# **2015 Specialty Crop Block Grant Program Projects Selected for Funding**

Applicant	Project Title	Funding Amount	
Boise State University	A Web-Enabled Site Suitability and Visualization Tool to Support Idaho's Growing Wine Industry	\$	139,487.10
Clearwater Economic Development Association	Lewis-Clark Valley AVA Launch	\$	67,144.60
Idaho Apple Commission	Creating Awareness of Idaho Apples through In- Store Promotions, Website Development, and Social Media	\$	18,855.00
Idaho Bean Commission	Water and Soil Conservation and Effective Weed Management for Sustainable Dry Bean Production	\$	162,451.74
Idaho Bean Commission	Novel Genetic Systems to Develop Bean Varieties Resistant to Viruses for Export to Mexico	\$	99,006.00
Idaho Cherry Commission	Creating Awareness of Idaho Cherries through In- Store Promotions, Website Development, and Social Media	\$	21,159.00
Idaho Grape Growers and Wine Producers Commission	Utilizing Educational Tools to Market and Propel the Idaho Wine Industry Forward	\$	87,960.00
Idaho Potato Commission	International Business Development for Idaho Potatoes	\$	132,924.00
Idaho Potato Commission	Development of Pale Cyst Nematode resistance in russet-skinned potato clones for Idaho	\$	125,000.00
Idaho Preferred	Promoting Specialty Crops through Advertising, Retail, and Foodservice Promotions	\$	198,000.00
Idaho-E. Oregon Onion Committee	Building International Markets in Mexico and Central America through Foodservice Promotional Activities and Trade Missions	\$	34,500.00
Northwest Nazarene University	IdaBOT: An Autonomous Utility Robot for Managing Idaho Specialty Crops	\$	80,651.00
Snake River Economic Development Association	Western Treasure Valley Pumpkins	\$	91,000.00
University of Idaho	Impact of Canopy Design, Cluster Management, and Cultivars on Quality, Yield, and in Table Grapes	\$	162,878.00
University of Idaho	Identifying How Potato Skin Wastes Produced in Idaho Can be Used to Modulate Glycemic Response	\$	83,454.00
USA Dry Pea & Lentil Council	Education and Outreach for Media Professionals	\$	140,000.00

**Boise State University** 

#### Title

A Web-Enabled Site Suitability and Visualization Tool to Support Idaho's Growing Wine Industry

## Abstract

This project will develop a web-based tool for producers to evaluate site suitability for wine grape production in the Snake River Valley American Viticultural Area (AVA). The intuitive tool will provide information on climate, topography, soils, and other producer-defined information to allow better site and crop selection. The tool will be graphically driven and incorporate 3-D landscapes with site-specific characteristics for producers to visualize. The information and tool will be demonstrated at multiple dissemination opportunities, and adapted based on user feedback. The expected outcome of the available data and tool usage is increased knowledge of site characteristics for improved site selection for viticulture production and specific varietals.

# **Applicant**

Clearwater Economic Development Association

## Title

Lewis-Clark Valley AVA Launch

#### **Abstract**

With the pending 2016 designation of the Lewis-Clark Valley American Viticultural Area (LCV AVA), the Lewis Clark Valley growers and vintners of north-central Idaho and southeast Washington hope to restore the region to what it was at the beginning of the 20th Century - a primary and well-respected, premier grape growing region of the United States. The 306,658 acre proposed LCV AVA encompasses parts of the Idaho counties of Nez Perce and Clearwater and the Washington counties of Asotin, Garfield, and Whitman. For growth to occur, the four bonded wineries and twelve grape growers must be formally organized, develop a cohesive brand, and implement a successful marketing launch. The Lewis-Clark Valley AVA Launch project will: 1.) Explore, evaluate, and select the best organizational structure for the alliance of sector businesses that can be sustainable and meet the short and long-term needs of the AVA; 2.) Create a five-year marketing plan for the AVA; and 3.) implement a marketing launch to introduce the AVA grape growers and vintners to potential markets. This \$86,400 Specialty Crop Block Grant request is being augmented with a similar \$33,600 funding request to the Washington State Department of Agriculture and \$2,500 local match.

Idaho Apple Commission

#### Title

Creating Awareness of Idaho Apples through In-store Promotion, Web Site Development and Social Media

## Abstract

The proposal "Creating Awareness of Idaho Apples through In-store Promotion, Web Site Development, and Social Media" outlines a project that will be conducted by the Idaho Apple Commission. The two-year project will be the development, creation, and distribution of a 5-6 minute video showcasing the apple growing, maturity, and the harvest and packing season of Idaho apples, and still photography will be acquired for each stage. The video and photography will be used on the Commission's web site and Social Media channels.

The Commission will hold in-store sampling in Idaho Supermarkets to continue to build awareness of the great apples Idaho has to offer. In-store sampling is an excellent way to introduce Idaho apples to the local consumer, and help reinforce the message to retailers about the great tasting products Idaho has to offer. The Commission would show the video in the produce departments during the sampling sessions, where that service is available. To further utilize the still photography the Commission will develop a tri-fold brochure containing nutritional information and recipes that will be handed out with the apple samples and be made available for viewing and downloading on the Idaho Apple Commission's website, as well as through Social Media.

