to heat stress in Pennsylvania. We will collect varieties that are commonly grown in Pennsylvania and new varieties that may have potential resistance to heat stress and evaluate them for their tolerance to heat stress in field trials at different locations in Pennsylvania. We will identify a few varieties with relative resistance to heat stress and have good qualities for either fresh or processing markets. We will also identify varieties that are susceptible to heat stress. We will recommend varieties that performed best under heat stress to Pennsylvania potato growers at meetings, presentations, field meetings, and printed research report.	$98,000.00
Pennsylvania Department of Agriculture	$1,028,940.13	9. Educating Mushroom Farmers: Assisting Inputs Costs and Sustainable ESG Reporting	The American Mushroom Institute will educate mushroom farms on how to assess the pricing and costs of their inputs that will allow for better cost projections and improved sustainability practices related to procurement. Objectives of this project include: 1) develop a data model of inputs market prices/costs for supplies and expenses; 2) develop explanatory and predictive econometric models for major inputs to allow farms to conduct periodic financial projections; and 3) analyze the implications of changes in input markets on mushroom sustainability, and environmental, social and governance (ESG).	$84,915.00
Pennsylvania Department of Agriculture	$1,028,940.13	10. 2024 PA Veggies Promotion and Farmer Support	The Pennsylvania Vegetables Marketing and Research Program (PVMRP/PA Veggies), will drive consumer demand for specialty Pennsylvania vegetables and support Pennsylvania farmers in their marketing efforts by implementing a comprehensive digital marketing plan. This plan, will promote Pennsylvania specialty crops during peak growing season, encompasses digital advertising, social media, email marketing, blogging, and graphic design.	$89,635.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Pennsylvania Department of Agriculture	$1,028,940.13	11. Planet Bee Apiculture Training Program: The Sustainable Honey Path	Planet Bee Foundation is inviting prospective beekeepers to the Apiculture Training Program: Sustainable Honey Path, an apprenticeship that provides a pathway to knowledge, tools and guidance in apiculture and honey production from local beekeepers and honey producers with certificates and awards upon levels of completion. This program will connect existing and prospective partners in schools and communities to the beekeeping and honey production industry.	$63,467.04
Pennsylvania Department of Agriculture	$1,028,940.13	Grant Administration	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.	$86,255.89
Departamento de Agricultura de Puerto Rico	$486,123.56	1. International Events for the Capacity Building of Specialty Crops Producers	The Puerto Rico Department of Agriculture (PRDA) will provide additional opportunities to specialty crop producers for participation in promotion activities within the Unites States and other Countries. This project efforts are directed to new beginning farmers, and farmers with potential to expand, gaining market share for specialty crop local products within Puerto Rico's own market as well as the international market.	$107,751.00
Departamento de Agricultura de Puerto Rico	$486,123.56	2. Promote the Development of the Agricultural Sector in the Local Market	The Puerto Rico Department of Agriculture (PRDA) will direct efforts to increase the presence and participation of beginning farmers and/or producers, as well as for other local specialty crop products within the Puerto Rico market (local events).	$102,000.00
Departamento de Agricultura de Puerto Rico	$486,123.56	3. Capacity Building in Food Security for Farmers in Puerto Rico	FIDA and the Department of Agriculture will provide tools to farmers so that they can improve their crops and products, as well as improve their management and handling skills. The planned educational activities will include training courses in areas such as: PSA, Next Level, management in packing houses, management of wildlife and congestion according to the FSMA Law, Safety, Transability, Mentoring for Farm Workers, Plans of Safety and Recall Plans.	$163,231.50

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Departamento de Agricultura de Puerto Rico	$486,123.56	4. Capacity Building in Coffee Cup Quality	The Puerto Rico Department of Agriculture (PRDA) is interested on improving the quality of the coffee grown on the island appealing specialize resources in this industry as Q-Graders. The course will be focused on training and impacting as many farmers as possible. Our goal is also to produce high quality coffee, reduce inputs, natural resources, which results in an increase in the income of the roasters.	$22,140.00
Departamento de Agricultura de Puerto Rico	$486,123.56	5. Farming the Future with AGROEDU Program	The general objective of this project is to promote agriculture in schools in Puerto Rico to promote food education and interest in the agricultural sector with the development of practical skills in students.	$54,000.00
Departamento de Agricultura de Puerto Rico	$486,123.56	Grant Administration	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.	$35,644.90
Rhode Island Division of Agriculture	$270,666.42	1. Improving the Viability of RI Specialty Crop Farms	The Rhode Island Department of Environmental Management - Division of Agriculture (RIDEM) will support RI Farmers through this project with the goal of improving farm viability. We will provide access to RIGAP certification and Agricultural water quality testing, Produce safety farm kits all with the purpose of promoting food safety on farm. In addition, we will support RI beekeepers through increased access to the RI apiary health inspections. RIDEM will contract with local auditors/ inspectors to carry out some of the project activities. By providing farms access to these programs RI producers will have increased market opportunities therefor increasing the availability of RI specialty Crops to consumers.	$58,577.15
Rhode Island Division of Agriculture	$270,666.42	2. Establishing RI Grown Week	The Rhode Island Department of Environmental Management - Division of Agriculture (RIDEM) will facilitate the development of RI Grown week - which will highlight the specialty crop products of the state. This marketing initiative will strengthen branding efforts and brand recognition throughout the state, while giving a statewide platform for locally produced specialty crops.	$41,723.35

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Rhode Island Division of Agriculture	$270,666.42	3. Scaling Equitable Growth: Technical Assistance for Small and Beginning Rhode Island Specialty Crop Producers	The Rhode Island Food Policy Council (RIFPC) has been working toward a more equitable, accessible, economically vibrant, and environmentally sustainable food system in Rhode Island for over 10 years. The issue this project seeks to address is that small, beginning, and historically underserved communities of specialty crop producers have not received the amount of specialized technical support that would benefit the launch, growth, resilience, and success of their agricultural enterprises. This project builds on the success of our currently funded SCBGP project by integrating early learnings from that project. In particular, combining into a single, larger cohort and using funds for one-on-one assistance between meetings will better support small and beginning farm businesses in starting and growing their businesses and creating and maintaining jobs.	$33,896.00
Rhode Island Division of Agriculture	$270,666.42	4. Community Education at the Farmers Market: Highlighting Specialty Crops throughout Rhode Island	Farm Fresh Rhode Island's Community Education team will partner with farmers market operators across Rhode Island to promote specialty crops through monthly promotions including hands on educational events and tours, utilizing Harvest of the Month and Community Roots marketing campaigns to increase knowledge, access, and purchasing of Rhode Island grown specialty crops.	$39,850.23
Rhode Island Division of Agriculture	$270,666.42	5. Evaluating Heat-Tolerant Broccoli Varieties for Rhode Island Vegetable Farmers	The University of Rhode Island will conduct research on heat-tolerant broccoli varieties suitable for the Northeast region. The data generated from two years of variety trials will inform farmers of optimal varieties for local production systems. Research results will be shared with the Rhode Island vegetable farming community through a combination of Cooperative Extension events, such as field days, and freely-available publications.	$37,883.97

