



**OREGON
DEPARTMENT OF
AGRICULTURE**

2023 Oregon
Specialty Crop Block Grant Program
Project Summaries

As prepared by
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1. Good Food Foundation - \$134,978

For more than a decade, the Good Food Foundation (GFF) has connected producers of sustainably sourced food with top-flight retailers, expanding the market reach of small and midsize food producers across America. The GFF engages 1,300 food and beverage producers and 1,000 buyers annually in four hallmark programs: the Good Food Merchants Alliance (41 industry-leading retailers representing over \$400 million in sales), the Good Food Awards (200 honorees from all 50 states), the Good Food Mercantile (highly-curated trade shows), and the Good Food Guild (trade association). More than 220 Oregon producers have benefited from GFF programs, of which more than 85 utilize Oregon-grown specialty crops.

Utilizing a 2021 Specialty Crop Block Grant, the GFF further deepened its work with Oregon producers, creating trade show access and an in-store display prototype that boosted month-over-month sales by 68%. The GFF is now uniquely positioned to innovate and scale that successful pilot through a 28-month project benefiting 230 producers utilizing an array of Oregon specialty crops, enabling them to thrive in the post-pandemic, high-inflation environment. Through its established producer community and network of partners, GFF will continue to ensure strong participation from rural and underserved producers.

This project will connect 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.

2. Growing Gardens - \$155,235

Our program works with incarcerated youth and adults in 14 correctional facilities in Oregon to train inmates for agricultural and horticultural jobs upon release from incarceration. We 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 individuals. 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.

With close to a decade of work experience in prison systems at state, federal, and juvenile facility levels, we understand how to create a learning environment, with evidence-based results. In the Oregon State Correctional System, inmates who have graduated from our program (now over 1,500) have a 4% recidivism rate compared to the Oregon state recidivism rate of 30%. Our staff has lived experience with incarceration, as both inmates and as family members, so we understand and connect with these populations to foster expert gardeners with the goal of post-release employment in the horticultural or agricultural sector.

3. Northwest Cider Association - \$175,800

The Northwest Cider Association (NWCA) is the applicant and will execute this project to address international market development and access issues that will benefit up to 80 Oregon cideries. Craft, alcoholic ciders are value-added products that utilize Oregon farmers' supplies of apples, grapes, cane berries, stone fruit, cranberries, hops and botanical herbs.

This is an international market development and access project. The proposed project approach, objective and activities described below were developed through a rigorous, industry-driven process.

The objectives are to (1) increase Oregon cidemakers' understanding of trade barriers and/or regulatory constraints to selling cider in the Japanese market, (2) 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, taproom takeovers in Osaka and (3) media/PR activities to improve buyer and consumer awareness of Oregon cider as a premium product in Japan and Oregon.

4. Oregon Agriculture in the classroom Foundation - \$128,049

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. Twenty classrooms will receive monthly crop boxes complete with a corresponding children's book and specialty crop poster. The remaining fifty boxes will be available through Oregon Agriculture in the Classroom's library each month for educators to order at no cost. 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.

5. Oregon Raspberry & Blackberry Commission - \$144,866

The Oregon Raspberry & 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.

The project outcome aims to first define and then document the taste, flavor, texture, and compatibility of caneberries with other foods in sensory terms. Two teams of tasters will be secured, trained in tasting and tasked with creating these blackberry lexicons. After the blackberry sensory terminology is finalized, it will be designed into berry flavor & pairing wheels. Flavor wheels are currently a standard tool utilized by numerous commodities and industries. Pairing wheels are used by chefs and consumers to find the perfect taste combinations. Flavor and pairing wheels can support the selection of blackberries as the right ingredient for an application. Terms like jammy, floral, or woody, help select the berry and variety that best suits the application or recipe for chefs creating new products. Subsequently, marketing professionals can use this same new terminology to attract consumers to the finished product, all using the flavor and pairing wheels as an integral part of the process. The final aim is to distribute and educate multiple audiences using the flavor and pairing wheels by ORBC participation in various industry events and targeted outreach activities.

6. Oregon Seed Association - \$114,750

The Oregon Seed Association (OSA) is requesting SCBGP funds to develop a database of state and federal seed labeling requirements that will improve efficiency and transparency, facilitate trade, and reduce the risk of noncompliance.

Domestic and international seed trade requires specific seed quality and seed health testing, documentation, and labeling protocols be met. Currently, the seed industry does not have a centralized system outlining the federal and state-by-state labeling requirements for seed. Each company's labeling departments manually keep this information up to date through multiple spreadsheets, documents, and printouts. Labeling requirements can change frequently without notification to industry. A database solution with ongoing oversight and updates would save significant staff time, prevent unintentional errors, and reduce long-term costs. Consumers will benefit from this database by having confidence their seed package contains accurate information.

OSA will work with Bryant Christie Inc. to build the database using a Microsoft Power BI platform. The database will house information on all turf-type grasses and vegetable seeds produced in Oregon. Steps involved in the project include the collection of the latest state and federal labeling requirements, building and testing the database, and publicizing the live system. RainPorch, a web developer, will be retained to incorporate the database effectively into OSA's website.

