Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
Colorado Department of Agriculture	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	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
Florida Department of Agriculture and Consumer Services	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

Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
Idaho State Department of Agriculture	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
Maine Department of Agriculture, Conservation, and Forestry	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
Michigan Department of Agriculture and Rural Development	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

Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
Michigan Department of Agriculture and Rural Development	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
Montana Department of Agriculture	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
Nebraska State Department of Agriculture	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

Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
North Carolina Department of Agriculture and Consumer Services	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 Dakota Department of Agriculture	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	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

Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
North Dakota Department of Agriculture	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
Oregon Department of Agriculture	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
Pennsylvania Department of Agriculture	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

Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	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	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

Specialty Crop Block Grant Program
Fiscal Year 2023 Description of Funded Projects – Farm Bill

Organization	Project Title	Description	Project Budget
Washington State Department of Agriculture	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	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
Wisconsin Department of Agriculture, Trade and Consumer Protection	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