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Rhode Island Division of Agriculture	$270,666.42	6. Increasing Consumer Access to, Consumption and Purchasing of Specialty Crops by Expanding Coverage of AARI Pop-up Farmer's Markets	The African Alliance of RI (AARI) will increase access to and consumption of specialty crops by expanding its summer farmers markets in underserved low-food access communities of Providence, RI and at a park in nearby Johnston, RI.	$37,000.00
Rhode Island Division of Agriculture	$270,666.42	Grants Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$21,646.85
South Carolina Department of Agriculture	$601,424.84	1. Evaluating and Promoting Wine Grape Varieties Suitable for South Carolina	Clemson University will evaluate horticultural performance of new wine grape hybrids (proven to be resistant to Pierce's disease, the main limiting factor to bunch grape production in the southeastern U.S.), and develop management practices and provide recommendations specific for our conditions in South Carolina to farmers through grower meetings, regional conferences, field days, factsheets and online platforms such as the South Carolina Grower blog.	$39,148.00
South Carolina Department of Agriculture	$601,424.84	2. Improving Detection of Xylella Fastidiosa to Protect Diversified Fruit Farms in South Carolina	Clemson University will improve detection of the devastating bacterial pathogen Xylella fastidiosa and determine the risk of Xf moving between small fruit crops on diversified fruit farms via insect vectors. This project will develop a diagnostic assay that can be used at the Plant and Pest Diagnostic Clinic on samples submitted from stakeholders across South Carolina to aid in early decision making, as well as develop risk assessments and recommendations to prevent spread of Xf for specific combinations of fruit crops, which will be useful to farms growing multiple fruit commodities.	$48,800.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Carolina Department of Agriculture	$601,424.84	3. Substantial Reduction of Captan Pesticide in Peach Spray Programs	Clemson University will substantially reduce the number of conventional fungicide applications needed to produce high quality peaches by strategic use of biologicals and disseminating results to stakeholders through grower meetings and farm visits.	$50,000.00
South Carolina Department of Agriculture	$601,424.84	4. Building Wholesale Readiness Amongst South Carolina Specialty Crop Farms	The South Carolina Specialty Crop Growers Association is seeking to host a workshop preparing small, socially disadvantaged, or beginning specialty crop farmers for the demands and requirements for selling to a wholesale market. The workshop will cover a variety of wholesale market topics including, but not limited to, Pricing, Branding, Contracts and Communication, Risk Management, Certification Requirements, Food Safety, Packaging and Quality. The workshop will consist of presentations from various agricultural organizations such as the South Carolina Department of Agriculture, Clemson Extension, Carolina Farm Stewardship Association, along with speakers from food distributors and food hubs.	$6,050.00
South Carolina Department of Agriculture	$601,424.84	5. Investigating the Role of Fungicides in Tank Mix on Managing Bacterial Spot of Peach	Fungicides and bactericides are routinely mixed together for disease management throughout the growing season in South Carolina peach orchards. However, the effect of fungicides on bacterial pathogens is unclear. Bacterial spot is a major disease that causes the South Carolina peach industry millions of dollars in annual losses. The Wang's lab at Clemson University conducted a preliminary study which found that some fungicides can inhibit the growth of bacterial spot pathogen in the lab and in greenhouse. Thus, Clemson University proposes to further evaluate these fungicides and their combination with bactericides in different dosages in both Geenhouse and field for bacterial spot management.	$49,300.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Carolina Department of Agriculture	$601,424.84	6. Systems Approach to Manage the Fusarium Wilt in Cucurbits	Fusarium wilt [FW; caused by fungi - Fusarium oxysporum f. sp. Niveum (FON)] is one of the most destructive diseases of watermelon that causes substantial yield losses each year. Current management practices for FW in watermelon are either expensive (grafting: 4-5 times more expensive) or lack the ability to contain the disease due to fungal resistance to fungicides, and adaptation to resistant varieties. Here, Clemson University will work on evaluating an environmentally friendly systems approach using cover crop mixtures and beneficial microorganisms to manage the FW in watermelon crop. Further, cover crop mixtures will be evaluated for their environment benefits and their ability to increase the abundance of beneficial soil microorganisms that can promote watermelon growth and decrease the FW severity	$45,541.00
South Carolina Department of Agriculture	$601,424.84	7. Evaluation of Low-input Pecan Cultivars in the Coastal Plain of South Carolina	Clemson University will evaluate the feasibility and profitability of growing newer low-input pecan cultivars in the Sandhills region of South Carolina by establishing a research trial comparing yield and pest and disease susceptibility of low-input cultivars to older standard cultivars. Results will be disseminated to stakeholders though grower meetings and field days.	$11,537.00
South Carolina Department of Agriculture	$601,424.84	8. Securing the Future by Preserving the Past: Developing a Strategic Stewardship Plan for South Carolina's Heirloom Vegetable Seed	Clemson University will identify best practices for germplasm collection management and will engage stakeholders in the development of a strategic plan to steward South Carolina's heirloom vegetable seed for future breeding efforts and distribution to the public.	$36,002.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Carolina Department of Agriculture	$601,424.84	9. Increasing the Marketability of Specialty Crops Through Direct Market Displays	The South Carolina Specialty Crop Growers Association is seeking to host a workshop that will teach specialty crop producers how improving the quality of displays at direct markets can increase sales. The workshop will consist of presentations from various agricultural organizations such as the South Carolina Department of Agriculture, Clemson Extension, and Carolina Farm Stewardship Association. Topics that will be covered include Types of Direct Markets and How to Choose Them, Food Safety and Quality, Branding and Pricing, the Certified SC Program, and How to Draw Attention to Displays.	$7,550.00
South Carolina Department of Agriculture	$601,424.84	10. Building Specialty Crop Branding and Marketability Through Value-Added Packaging	The South Carolina Specialty Crop Growers Association is seeking funding to improve and continue its Value-Added Packaging Cost share program form small and mid-sized specialty crop growers. This project will enable more growers to increase their share of South Carolina's specialty crop industry while complying with market outlet packaging requirements. Additionally, it will allow specialty crop growers to improve the branding and marketability of their crops and seek more sustainable packaging options.	$20,000.00
South Carolina Department of Agriculture	$601,424.84	11. Increasing Specialty Crop Production and Distribution through Data Visualization	Freshlist aims to enhance the competitiveness of South Carolina's specialty crop industry by developing a centralized, digital platform for the South Carolina Food Hub Network (SCFHN) to collect and share data on specialty crop sales and availability across the network. This will allow food hubs to access and visualize real-time data on the current and projected supply of specialty crops from over 125 SC farmers, enabling them to optimize production, distribution, and marketing of specialty crops statewide.	$60,795.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Carolina Department of Agriculture	$601,424.84	12. Effective Fungicides to Manage Phomopsis Fruit Rot on Eggplant in South Carolina	Clemson University will improve management of Phomopsis fruit rot and reduce postharvest losses by testing a variety of different fungicides on two types of eggplant, globe and Japanese, and calculate if any treatments increase net returns for the crop. The most serious fruit rot disease on eggplant in South Carolina is Phomopsis fruit rot, caused by the fungus Phomopsis vexans. It is found in late summer and fall and also develops in postharvest storage. This project will determine which fungicides reduce phomopsis fruit rot on eggplant by testing fungicides with 8 different active ingredients currently registered on eggplant.	$29,641.06
South Carolina Department of Agriculture	$601,424.84	13. Chickpea (Cicer arietinum L.) Breeding for Emerging High Protein Plant-Based Hummus Production in SC	Clemson University (CU) will develop short-season winter hardy chickpea cultivars (Cicer arietinum L) adapted to the SC. Chickpea is a brand-new legume crop to SC; current cultivars in Western Canada and the Pacific Northwest are unsuitable for SC winter conditions. These cultivars are best for mid-western regions and did not fit for SC winters.	$65,220.00
South Carolina Department of Agriculture	$601,424.84	14. South Carolina State Farmers Markets Specialty Crop Consumer Awareness Initiative	The three state farmers markets in Columbia, Florence and Greenville, operated by the South Carolina Department of Agriculture will educate consumers through the promotion of SC grown specialty crops. A Specialty Crop Event will be held during the summer months in 2024 and 2025 at each market, which will promote specialty crops through tasting events, canning demonstrations and distribution of recipe cards & educational materials. Social media will also be used to promote the specialty crops in season and direct consumers on where to purchase them.	$30,100.00
South Carolina Department of Agriculture	$601,424.84	15. Expanding FoodShare Greenville's Capacity to Support SC Farms and Low-Income Consumers	Mill Village Ministries' FoodShare Greenville Program provides affordable fresh produce to low-income residents in Greenville, SC. Through this project, FoodShare Greenville will expand its capacity to include SC-grown specialty crops in FoodShare boxes by increasing the number of SC farms from which produce is procured. The program will maintain its strong base of consumers and its focus on nutrition and cooking education.	$41,716.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Carolina Department of Agriculture	$601,424.84	Grant Administration	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.	$14,434.67
South Dakota Department of Agriculture	$378,919.97	1. Enhancing Accessibility of Dakota	Dakota Fresh LLC, a farmer-owned collective representing 12 producer-members, aims to increase marketing of their current retail options and develop a Farm Share program that would increase the accessibility and ease of purchasing locally grown specialty crops. The development of the Farm Share option would allow retail customers to sign up at the beginning of the season to receive weekly produce boxes featuring multiple producers' items, similar to a CSA share, but with a wider range of specialty crops available. Dakota Fresh managers will coordinate with producers to plan crop production, recruit new producers to fulfill customer needs, develop relationships with community partners to serve as drop-off locations, hire professional services to help market and launch this program to the public, and evaluate and troubleshoot ongoing logistics. The project will also focus on educating all customers about storage, preparation and nutritional value of specialty crops.	$71,616.98
South Dakota Department of Agriculture	$378,919.97	2. Expanding Availability and Consumption to Pulses Through the Development of New Products	South Dakota State University will complete project objectives related to expanding availability, access and safety of pulse specialty crops through new product development. The proposed activity will target lentil and chickpea utilization in the development of non-traditional food products associated with these pulses. Furthermore, food safety related activities will be conducted on the raw seeds to establish if the microflora present on the raw material enters the final product. The end goal of this project is to expand availability of pulses by developing new products that are more readily adaptable to consumer diets and need minimal preparation.	$62,204.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Dakota Department of Agriculture	$378,919.97	3. South Dakota Cucurbit Foliar Disease Survey	South Dakota State University (SDSU) will improve cucurbit disease management by carrying out a three-year cucurbit foliar disease survey, visiting 40 farms from the east to west sides of the state, to identify the economically important diseases throughout, identify their causal pathogens to species, document major fungicide resistances to fungal pathogens species isolates, and disseminate findings to growers and scientists, with suggestions for management, through SDSU Specialty Crop Field Days and a peer-reviewed scientific publication.	$75,425.00
South Dakota Department of Agriculture	$378,919.97	4. South Dakota Honey Production Education and Curriculum Development	The Edmunds Central School District projects aims to dramatically impact the exposure to and consumption of locally-produced honey by developing a curriculum for Prek-12 students that is based entirely on the South Dakota honey production and pollinator industry. This proposal will utilize the relationship built with Adee Honey and our experience with their operation through our site visits in the FY21 specialty crops grant to train a minimum of 66 teachers in 50 of South Dakota's 148 school districts.	$72,579.06
South Dakota Department of Agriculture	$378,919.97	5. Strengthening of Specialty Crop Wholesale Marketing Ecosystem via Focused Buyer Development by Wholesale Customer Relationship Specialist	The South Dakota Mines and Technology will work with the Black Hills Farmers Market (BHFM) to train Wholesale Customer Relationship Specialist (WCRS) with developing a group of local long-term buyers for its newly formed wholesale market. The project team will assist WCRS to specialize in identification of Rapid City wholesale buyers who have procurement, bidding, and supplier requirements in-line with those of that can be met by small-to-medium sized farming businesses. Multi-year purchase agreements will be used to increase farmers knowledge, experience, and revenue stream to sustain feasibility of undertaking fiscal investments needed to cover cost associated with food safety certification and liability coverage. To accomplish this, the WCRS will promote BHFM as an intermediary player between wholesale buyers and sellers by offering a platform for aggregation of produce, advancing use of collaborative e-marketing systems, and forming recurrent buyer-seller purchase relationships.	$40,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
South Dakota Department of Agriculture	$378,919.97	6. The Fungi Frontier: Advancing Sustainable Agriculture through Mushroom Production and Soil Building in South Dakota	Black Hills Mushrooms, LLC (BHM) aims to increase specialty crop production and distribution of mushrooms in South Dakota by increasing technical knowledge of growers through outreach on 1) soil benefits of using Spent Mushroom Substrate (SMS) in mushroom production; 2) utilizing cover crops (brassica and oats) to aid mushroom production; 3) cultivating specialty crop whole mushroom varieties (Pleurotus ostreatus, Pholiota adiposa, Stropharia rugosoannulata, Agaricus subrufescens, SMS) suitable for South Dakota; and 4) targeting Urban agriculture growers; however rural producers will also be a focus as sustainable mushroom production can be a beneficial crop for them, too.	$23,567.69
South Dakota Department of Agriculture	$378,919.97	Grant Administration	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.	$33,230.67
Tennessee Department of Agriculture	$497,591.97	1. Crockett County Specialty Crops and Food Science Project	The Crockett County FFA Chapter is building a general store and a hydroponic greenhouse at Crockett County High School. The general store will house products from our students' SAEs (Supervised Agricultural Experience), that will be available to the public for purchase. This store will provide our students with a way to display all of their hard work. Our hydroponic greenhouse will provide a way for the students that do not come from an agricultural background, to start and maintain a SAE. Being able to grow specialty crops in our chapter is going to give us a diverse learning environment to offer to our students. Being able to offer these fruits and vegetables to our community will allow us to offer a “Buy Local” option in Alamo, Tennessee.	$31,602.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Tennessee Department of Agriculture	$497,591.97	2. Specialty Crop Training Center, Demonstration Farm, and Community Outreach Center	Cul2vate grows and delivers nutritional food to combat food insecurity locally by providing nutritious specialty crops to underserved communities. We work in collaboration with other organizations to provide education to employees and the community regarding nutrition, food safety, Good Agricultural Practices, and implementation of urban agriculture projects. All food is grown by chronically underemployed individuals hired by Cul2vate and trained on site in agriculture and job readiness skills, preparing them for job placement. Prior graduates are now working to assist/educate current students as well as other local farms and organizations in adopting Specialty Crop practices that comply with Federal Food Safety Standards.	$17,600.00
Tennessee Department of Agriculture	$497,591.97	3. Growing Year-Round: Providing State-Wide Educational and Marketing Toolkits for Cool-season Specialty Crops at Winter Farmers Markets in Tennessee	Grow Oak Ridge will create four education/marketing toolkits highlighting four types of cool-season specialty crops (greens, mushrooms, herbs & flowers, and root vegetables). Once complete, these toolkits will be donated to the Tennessee Association of Farmers Markets for inclusion on the association's website for free downloads by other winter farmers markets, so those markets can easily promote winter specialty crops and help raise farmer income.	$47,152.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Tennessee Department of Agriculture	$497,591.97	4. Evaluating Near Infrared Radiation and Ultraviolet-C on Salanova® Lettuce Postharvest Shelf Life Extension	A collaborative research group at Middle Tennessee State University (MTSU) will evaluate the potential of using short-term near-infrared (NIR) and Ultraviolet-C (UVC) radiation to suppress mold and bacterial growth of fresh-cut Salanova® lettuces and extend shelf life. Upon completion of the project, the research team will provide the results of the feasibility and effectiveness of using short-term NIR and UVC radiation for extending the fresh-cut Salanova® lettuce storage life. The team proposes to design a treatment regime by posing and answering the following questions: 1) what is the optimal light intensity and duration for controlling fungi and/or bacterial outbreaks while minimizing the browning ratio? 2) How can different cultivars of Salanova® lettuces respond differently to short-term NIR and UVC radiation? 3) How can low-cost NIR-UVC integrated pathogen/bacteria control equipment be custom-designed and integrated into commercial post-processing pipeline? We will rely on the existing MTSU Small Farming project, consisting of seven caterpillar tunnel production of leafy-green vegetables, including four different Salanova® lettuce varieties, Green Butter, Red butter, Red Gem, and Red Oakleaf. A range of intensity and duration of NIR and UVC light will be applied to process the lettuce to obtain the dose dependent effects.	$49,984.00
Tennessee Department of Agriculture	$497,591.97	5. Finding the Right Grapes: Testing the Success of Growing New Varieties in Tennessee's Climate	Mountain Valley Vineyards (MVV) will determine the economic feasibility and success of growing new grape varieties in Tennessee by contracting with an established vineyard to plant, manage, and ultimately harvest the test varieties. Results will be disseminated via a detailed written report on the growing of new/emerging grape varieties for all stakeholders to consider in partnership with the University of Tennessee. The goal will be to select 2 grape varieties and plant 2 acres of each selected.	$69,982.70