As an outcome of the project, OSA expects users to have access to a singular location on seed labeling regulations updated in real time, which will allow for quicker seed processing times at the staff level and increased accuracy.

7. Oregon State University – Daniel Curry - \$175,267

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. The overall outcome provides productivity enhancement through new innovations. Tasks include 1) 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, 2) develop a computer vision enabled user-friendly web tool that processes images for classification, 3) have seed lab researchers review classification and generate reports, 4) develop turf grass seed grower and seed laboratory partnerships to test early prototypes, and 5) share results of the final product and demonstrations at industry conferences and meetings.

8. Oregon State University – Timothy Delbridge - \$120,541

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.

9. Oregon State University – Valtcho Jeliazkov - \$166,106

Oregon State University 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, funded by ODA SCBG. We identified 15 whole essential oils, essential oil blends, and fractions that suppress sprouting. In this proposed project, we aim 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. The project participants will disseminate results through factsheets, meetings and field days (such as Hermiston Farm Fair), website, and webinar, to be posted at eOrganic (<https://eorganic.info/>) and publications in scientific journals. We are targeting the development of products that can be patented and offered to U.S. potato growers and processors. The implementation of the expected results will have a positive impact on the potato industry, help overcome the limitations of chemical inhibitors, and foster expanding markets for OR potato across the nation and internationally. Adopting new essential oil-based products in potato storage is expected to improve access to additional market segments, thus enhancing OR potato's marketability, economic returns, and safety. In addition, essential oil-based products in potato storage and transportation could reduce the exposure of workers to chemical pesticides, provide cleaner and safer products to consumers, and contribute to improved human health.

10. Oregon State University – Udayakumar Sekaran - \$174,373

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. Most growers in eastern Oregon, are unsure what they can do to adapt to recent extreme weather conditions and how they can afford to increase their onion production against changing and unstable regulatory, climatic, and market conditions. Furthermore, on-going regional loss of biodiversity due to past and current management practices, if left unaddressed, will result in systemic crop production shortfalls and agroecological degradation. Thus, there is an urgent need for developing resilient, sustainable agricultural systems for the onion growers in eastern Oregon. Incorporating cover crops and reduced tillage (strip till) in the onion cropping system has not been widely adopted among onion growers in eastern Oregon due to many practical difficulties. We propose to fill this gap by 1) Identifying effective cover crops and a reduced tillage system to economically increase onion production and agroecological synergies, 2) Determining the system profitability and cost efficiency, and 3) Providing education and outreach support to onion growers and stakeholders in onion industry using evidence-based and learner-centered approaches to allow for two-way sharing of knowledge and ideas. The 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.

11. Oregon State University – Sihong Park - \$174,966

Oregon State University will manage the research progress and disseminate the outcomes to the stakeholders through grower meetings and field days by oral/poster presentations. A dynamic biological and chemical activity of microbes (bacteria and fungi) in the soil contributes to the quality of fresh strawberries as well as productivity of plants. Recent studies have provided the positive evidence of mycorrhizae (beneficial fungi present around roots) on the plant growth and their functions on plant defense mechanism contributed to the improvement of fruit quality. In this proposal, Dr. Park's research group in the Department of Food Science and Technology at OSU 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. Mr. Arne Goddik who owns several large strawberry farms in Dayton, OR, will provide plots, plants, and strawberries for the success of proposed research and manage them during a research period. The proposed research will be accomplished during the project period including: 1) **Identification of the most effective mycorrhizae** for strawberry plant soil; 2) **Effects of mycorrhizae on mycobiome** (the overall fungi population) in strawberry plant soil; 3) **Analysis of metabolites and macronutrients** in strawberry plant soil; 4) **Evaluation of strawberry quality (sweetness, sourness, color, volatile compounds, etc.)** grown with mycorrhizae supplementation. Upon the success of the proposed research, we can delineate the interaction between mycorrhizae and mycobiome in soil as well as effects of mycorrhizae on strawberry quality.

12. Willamette Food and Farm Coalition - \$110,984

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.

Outcomes of this project include increased production, sales, and consumption of specialty crops grown in our area, thus enhancing competition for these producers and their products in the broader market. Outcomes will be measured by increased purchasing by local school districts and other institutional buyers, increasing the reach of and producer participants within the Locally Grown Guide each spring and Fill Your Pantry each fall, developing and refining a distribution network for area schools, increasing distribution range and capacity for local farmers, and the creation of a new market outlet opportunity through the Collective Produce Stand.

We are supported in this work by the Oregon Farm to School and School Garden Network, the 4J School district, Emerald Fruit and Produce Distributors in our work as the Regional Procurement Hub for Farm to School purchasing with the goal of creating a model for procurement that can be more easily accessed by both producers and districts new to Farm to School work. The Farmers Market Fund and Whiteaker Community Market are key partners in our project and Emerald is also working to support direct consumer purchases from our farmer partners.