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Tennessee Department of Agriculture	$497,591.97	6. Munford High School Farm Fresh Center Hydroponic Facility	Munford FFA is collaborating with the Tennessee Department of Agriculture to establish a Farm Fresh Center at Munford High School in the Tipton County School System. The Farm Fresh Center will house state of the art hydroponic production systems to train students to raise fruit and vegetables using controlled environment agriculture practices. This new specialty crop production facility will be known as The Farm Fresh Center and will serve three purposes: educating community members of innovative methods of raising food on limited land area, providing a Buy Local, Buy Fresh option in Munford, TN, and delivering healthy produce to local food pantries. Growing methods and techniques will be shared with local farmers, producers and master gardeners through workshops and meetings with the intent to increase local fresh produce production in the Tipton County Area. Produce raised in the Farm Fresh Center will be sold to generate income to sustain the facility; veterans will be encouraged to volunteer as an opportunity to heal from PTSD.	$50,000.00
Tennessee Department of Agriculture	$497,591.97	7. Expanding Markets and Providing a Learning Foundation for Future Generation of Specialty Crop Growers	Nourish Knoxville will promote the consumption of specialty crops by expanding our successful children's educational program, Nourish Kids, to new and underserved East Tennessee farmers' markets. The program will fund Nourish Kids Clubs at six farmers' markets in East Tennessee, providing children ages 2-12 with the opportunity to try new specialty crops, to participate in educational activities about specialty crops, and to receive $5 each in Produce Bucks to spend on select specialty crops at farmers' markets, which builds revenue for specialty crop farmers. All our partner farmers' markets are producer-only, meaning that all Produce Bucks spent will go directly to local farmers. Participating children will also receive recipe cards to take home featuring specialty crops, encouraging more consumption of specialty crops at home.	$49,999.92

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Tennessee Department of Agriculture	$497,591.97	8. Pick TN Conference Attendee Scholarships, AV Costs and Speakers	The Pick TN Conference is an annual conference provided to expand revenue for TN agriculture by providing educational workshops for farmers across the state. It is made up of 8 statewide members associations: TN Fruit and Vegetable Association, TN Agritourism Association, TN Farm Winegrowers Alliance, TN Organic Growers Association, TN Farmers Market Association, TN Farm Veteran Coalition, TN Beekeepers Association, TN Flower Growers Association, TN Christmas Tree Growers Association. Partners include TN Department of Agriculture, University of TN Extension, University of TN Center for Profitable Agriculture, and TN State University Extension. This project will help producers who need funding to attend the conference through scholarships, to bring in expert speakers from all over the nation to improve the educational aspects of the conference, and to provide funding for conference costs such as AV.	$66,000.00
Tennessee Department of Agriculture	$497,591.97	9. Expanding Markets and Providing a Learning Foundation for Future Generation of Specialty Crop Growers	This project will fund a series of educational workshops, field days, networking sessions and awareness raising events to be completed in partnership by the Tennessee Local Food Summit and the Southeast Tennessee Young Farmers (SeTNYF), a chapter of the National Young Farmers Coalition. This will impact a great number of Specialty Crop producers, feature innovative research and tools for Specialty Crop growers, provide a learning foundation for future generations of Specialty Crop growers, and will expand markets for new and existing Specialty Crop growers.	$14,357.89

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Tennessee Department of Agriculture	$497,591.97	10. A Coordinated Effort to Understand the Dynamics of Vascular Streak Dieback in Redbud Production	Tennessee State University (TSU) Otis L. Floyd Nursery Research Center (TSUNRC) in McMinnville, TN, and Tennessee Department of Agriculture (TDA) plant pathologists and plant inspectors will work with nursery growers in the region to understand the nature of Vascular streak dieback (VSD), a novel threat to the woody ornamental industry. This study will have 4 outcomes: 1) Determining the density and seasonal variability of airborne Rhizoctonia theobromae (RT) spores as well as other targeted fungal pathogens that pose threats to redbud production and identifying the relationship between the spore loads and the VSD progression; 2) Identification of the environmental factors that favor the VSD development; 3) Screening the redbud species and cultivars to identify their tolerance/susceptibility to VSD; and 4) Organization of workshops to educate growers regarding the findings and development of extension publications and factsheets to reach out to a broader audience regarding VSD.	$50,000.00
Tennessee Department of Agriculture	$497,591.97	11. Equipping Cut Flower Growers to Expand their Markets in Tennessee	The University of Tennessee will equip current and potential cut flowers growers in Tennessee to open new businesses and expand current operations by providing training and information based on Tennessee-specific studies that will help producers select, grow, and market cut flower crops that meet the needs of local markets. This project will be based on new and regionally specific consumer research to determine demand and marketability as well as production and cultivar trials to help growers make the best production decisions. It will provide training and resources including enterprise budgets, marketing strategies, and research-based production information to support Tennessee cut flower growers.	$50,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Texas Department of Agriculture	$1,446,654.71	1. Collecting Data to Educate Texas Produce Farms on the Produce Safety Rule and Maintaining Produce Safety Standards	Texas Department of Agriculture's (TDA) has developed a long-term educational program and provides resources for producers. TDA will collect data and evaluate the need for training throughout the State and contracts with other state educational facilities to provide outreach. Outreach activities promote self-assessment of at-risk activities, encourage proactive compliance in advance of regulatory action, and provide updated education and information regarding the Produce Safety Rule.	$276,698.16
Texas Department of Agriculture	$1,446,654.71	2. Boosting Organic Leafy Green Production Using Summer-Adapted Cover Crops in Texas	Texas A&M AgriLife Research and Extension experts are organizing field trials by precisely choosing summer-adapted legume cover crops varieties with specific root architecture that would (1) reshuffle the soil structure, (2) ensure enrichment of microbial communities, and (3) mobilize and retain nutrients (especially nitrogen) in the available zone for the succeeding leafy greens in organic systems. We will evaluate the efficacy of summer-adapted varieties of cowpea, tepary beans (Southern natives), and sun hemp by assessing their impact on soil health through physicochemical properties and microbiome diversity. The potential impact on nutrient retention and availability will be valued based on the productivity of winter-grown kale and spinach varieties. The project's outcome demonstrating the most efficient pairs of cover crop-leafy green varieties would promote its rapid adoption by the regional vegetable industry.	$154,156.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Texas Department of Agriculture	$1,446,654.71	3. Maximizing Irrigation Use Efficiency in Texas Vineyards as a Means to Conserve Water While Ensuring Grapevine Resiliency Under High Stress Environ	Researchers with the Texas A&M AgriLife Extension Service will partner with the Texas Wine and Grape Growers Association, Texas Hill Country Wineries, Texas Artisan Vineyards Cooperative (High Plains), Cross Timber Wine and Vineyard Association, North Texas Winery Association, Rustic Spur Vineyards, Kerrville Hills Vineyard and Winery, and Hidden Hangar Vineyard and Winery in evaluating wine grape resiliency amidst an unpredictable climate and a dwindling precious resource, water. Working together, these cooperating organizations intend to establish three research trials across three distinct grape growing regions of Texas with the ultimate goal of developing practical and economically feasible research-based tools for grape growers to implement in their respective vineyards, appropriate for their distinct region that will promote water use efficiency and thus water conservation while ensuring vines are resilient and better able to cope with the perennial threat of vine stressors such as drought.	$88,612.00
Texas Department of Agriculture	$1,446,654.71	4. Revitalizing Figs as a High-Value Fruit Crop for Small Farmers in Texas	Texas A&M AgriLife Extension will continue partnering with Stephen F. Austin State University, Stonehouse Figs, and Gundermann Acres to reinvigorate the fresh fig industry in Texas through completion of two strategic field studies: 1) conduct a multi-site trial to identify fig varieties with the greatest yield potential in response to severe freeze; 2) establish a multi-site trial to evaluate the over 100 fig varieties available for the Texas fresh fruit industry and nursery industry. A consumer preference study will also be conducted to identify the most marketable varieties for commercial production in Texas and develop Fig Variety Recommendation Guide. Results will be showcased through the first-ever Texas Fig Field Day, Texas Fig Variety Recommendation Guide, a new factsheet, demonstration videos, social media posts, and conference presentations.	$16,920.87

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Texas Department of Agriculture	$1,446,654.71	5. Texas Grown Identification, Promotion, and Education	The Texas Department of Agriculture (TDA) aims to create online resources that benefit specialty crop producers and further educate the public on the accessibility of locally grown products throughout the state. These resources will also highlight other TDA programs with a direct impact of specialty crop production, including but not limited to GO TEXAN, Agriculture Consumer Protection, Farm Fresh Network, and Produce Safety. To better present these resources in a way that is usable for specialty crop producers, TDA will create a specialty crop website that houses and displays information relating to funding opportunities for producers, a producer directory for potential buyers, and educational material for the public to further promote the Texas specialty crop industry.	$204,310.74
Texas Department of Agriculture	$1,446,654.71	6. Testing Wetting Agents for Soil Drag and Bootie Swabs and Validating Them in Varied Agricultural Soils	The Texas International Produce Association, collaborating with the Center for Produce Safety, will partner with University of Illinois at Urbana-Champaign to optimize the swab method used for agricultural soil sampling. This project will identify the optimal wetting agent for drag and bootie swabs used in different agricultural soils for specialty crop production. The research team will test increasingly practical wetting agents and compare them with reference methods. Evaporated milk will serve as a reference for the optimization of wetting agents, and soil composite grabs as a reference for the validation of aggregation. In addition, this project will validate the best wetting agent by testing in different soils created by various stages of ground preparation for different commodities, using bacterial recovery and diversity as metrics. Success will mean a cost-effective testing method that provides field-level analysis of soil-borne risks.	$149,967.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Texas Department of Agriculture	$1,446,654.71	7. Hands-On Cooking and Nutrition Education with Texas Specialty Crops for El Paso Families	Common Threads (CT) will increase nutrition knowledge, consumption, and preparation of Texas specialty crops among underserved communities by expanding family and youth nutrition and culinary education programs at El Paso schools and community sites. Programs implemented will include Small Bites, a hands-on nutrition education curriculum for youth; Family Cooking Classes focused on preparing specialty crops; and Caregiver Workshops focused on shopping and meal planning around specialty crops. Our project goal is to equip students and their families with the skills and knowledge necessary to recognize, choose, and prepare healthy meals centered around locally and regionally grown specialty crops, empowering them as agents of change for healthier families, schools, and communities.	$100,312.40
Texas Department of Agriculture	$1,446,654.71	8. Developing Pineapple Guava as a New Low-Fruit and Ornamental Crop for Texas	Stephen F. Austin State University (SFASU) will partner with Texas A&M AgriLife Extension to continue developing pineapple guava into a new commercial crop for the Texas specialty fruit crop and nursery industry. A unique attribute of this project is the acquisition of new varieties from contacts previously made by Dave Creech and Tim Hartmann in this country and in New Zealand. This will be accomplished through, 1) collecting yield/fruit data from extensive trialing of over 40 varieties at two sites to identify best-performing material; 2) completion of study to developing more efficient propagation techniques to make these varieties commercially available; 3) comprehensive consumer preference study to identify most marketable varieties; 4) promotion of this new and exciting crop through a variety guide, field day, conferences, and social media. Continuation of this project will lead to a complete and comprehensive understanding of how to select, propagate, and produce elite varieties and how to market a new high-value commodity for the Texas fruit and nursery industries.	$31,935.25

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Texas Department of Agriculture	$1,446,654.71	9. Texas Specialty Crops Promotional Podcast	Tarleton State University will work with industry organizations and participants to develop a podcast promoting Texas Specialty Crops. Through the podcast and accompanying website and YouTube channel, this project will bring to life the uniqueness, history, regionality, and even events that celebrate Texas specialty crops. The monthly podcast will bring specialty crops and specialty crop growers to life for a diverse audience including consumers, community members, local and state leaders, and even members of the broader food system (i.e. processors, wholesalers, retailers, exporters, and importers). A related website will also be developed to host the podcasts, provide images and video content to supplement the podcasts, and provide industry information and materials (brochures, recipes, etc.) for listeners and interested parties.	$100,000.00
Texas Department of Agriculture	$1,446,654.71	10. Vine to Wine: Education and Promotion	To enhance consumer awareness on Texas wine, the Texas Department of Agriculture will conduct a marketing and public outreach campaign that will target consumers and raise awareness of grape growers and wineries in Texas. This campaign will focus on the grape growing process and the various factors that take place before these grapes can be used for wine production.	$141,822.14
Texas Department of Agriculture	$1,446,654.71	Grant Administration	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.	$176,317.19
U.S. Virgin Islands Department of Agriculture	$244,645.77	1. Building Youth Capacity for Sustainable Food Security Through S.T.E.A.M. Integration	The Virgin Islands Women in Agriculture Association, (VIWIAA), an affiliate of the National Women in Agriculture Association (NWIAA), will increase child and adult knowledge of specialty crop, production, consumption, and nutritional value. Project highlights include Agriculture Literacy Week activities, interdisciplinary lesson plans development, and creation of a nutrition/coloring/recipe book for distribution.	$59,149.86

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
U.S. Virgin Islands Department of Agriculture	$244,645.77	2. On-Farm Intercropping Sweetpotatoes with Jicama to Control Weevils	The University of the Virgin Islands School of Agriculture's Agricultural Experiment Station will work with local low-income, minority farmers and back yard gardeners to conduct on-farm sweetpotato trials with intercropped jicama. Three growers will supply land and water for the study in two growing seasons. The project will provide planting material (virus-free Sweetpotato cutting and Jicama seedlings), drip irrigation, fertilizer, weevil traps, and assist with harvest. Data will be collected on the weevil population over time and weevil damage at harvest. By working on-farm with growers and intercropping Sweetpotato with Jicama, the project will develop a natural control of weevil damage and increase marketable Sweetpotato yield in the U.S. Virgin Islands.	$50,000.00
U.S. Virgin Islands Department of Agriculture	$244,645.77	3. Improving Cucurbit Production in Protected Structures in the U.S. Virgin Islands	University of the Virgin Islands (UVI) will improve the production potential of cucurbits (cucumbers and watermelon) in the Virgin Islands by introducing non-pollinator dependent lines that are optimized for both indoor and open field environments.	$74,463.00
U.S. Virgin Islands Department of Agriculture	$244,645.77	4. Propagation of Java Plum (Syzygium cumini)	The University of the Virgin Islands will work with small acreage disadvantaged farmers of the U.S. Virgin Islands to provide on-location training of air-layering techniques of Java plum (Syzgium cummingi). The project will collect seeds of Java plum and investigate different pre-germinative seed treatments along with vegetative propagation to develop nursery protocols for planting stock. From the various germinated seedlings, the project will produce viable plantlets to be provided to participating farmers and develop a fact sheet for the general public.	$50,000.00
U.S. Virgin Islands Department of Agriculture	$244,645.77	Grant Administration	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.	$11,027.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Utah Department of Agriculture and Food	$386,242.69	1. Isolation and Utilization of Frankia from Nodules of Two Native Plants for Sustainable Nursery Production.	Utah State University will establish an agreement or contractual relationship with the State Department of Agriculture and Food to lead and execute a project to isolate and utilize Frankia isolates from the nodules of Ceanothus velutinus (snowbrush) and Shepherdia × utahensis 'Torrey' (hybrid buffaloberry) for sustainable nursery production. The results from this project will be disseminated to nursery growers and landscape professionals through field days, workshops, and/or educational materials.	$88,191.54
Utah Department of Agriculture and Food	$386,242.69	2. Maximizing Sustainable Green Industry Production Using Alternative Water Sources	Utah State University will establish an agreement with the State Department of Agriculture and Food to lead and execute the project to collaborate with at least 20 nursery and greenhouse producers to monitor the quality of alternative water (e.g., groundwater and/or secondary water) and implement the best water management practices for sustainable nursery and greenhouse production.	$86,893.12
Utah Department of Agriculture and Food	$386,242.69	3. Urban Edible Perennial Demonstration Garden & Educational Programming Development at Wasatch Community Gardens' Campus & Farms	Wasatch Community Gardens (WCG) will continue to establish edible perennial specialty crops as living demonstration and educational features at its urban Campus and farm locations with the purpose of showcasing varieties that are attractive in landscape designs, can thrive in Salt Lake County's dry climate, and are interesting and fun to consume for people of all ages. Alongside selecting and maintaining the edible perennials at the Campus and farm, WCG staff will develop public-facing educational opportunities through existing programming such as hands-on workshops and virtual resources for growers in our community to access. WCG staff will also develop and participate in internal training opportunities to further their knowledge around edible perennial specialty crops and, in turn, share their expertise with the broader community. The anticipated outcome of this project is for a greater number of Utah growers and consumers to be empowered to successfully identify, cultivate, and consume their own edible perennial specialty crops.	$46,830.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Utah Department of Agriculture and Food	$386,242.69	4. Utah Tree Fruit Growers- Consumer Education and Awareness of Utah Grown Tree Fruits	Mountainland Apples, Inc., along with approximately 15 "Utah Tree Fruit Growers" will work very closely with the UDAF/Utahs Own to develop educational and marketing programs to increase the consumer awareness and benefits of buying "Utah Grown Tree Fruits". The purpose for this project is to promote the sales and consumption of tree fruit, grown, packed, and sold by Utah tree fruit growers at several different locations - this can include farmers markets, roadside fruit stands, grower owned stores, and all traditional retail grocery stores, local and national.	$46,000.00
Utah Department of Agriculture and Food	$386,242.69	5. Wine Grape Irrigation Water Requirements in Utah	Utah State University researchers will quantify wine grape irrigation requirements in production vineyards in Washington and Box Elder Counties, Utah. The researchers will measure irrigation, precipitation, and soil moisture in five production vineyards throughout the growing seasons of 2024 and 2025. The researchers will estimate vineyard transpiration and soil water evaporation using a water balance approach and satellite imagery. Weather data will be collected at the vineyards to identify the role of local climate on vineyard irrigation water requirements. The researchers will produce Extension outreach fact sheets, workshops, and field days to disseminate the results to current and prospective growers. With this information, growers, potential growers, and state agencies will know how much water is necessary for wine grape production and producers will have information to make scientifically based irrigation decisions.	$87,135.48
Utah Department of Agriculture and Food	$386,242.69	Grant Administration	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.	$30,873.92

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Vermont Agency of Agriculture	$320,341.18	1. The Farmer's Share Podcast	The Farmer's Share podcast, a production of University of Vermont (UVM) Extension Agricultural Engineering, will provide self-directed, just-in-time, peer-to-peer educational opportunities for over 400 farmers related to sustainable practices in growing specialty crops. We will do this by producing 20 podcast episodes as a result of interviewing 20 Vermont growers (peer educators). The Farmer's Share is "a behind the scenes podcast where we visit with farmers and learn what it takes to be a sustainable produce grower across people, profits and our planet."	$29,930.00
Vermont Agency of Agriculture	$320,341.18	2. Establishing a Point of Origin Comparison Database for Vermont Honey	The Vermont Beekeepers Association will build a pollen profile found in Vermont honey samples. Samples will be collected from around the state, pollen will be DNA analyzed for species, and a computerized database will be created for comparison purposes. This database will be established to identify honey points of origin so that a future quality assurance and marketing program may be developed for tested and certified Vermont honey. The program will help consumers be more confident in the food they consume by certifying pure, authentic Vermont honey.	$8,961.00
Vermont Agency of Agriculture	$320,341.18	3. Research Validation for Alternative Viticulture Systems in Vermont	The University of Vermont Fruit Program will conduct on-farm research on alternative management strategies that reduce or eliminate synthetic pesticide inputs in vineyards by evaluating disease control efficacy, crop yield and quality, and economic return. Data collected will include: practices used by growers and in the experimental vineyards; weather conditions; grower satisfaction withdisease management; disease incidence on fruit and foliage, and crop yield.	$39,998.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Vermont Agency of Agriculture	$320,341.18	4. The Use of Drones to Detect and Control Common Tree Pests in Vermont	Randolph Technical Career Center, a school in the Orange Southwest School District, will collaborate with the University of Vermont and the Vermont Fish and Wildlife Department to utilize drones for the identification and reduction of common tree pests including balsam woolly adelgid, gypsy moth and other destructive pests. The goal is to reduce the use of pesticide through targeted application with informed knowledge in the Christmas tree, fruit tree, and maple industries. The data and information learned will be shared publicly with Vermont farmers and specialty producers. Drones will be used for mapping, pest detection, and precise pesticide distribution. Data will be collected to determine efficacy, cost effectiveness, and environmental impact of this pest detection and reduction method.	$49,450.00
Vermont Agency of Agriculture	$320,341.18	5. Increasing Market Access and Building Efficiency and Viability of Distribution/Freight Options	The project from Myers Produce will increase the sale and distribution of specialty crops for 116+ producers by directly increasing the volume of crops purchased from VT growers; increasing the number of specialty crop growers selling to the New York and Boston markets; and growing the number and scope of market access points for Vermont specialty crop producers. It will also provide educational opportunities to other food distributors and wholesale buyers to increase efficiencies for specialty crop producers across the country.	$47,000.00
Vermont Agency of Agriculture	$320,341.18	6. The Changing Landscape of Allium Pest Management on Vermont Diversified Vegetable Farms	The University of Vermont will conduct an applied research and education project exploring the changing suite of allium pests (allium leaf miner, leek moth, onion thrips) in Vermont by conducting a scouting and monitoring program of allium pests in Vermont, on-farm trials exploring interactions between common management practices and the suite of onion pests affecting Vermont growers and updating the recently acquired Leek Moth Information Center for the United States website. This proposed project is especially relevant for Vermont growers interested in organic and/or ecologically responsible practices, particularly small-holder farmers.	$39,024.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Vermont Agency of Agriculture	$320,341.18	7. Connecting Restaurants and Specialty Crop Producers: Increasing Sales and Enhancing Marketing Opportunities	The Vermont Agency of Agriculture, Food & Markets (VAAFM) will support specialty crop producers in establishing or expanding sales to restaurant accounts. VAAFM will do this by developing a number of resources for key market channel stakeholders, including specialty crop producers, restaurants and distributors. Resources will include case studies highlighting successful relationships between restaurants and specialty crop producers, and toolkits to help producers and restaurants reduce market channel barriers and better market their local purchases/sales. VAAFM, with the help of a contractor, will also facilitate networking and meet-up events to help stakeholders across the market sector connect with each other and communicate their business needs and product information. Events will include opportunities for key restaurant staff to visit specialty crop producer farms, and for specialty crop producers to visit restaurants. These exchanges will include both in-person and virtual formats.	$80,137.55
Vermont Agency of Agriculture	$320,341.18	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$25,608.74

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Virginia Department of Agriculture and Consumer Services	$552,005.24	1. Validating In-Field Water	Virginia Tech will validate in-field water treatments to enhance produce safety for specialty crop farms. These findings will directly support Virginia specialty crop farms by generating data on the efficacy of in-field water treatments, and how farms can monitor, verify and validate their use as a mitigation strategy to control contamination risks. Results will be communicated to stakeholders through extension activities at grower meetings, fact sheets/presentations, and Virginia-hosted Produce Safety Alliance Grower Trainings. Food safety programs, including Good Agricultural Practices and the Food Safety Modernization Act Produce Safety Rule address water usage on-farm with a combination of risk assessments, standards, or metrics. The ultimate outcome is generation of in-field water treatment data, which will allow growers to reduce contamination from water usage on-farm.	$74,801.26
Virginia Department of Agriculture and Consumer Services	$552,005.24	2. Use of Drone-Spray for Weed Management in Specialty Crops (Tomatoes and Broccoli)	The weed science team at Eastern Shore AREC, Virginia Polytechnic Institute and State University will evaluate the potential economic benefits of Unmanned Aerial Systems (UAS)/drones. Current use of UAS/ aerial drones for pest management is mainly limited to pest mapping and classification only. With the availability UAS carrying 20-25 L of pesticides/payload, UAS have the potential to modernize agricultural fields due to lower costs, greater coverage capacity, and flexibility compared to AI-based agricultural robots and tractors. Previous research on soybean and corn showed that these technologies can provide higher efficacy of the herbicides that are applied, saving money and herbicide. These technologies have not been tested for specialty crops, and operational conditions of drones may change based on canopy size, crop morphology, and herbicide label.	$74,958.59

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Virginia Department of Agriculture and Consumer Services	$552,005.24	3. Increasing Sustainability and Competitiveness of Virginia's Floriculture Industry by Improving Efficiency and Reducing Distribution Costs	The River City Flower Exchange Cooperative will continue to increase public awareness of and enhance the competitiveness of Virginia's floriculture industry through increasing access to sustainably grown flowers by developing an efficient and cost-effective delivery and outpost model. RCFE has demonstrated success in the Richmond area for locally grown flowers and there is demand in the Tidewater, Northern and Central Virginia areas for RCFE's locally grown flowers.	$75,000.00
Virginia Department of Agriculture and Consumer Services	$552,005.24	4. Increase Yield in Greenhouse Soilless Strawberry Using Growth Promoting Bacteria	The Institute for Advanced Learning and Research (IALR), in partnership with Virginia Cooperative Extension, industry leaders, and growers, will contribute to increasing greenhouse soilless strawberry yield by utilizing growth promoting bacteria. IALR will specifically use beneficial bacterial endophytes, which live inside plants and help plants grow better, tolerate stress conditions, and fight diseases. We will use different strawberry cultivars and promising bacterial endophytes in our CEA facility to decipher which cultivar x endophyte combinations give better yield. This research outcome would help growers increase profits in hydroponically grown strawberry by using growth promoting bacteria. We will disseminate our results by organizing grower tours to the institute and using Virginia Tech extension specialists.	$41,257.67

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Virginia Department of Agriculture and Consumer Services	$552,005.24	5. Virginia Specific Disease Management Strategies to Protect Young Sweet Corn Seedlings	Fresh-picked sweet corn is a quintessential summer treat, but seed rot and seedling blight threaten production. Stand reductions over 50% and stunted plants with low vigor are common in affected sweet corn, especially in the popular super sweet type hybrids and early plantings. Seed treatment with combinations of different fungicides are the most cost-effective means to manage these pathogens. The composition of pathogens affecting Virginia sweet corn is expected to differ from other sweet corn production regions. The objectives of this Virginia Polytechnic Institute and State University project are to identify fungicide seed treatments that are most beneficial for Virginia growers and to determine which soilborne pathogen species are most common in Virginia soils. Virginia specific disease management recommendations for protecting sweet corn seedlings will be disseminated to growers using written and oral Extension outreach methods.	$74,177.13
Virginia Department of Agriculture and Consumer Services	$552,005.24	6. Next-Generation Biofungicides for Application in Controlled Environment Agriculture	A team of researchers at Virginia Tech will develop and evaluate the use of biofungicides for the control of common diseases of food crops produced in controlled environment agriculture which is limited in the number of pesticides that can be utilized. This goal will be fulfilled by developing and evaluating RNAi-based biofungicides targeting grey mold in strawberry production and downy mildew in spinach production and then disseminating results to stakeholders through publications and presentations.	$74,975.37

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Virginia Department of Agriculture and Consumer Services	$552,005.24	7. Preserving Apples in the Face of Frost: Evaluating the Efficacy of Cryoprotectants	Spring frost represents a formidable abiotic stressor that poses a significant economic threat to fruit production worldwide. The annual cost of spring frost and freeze damage reaches millions of dollars, and climate change is projected to exacerbate the situation. Agrochemical companies have developed cryoprotectants that are believed to help prevent frost damage by increasing solute concentration and lowering the freezing point of intracellular fluids. There is limited scientific evidence on their effectiveness in fruit crops, particularly apple trees in the Mid-Atlantic region. Virginia Tech will investigate the impact of cryoprotectants on apple trees in the Mid-Atlantic region to advance the development of more practical and cost-effective strategies for reducing the adverse effects of spring frosts on apple production. The deployment of frost protectants is expected to augment the cold tolerance of buds, providing significant benefits to horticulture industry stakeholders.	$69,731.24
Virginia Department of Agriculture and Consumer Services	$552,005.24	Grant Administration	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.	$79,831.28
Washington State Department of Agriculture	$4,846,024.74	1. Washington Craft Cider Market Development Kickoff via National Cider Conference	The Northwest Cider Association (NWCA) will establish an agreement with Washington State Department of Agriculture to execute this project to address domestic market issues that will benefit up to 80 Washington cideries. Key activities include audience specific marketing/PR and education for influencers, buyers, distributors and consumers. NWCA will collaborate with the American Cider Association to complete project activities. This project seeks to improve gatekeeper, influencer, and buyers' awareness, preferences for and purchase of Washington craft cider in order to increase consumers' access and ability to purchase.	$249,800.52

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	2. IFPA Trade Show	The Washington State Potato Commission (WSPC) will coordinate a WA Grown Pavilion for members of Washington's specialty crop industry to exhibit at two consecutive Global Produce & Floral Shows (GPFS) Expos: Anaheim, CA in 2023 and Atlanta, GA in 2024. In order to help Washington specialty crop businesses continue to grow their footprint in other markets, both foreign and domestic, WSPC will coordinate booth space for multiple companies and organizations and will provide space to hold meetings with potential buyers and have a local Washington Chef to demonstrate what can be done with our specialty crops, drawing a crowd to the booth. The objective of this project is to grow Washington State's presence at GPFS during the Expo and continue to grow the number of companies able to participate, with an outcome of increased sales for participating companies.	$150,000.00
Washington State Department of Agriculture	$4,846,024.74	3. International Bio Pesticide Residue Compliance in Key Markets	Bryant Christie Inc. (BCI) seeks to conduct research on the rules and regulations of biopesticides in eight key export markets: Australia, Canada, China, the EU, Japan, Korea, Taiwan, and the UK. BCI will conduct extensive desk research and in-country interviews with foreign regulatory officials and experts to produce a definitive guide for Washington State specialty crop growers and exporters. This guide will contain a detailed analysis of the regulatory processes in the selected markets. It will be made available at no cost to Washington growers and presented by BCI to interested Washington specialty crop stakeholders.	$134,011.00
Washington State Department of Agriculture	$4,846,024.74	4. Initiating Washington Blueberry Exports to Thailand and Indonesia	The Washington Blueberry Commission (WBC) project will conduct retail, foodservice, and culinary promotions in Thailand and Indonesia for fresh, frozen, and dried blueberries. The Commission intends to use SCBGP funds to conduct a market visit to both countries to meet with importers, wholesalers, retailers and food manufacturers, and to coordinate seasonal promotions that hopefully encourage increased orders and sales. Promotions would be arranged through a contractor and include point of sale materials, advertising, and retail/foodservice demos and sampling.	$175,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	5. WA State and the Netherlands: Accelerating Innovative Technology Adoption through Orchard of the Future Collaboration	The Washington Tree Fruit Research Commission (WTFRC), with significant support from project partners, will lead and execute this project to accelerate the development and adoption of innovative technologies that benefit Washington State's tree fruit industry. WTFRC is one of twenty-five Washington State and Dutch partners working together as part of the "Orchard of the Future" collaboration. To meet the project's objectives and outcomes, "Orchard of the Future" partners will share information and collaborate with one another on past and current projects, develop and collaborate on new projects, demonstrate innovative technologies, and provide ongoing outreach and education to Washington tree fruit producers about the innovative technologies and solutions developed. Lastly, we will develop training materials to enable farmers to understand how to interact with their own smart farm data.	$175,000.00
Washington State Department of Agriculture	$4,846,024.74	6. ViruStop: Development of Virus Resistant Potato Through Topical Application of Bio-Based and Eco-Friendly RNA Vaccines	Washington State University's proposed research will contribute to the development of materials and methods to generate resistance to potato virus Y (PVY), one of the most important pathogens of potato in WA State and the region. Outcomes could lead to reduction in input costs including insecticides for vector control, and cost of production with a subsequent increase in profit and will directly contribute to environmental stewardship and increased sustainability. WSU intends to build on a proof of concept and develop bioformulations that trigger innate plant resistance to PVY infection and to optimize topical application-based delivery technology for effective and efficient use of the bioformulations.	$208,851.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	7. Application of Cellulose Nanofibers for Managing Potato Diseases	Washington State University will expand the utility of cellulose nanofibers (CNFs) as protectants against potato diseases thereby providing a new avenue for sustainable management of plant diseases. This project will conduct in vitro, greenhouse, and field studies to test the efficacy of different CNFs against several potato diseases and their impact on potato yield and quality. In addition, management recommendations will be developed for CNF application. Expected outcome from this project is that CNFs will alleviate potato diseases without inducing plant defense responses, which often results in fitness penalties such as growth retardation and yield loss.	$249,507.00
Washington State Department of Agriculture	$4,846,024.74	8. Leafhopper Phenology Model Development to Improve Cherry X-Disease Management	Washington State University will document population dynamics of leafhopper vectors of the incurable and destructive cherry X-disease. The researchers will use these data to create phenology models that predict when different generations of different species are present according to a degree-day scale. These models will allow cherry orchardists to time management actions effectively, saving money, reducing pesticide use, and reducing X-disease.	$249,813.00
Washington State Department of Agriculture	$4,846,024.74	9. Improving Blossom Blight Management Through Determining In-Orchard Bacterial Population Dynamics and Structure Variations	Washington State University aims to improve fire blight blossom blight management by determining in-orchard pathogen population dynamics and population structure variations. The project will determine in-field population dynamics on different stages of apple flowers from multiple cultivars at different times of day and night; to study the effect of population structure variations on population dynamics; and to improve the prediction of fire blight blossom blight and management under cooler temperatures and dry conditions. Findings will aid in understanding the population dynamics on stigma, how pathogen structure variations will affect the population dynamics, and improve disease prediction model and thus blossom blight disease management to benefit growers.	$249,838.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	10. Synergistic Antimicrobial Activity of Food-Grade Compounds in Wax Coatings on Fruits During Wax Drying	The Center for Produce Safety will partner with University of California, Davis, to enhance the safety of citrus and apples with antimicrobial wax coatings applied during postharvest treatment. The overall aim of this research is to reduce cross-contamination risks from wax formulations and improve the safety of coated fruits by reducing the bacterial load on the fruit surface. This project will use a synergistic approach to enhance inactivation of bacteria, based on the combined effect of selected generally recognized as safe (GRAS) antimicrobial compounds added to commercial wax coatings along with mild heat-assisted drying of the wax formulations. The project outcomes will include identification of at least two food-grade compounds and/or extracts that can be blended with commercial wax formulations to achieve 3-log reductions of pathogens in the wax coatings and on the fresh fruit surfaces.	$250,000.00
Washington State Department of Agriculture	$4,846,024.74	11. Superheated Steam in Eliminating Listeria Monocytogenes Biofilm in Wooden and Plastic Fruit Storage Bins	Washington State University will systematically evaluate the efficacy of sanitizer treatments against Listeria on fruit bins and to investigate the effectiveness of superheated steam under industry-relevant conditions in reducing Listeria harborage. The project objectives are to 1) evaluate and optimize the efficacy of the selected sanitizers against Listeria biofilm on both wooden and plastic fruit bin surfaces; and 2) assess the efficacy of superheated steam against Listeria biofilm on fruit bin surfaces. The project will provide the industry with new and effective sanitization strategies to enhance control over Listeria cross-contamination and improve the design of sanitation programs.	$250,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	12. Establishing and Increasing the Competitiveness of Hazelnut Production in Washington	To support the competitiveness of Washington hazelnut production, an interdisciplinary Washington State University (WSU) team, in collaboration with industry sectors, will conduct this project to: a) characterize economic value associated with orchard establishment, b) identify best management practices including pest and pathogen threats, and c) develop a reference whole genome sequence to support genetic improvement applications including identification of markers associated with economically valuable traits and facilitate pedigree-based analyses. The costs associated with orchard establishment will be assessed and an enterprise budget will be created that includes modeling of different scenarios faced by Washington growers. Monitoring for pest and pathogen threats at multiple sites distributed across the state will be conducted at least four times annually and these results will be used to develop management strategies for hazelnut growth in arid regions of Washington. By the conclusion of the project, a reference genome sequence will also be generated for two hazelnut cultivars central to U.S. germplasm.	$249,750.00
Washington State Department of Agriculture	$4,846,024.74	13. Feasibility Study: Supporting Communities of Color to Access and Produce Culturally Relevant Crops in SW Washington	The Haki Farmers Collective seeks to conduct a feasibility study to establish the viability and prosperity of marginalized BIPOC farmers in the production of specialty crops that are culturally relevant for SW markets. Study will: 1) identity gaps, barriers, and potential markets for BIPOC farmer's production with market viability; and 2) design and implement a crop trial to understand cultivation and crop germination length.	$49,430.00
Washington State Department of Agriculture	$4,846,024.74	14. Enhancing Labor Management Skills in Washington's Agricultural Industry	The Washington State Tree Fruit Association (WSTFA) in collaboration with Washington State Department of Agriculture's Technical Services and Education Program (TSEP) and Washington State University (WSU) created the Agricultural Leadership Program (ALP), a comprehensive leadership program developed to enhance leadership skills of farm owners, supervisors, and managers. This project will expand ALP to the entire agricultural industry due to high interest expressed by other commodity groups in the state.	$250,000.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	15. Specialty Crop Education and Career Focus Through Agriculture Education	The Washington Future Farmers of America (FFA) seeks to expand on its inter-curricular education pertaining to specialty crop through career development event program offerings. The Washington FFA seeks funds to run and expand on these program offerings for youth agriculture education students with the goal of career interest and entry into specialty crops. Because of the biological diversity of Washington State and our over 300 unique crops grown, this is the perfect region to be marketing and recruiting for the specialty crop industry.	$201,525.87
Washington State Department of Agriculture	$4,846,024.74	16. Managing Soil Moisture and Soil Physical Health for Annual Specialty Crops in Northwestern Washington	The project team at Washington State University will conduct research at the nexus of soil health, soil moisture, and irrigation management for fresh-market potatoes, and increase farmer familiarity with the practical application of improved irrigation scheduling strategies through individual outreach, farmer participatory research, recorded videos, workshop presentations, and WSU Extension publications.	$249,416.00
Washington State Department of Agriculture	$4,846,024.74	17. Enzyme-Oriented Detoxification of Multiple Toxic Pesticides Exposed to Honeybees	Washington State University will protect honeybees from pesticide poisonings by developing a detoxifying agent composed of multiple detoxification enzymes to reduce both regional and national widespread bee colony losses attributed to pesticide exposure. The project proposes a muti-enzyme (e.g., phosphotriesterase, carboxylesterase, aldehyde-oxidase) pharmaceutical treatment for honeybees that could prevent field realistic poisonings caused by various insecticides. Using this new technique, the beekeepers will have lower colony losses and provide more and healthier colonies to specialty crop growers who depend on honeybee pollination for their successful crop production.	$249,976.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	18. Non-Destructive Sorting at Harvest to Improve Pear Cold Chain Outcome	Researchers at Washington State University propose to adapt the sorting protocol to pears, which could potentially be implemented in any sorting system. The project will determine benefits of this sorting protocol to fruit finish including reduced sunburn, sunscald, and superficial scald, as well as uniformity of response of fruit to postharvest conditions and treatments, including 1-MCP and ripening treatments. Researchers expect that sorted groups of fruit at harvest will have a more predictable outcome from postharvest treatments and cold-chain management, reducing cold chain losses and improving eating quality.	$247,275.00
Washington State Department of Agriculture	$4,846,024.74	19. Assessment of Pear Cultivars Sustainability in Washington State Growing Conditions	Washington State University researchers, in collaboration with WTFRC, propose to utilize one existing ad-hoc orchard established in 2019 with 20 pear cultivars to explore the possibility to increase the number of pear cultivars grown in Washington State (WA). A second experimental 'Bartlett' orchard planted in 2018, contiguous to the first, will be utilized to expand the pear collection by top-working the canopy with new cultivars selected from the National Clonal Germplasm Repository located in Corvallis (OR, USA). During this project, the productive and qualitative characteristics of the 20 cultivars will be assessed, and the implementation of the number of varieties under evaluation will be pursued up to a potential total number of 50. Demonstration visits to the orchards combined with recommendations based on the robust data collected will enable Washington pear growers to make informed decisions on expanding the pear varieties offered to the consumers.	$161,089.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	$4,846,024.74	20. Beyond Honeybees: Building Towards Resilient Pollination for Blueberry	This proposal, led by Washington State University in collaboration with Washington blueberry producers, will generate knowledge on implementing more resilient pollination systems for blueberry farms that incorporate information on honeybees, wild bees, and landscape context. Specifically, we will accomplish three complementary objectives: (1) measure how variability in wild bee communities and honeybee density across landscapes affects pollination of early- and late-flowering blueberry cultivars, (2) estimate the economic benefits of wild bees on pollination across variable landscapes, and (3) implement digital tools while enhancing current extension efforts to aid growers in making data-driven pollination decisions.	$191,229.00
Washington State Department of Agriculture	$4,846,024.74	21. Adapting a Carbohydrate-Based Fruitlet Thinning Model for WA State Apple Production	Washington State University, led by Dr. Lee Kalcsits, proposes to bring a carbohydrate thinning model to WA apple growers to improve thinning precision that will increase fruit quality and decrease manual thinning costs. The project has three objectives: 1.) test the current carbohydrate thinning model under Washington State conditions using historical WSU AgWeatherNet (AWN) data; 2.) test and adjust submodels that account for differences in an irrigated, semi-arid climate like WA; and 3.) make the model available to WA state growers via AWN portal and develop training material and in-person workshops that improve the integration of this model into their thinning decisions. A refined model validated in Washington State would benefit the entire state apple industry as growers need to maximize the number of fruit meeting target size and color categories, two traits that are heavily influenced by crop load.	$249,783.00
Washington State Department of Agriculture	$4,846,024.74	Grant Administration	Ensure that the State Agency and sub-awardees abide by Federal and State requirements and regulations by performing pre-award and postaward activities to administer Specialty Crop Block Grant Program funding.	$386,101.40

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
West Virginia Department of Agriculture	$299,757.33	1. Farm to You MOBILE Access Expansion Project	The Eastern Area Health Education Center (EAHEC) will strengthen a new, innovative distribution system for specialty crops in the Eastern Panhandle of West Virginia while increasing access and consumption of specialty crops to support patient health at 9 local health clinics.	$72,685.00
West Virginia Department of Agriculture	$299,757.33	2. FARMacy WV: Prescriptions for Produce	The West Virginia Farmers Market Association through its Healthy Food Initiatives continues to support FARMacy WV: Prescriptions for Produce which is designed to provide access to fresh locally grown WV specialty crops as well as cooking skills and nutrition education to patients with chronic disease, health disparities, and nutrition insecurities. This project will fund Community Champions who will provide on-site supervision and act as a liaison between clinics and farmers. Funding will be used for marketing strategies to promote and recruit farmers and growers of specialty crops, as well as patients and providers to participate.	$59,890.00
West Virginia Department of Agriculture	$299,757.33	3. Using Freeze Dried Products to Access Farm to School & Year Round Retail Market	Sunset Berry Farm, in partnership with local farms, will freeze dry strawberries, peaches, blueberries and tomatoes to test market viability within the region and statewide including schools for the farm to school programs and the general public.	$74,825.00
West Virginia Department of Agriculture	$299,757.33	4. Increasing West Virginia Honey Sales through Efficient Extraction and Bottling	The West Virginia Military Authority will develop a honey extraction and bottling location at its Patriot Apple site in Muddlety, WV with the overall goal of increasing the amount of locally produced honey that is efficiently and consistently packaged for sale throughout the state and region. Through education and outreach to West Virginia beekeepers, particularly those beekeepers that are veterans or military family members, these individuals will be able to utilize this centralized processing and bottling equipment to reduce processing costs on the farm and to expand market opportunities for local honey.	$49,535.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
West Virginia Department of Agriculture	$299,757.33	5. Continuation of the West Virginia FieldWatch Program	The West Virginia Department of Agriculture will mitigate accidental pesticide exposure to specialty crops by increasing communications between pesticide applicators, beekeepers, and specialty crop stakeholders by continuing to provide free online membership to FieldWatch, a secure online mapping tool.	$9,203.00
West Virginia Department of Agriculture	$299,757.33	Grant Administration	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.	$33,469.43
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	1. Gays Mills Apple Orchard Corridor Marketing Project	Driftless Development INC will develop and implement marketing strategies and promotional campaign that leads to increased knowledge, consumption and sales of apples grown in the apple orchard corridor in Gays Mills. An analysis of these efforts will inform future marketing efforts and provide valuable education for apple growers/farmers that leads to improved specialty crop production and revenue for the growers/farmers.	$99,330.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	2. YMCA Camp St. Croix Maple Sugaring Project	The YMCA Camp St. Croix will educate 4,000 participants (youth and adults) about the unique industry of maple syrup production through immersion with the process and tasting, with the purpose of sustaining the occupation and consumerism of the products.	$12,417.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	3. Supporting Honeyberry Production in Wisconsin	University of Wisconsin-Madison Division of Extension will establish replicated honeyberry trials at three locations to provide cultivar performance data and production information to existing and aspiring growers of this emerging fresh fruit in Wisconsin.	$71,739.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	4. Increasing Production, Awareness and Demand of Year-Round Locally Grown Leafy Greens in Milwaukee	Hundred Acre is a new indoor hydroponic farm located in Century City business park on the north side of Milwaukee growing and harvesting leafy greens year round. In order to further educate the public on the health benefits and environmental advantages of consuming hydroponically-grown leafy greens , we will leverage our partnerships with community-based educators and local distributors to increase training and technical assistance to entry-level adult farmers and provide opportunities for youth to explore specialty crop production as a career through hands on education and food safety training. Hundred Acre will work with high school students to train them on the farm. The students will take the information and harvested crops from their educational experience back to the school and share the newly acquired knowledge with their peers.	$100,000.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	5. Preventing Premature Defoliation in Wisconsin Ginseng to Preserve Yields	The Ginseng Board of Wisconsin seeks to partner with Michigan State University to conduct research and grower extension to prevent premature yellowing and defoliation that growers are observing in their gardens through increased knowledge and development of targeted cultural and integrated disease management strategies and grower involvement through workshops, field days, and communications opportunities.	$98,506.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	6. Reducing Groundwater Contamination Risks with In-Season Cover Crop Interseedings in Potato and Sweet Corn	The University of Wisconsin will develop agronomically practical and economically feasible groundwater contamination mitigation strategies that can be readily adopted by potato and processing vegetable growers on highly leachable coarse-textured soils by investigating continuous living cover crop interseedings in replicated studies and sharing results with growers and processors via field tours, grower meetings and videos featured on the IPM YouTube channel.	$99,664.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	7. Attract-and-Kill or Kill Alone to Manage Japanese Beetle in Vineyards	The University of Wisconsin will compare perimeter Attract-and-Kill and Kill alone as edge-row sprays for reducing Japanese beetle populations and foliar injury and provide new management recommendations to Wisconsin grape growers for managing Japanese beetle in commercial vineyards.	$66,770.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	8. Collard Variety Selection and Breeding for Urban and Peri-Urban Production in the Upper Midwest	REAP Food Group of Madison, WI along with partners at University of Wisconsin-Madison and the collaborative Heirloom Collard Project will provide urban farmers, seed growers, and other direct-to-consumer growers recommendations for unique heirloom collard varieties. Farmers will trial collard varieties and collect data on varieties best suited for Midwest urban and peri-urban farm growing. In addition, seed growers will select new varieties for northern climates through seed saving and overwintering varieties. We will also connect with local culinary professionals to highlight the diversity in taste of heirloom collards.	$99,518.87
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	9. Advanced Level Crop Detection and Sensor System to Reduce Chemicals and Water Usage in Spray Applications of Specialty Crops	Spraycision will decrease the chemical and water usage in spray applications of specialty crops by developing a LiDAR based sensor system that only sprays to the plant canopy based on leaf density and avoids non-target areas such as gaps between the trees to provide sustainable and eco-friendly solution for orchard growers and nursery owners. The project will be done through the collaborations with the extension specialists of the University of Wisconsin-Madison Department of Horticulture and Plant Pathology.	$33,590.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	10. Growing Wisconsin; Food, Specialty Crops and Agricultural Tourism Development; Galvanizing Wisconsin as America's Agricultural Tourism Destination	The Wisconsin Agricultural Tourism Association (WATA) in collaboration with specialty crop producers will increase the demand for and sales of agriculture specialty crops and agricultural tourism experiences; through a targeted "Wisconsin, America's Agricultural Tourism Destination" campaign promoting the state's agriculture heritage and diversity while building on the reputation of specialty crops quality and versatility enjoyed by consumers experience on-farm agricultural tourism experiences.	$99,851.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	11. Hop Production and Processing Operations and Expansion effecting Eastern Wisconsin and Neighboring Counties	Miles Acres LLC will complete this project which will directly support hop growing operations in the state of Wisconsin, which is not meeting its quota, due to a lack of grower interest and labor/equipment shortage. This project will help provide educational opportunities and internships with the utilization of hops specific processing equipment. This will aid in the promotion of Wisconsin grown hops and continue to grow an industry that Wisconsin once dominated. The proposal of funding for equipment will give other beginning hop growers in the area the ability to have access to harvesting, processing, and packing equipment that is rare, expensive, and hard to come by in our state. Providing funds for processing equipment will allow hop farmers to have the ability to share a hops harvester by transporting it from each specific farm location and gives the ability for each hop farm to harvest their hops on site in a timely and efficient manner.	$70,200.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	12. Supporting Beginning Elderberry Farmers in Southwest Wisconsin: Accessing Local Markets and Increasing Consumer Education on Elder Berries, Flower	Sheryl Scott of Good Thunder Farm will coordinate a group of diverse, beginning farmers in Southwest Wisconsin to work together to support efforts to grow elderberry and expand local markets. Project outcomes include 1) create a directory of local elderberry growers and value-added producers; 2) research specific price points and local direct markets for elderberry products; 3) provide input into hub development; and 4) educate consumers and herbalists in our local area on our native American elderberry and “farm to kitchen to table” elderberry products.	$26,220.00

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	13. Ask the Honeybees: How do Local and Landscape Conditions Affect Pollen Quality?	The Gratton Lab in the Department of Entomology at the University of Wisconsin-Madison will improve our understanding of how management and habitat features at the farm-level and aspects of the surrounding landscape affect the quality of pollen collected by honey bees by assessing pesticide load, flower diversity, and protein and lipid content across three pollinator-dependent crops (apple, cranberry, and pumpkin), and we will share results with stakeholders through printed material in association newsletters and outreach presentations to offer management recommendations for improving the farm experience for bees.	$99,435.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	14. Supporting Specialty Crop Farmers via the Farm Fresh Atlas Statewide Expansion	REAP Food Group, Inc. a Wisconsin-based nonprofit, aims to expand the Farm Fresh Atlas, an annual print and internet guide to sustainable family farms, farmers' markets, grocers, and restaurants, by consolidating its five regional guides into a singular, statewide publication to provide better marketing services to farmers and businesses supporting local farms as well as expanding our database of local farms.	$98,994.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	15. From Seed to Feed with Fruitz 2 Art	Fruitz 2 Art will provide comprehensive education and practical skills courses in nutritional facts about fruits and vegetables, culinary arts, agricultural practices, community collaboration, and business literacy within these industries.	$50,000.00
Wisconsin Department of Agriculture, Trade and Consumer Protection	$1,337,607.22	Grant Administration	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.	$106,632.49

Organization	Amount Funded to Organization	Project Title	Description	Project Budget
Wyoming Department of Agriculture	$338,724.38	1. Enhancing the Capacity of Wyoming Specialty Crop Growers	The University of Wyoming Extension will enhance the capacity of Wyoming citizens to successfully grow specialty crops in the very climatically and economically challenging conditions of our state. In addition, they will educate growers on the benefits and how-tos of creating or enhancing pollinator habitat. UW will accomplish this by capturing the knowledge of what it takes to succeed in these areas of endeavor through a series of articles, video clips, and publications and make them known throughout the state via a concentrated marketing effort, two grower conferences and a geodome season extension workshop.	$99,906.00
Wyoming Department of Agriculture	$338,724.38	2. 5th Street Greenhouse Hydroponics Project	Sheridan County School District No. 2, in partnership with community supporters, will: A) provide healthy, locally-grown produce to students by installing and managing hydroponic raft growing systems that produce up to 100 pounds of leafy greens (including lettuce, kale, and mustard & other greens) per week for school meals; and B) create opportunities for students and stakeholders to increase knowledge about producing specialty crops.	$99,884.00
Wyoming Department of Agriculture	$338,724.38	3. Screening Varieties of Three Protein-Rich Pulse Crop Species for Reduced Water Use in Wyoming	This project will be conducted by two University of Wyoming research centers located in the northern part of the state. The project will identify, select, and grow the most drought-tolerant lines of chickpea, dry edible bean, and dry edible pea.	$79,584.00
Wyoming Department of Agriculture	$338,724.38	Grant Administration	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.	$58,396.00