## **Applicant**

Idaho Bean Commission

## **Title**

Novel genetic systems to develop bean varieties resistant to viruses for export to Mexico

## **Abstract**

Bean common mosaic virus (BCMV) and Bean common mosaic necrosis virus (BCMNV) are two bean viruses causing serious and often devastating losses in common beans (*Phaseolus vulgaris* L.). Both are transmitted by aphids and also through seed with high efficiency (up to 80%), and because of this present a global threat everywhere common beans are grown. Two approaches are used to control BCMV and BCMNV: 1) seed certification maintaining virus infection level at minimum, and 2) breeding for virus resistance, with incorporation of known resistance genes into main classes of beans. There are currently seven known pathotypes of BCMV and BCMNV, distinguished due to interaction with multiple resistance genes. Hence, breeding of resistant varieties of beans requires tedious, multiple challenges with different strains of these viruses. Here, we propose to greatly simplify this process through the development of genetically engineered infectious clones of both BCMV and BCMNV which can be maintained as uniform cDNA sequences in an ordinary plasmid vector. These genetically engineered clones can be made available to any bean breeding program facilitating selection of virus-resistant lines and streamlining the search for sources of resistance in common beans.

Idaho Bean Commission

#### Title

Water and soil conservation and effective weed management for sustainable dry bean production

## Abstract

In cooperation with the Idaho Bean Commission, plant and soil scientists and water management engineers at the University of Idaho will conduct two field experiments to develop sustainable water and soil conservation and weed management strategies for dry bean production. One study will focus on the effects of water management using subsurface drip irrigation versus furrow irrigation in two tillage systems: conventional and strip tillage. Weed response to these water and soil management practices will be measured in addition to crop growth and yield. The second study will focus on the effects of three tillage systems - conventional tillage, strip tillage, and direct seeding - and nine weed control treatments on dry bean growth and development. These experiments will be conducted at two locations in southwestern and south central Idaho and repeated over two years.

## **Applicant**

**Idaho Cherry Commission** 

## Title

Creating Awareness of Idaho Cherries through In-store Promotion, Web Site Development and Social Media

## Abstract

The proposal "Creating Awareness of Idaho Cherries through In-store Promotion, Web Site Development, and Social Media" outlines a project that will be conducted by the Idaho Cherry Commission. The two-year project will be the development, creation, and distribution of a 5-6 minute video showcasing the cherry growing, maturity, and the harvest and packing season of Idaho cherries, and still photography will be acquired for each stage. The video and photography will be used on the Commission's web site and Social Media channels.

The Commission will hold in-store sampling in Idaho Supermarkets to continue to build awareness of the great cherries Idaho has to offer. In-store sampling is an excellent way to introduce Idaho Cherries to the local consumer, and help reinforce the message to retailers about the great tasting products Idaho has to offer. The Commission would show the video in the produce departments during the sampling sessions, where that service is available. To further utilize the still photography the Commission will develop a tri-fold brochure containing nutritional information and recipes that will be handed out with the cherry samples and be made available for viewing and downloading on the Idaho Cherry Commission's website, as well as through Social Media.

Idaho Grape Growers and Wine Producers Commission

#### Title

Utilizing Educational Tools to Market and Propel the Idaho Wine Industry Forward

## Abstract

Idaho is proud to boast more than 50 wineries, up from 11 in 2002. The Idaho Grape Growers and Wine Producers Commission (IWC) works to promote all Idaho wineries and wine grape growers. In January of 2015, the IWC announced the Idaho wine industry had nearly a \$170 million dollar impact within Idaho in 2013. The IWC works to promote not only the economic growth of the Idaho wine industry, but also the quality of production that can only come from education and experience. In addition to marketing and promoting the industry a large need for focused education to the industry members, consumers, restaurants, buyers and media is also needed. The IWC would like to continue its pattern of growth by utilizing educational tools to adequately inform these parties about Idaho wine. These efforts aid in the awareness and education with key ads that would be placed during Idaho Wine Month in June and during Thanksgiving Weekend. This can be accomplished with the help of the ISDA specialty crop grant.

## **Applicant**

**Idaho Potato Commission** 

## **Title**

Development of Pale Cyst Nematode resistance in russet-skinned potato clones for Idaho

## Abstract

Pale cyst nematode (PCN) was discovered in eastern Idaho in 2006 and infested acres have since been under quarantine to prevent further spread and to facilitate eradication efforts. Although immunity to PCN does not currently exist in cultivated potato, a high level of resistance does exist in European and South American cultivars and breeding clones. However, this PCN-resistant germplasm is lacking the long, russet-skinned tubers that represent the primary market class in Idaho used by the fresh-pack and processing industries. Hybrids between the PCN-resistant germplasm and russet skinned breeding clones and varieties will be synthesized and those hybrids displaying the necessary agronomic, and fresh-pack and/or processing characteristics for Idaho will be selected and advanced in the breeding program. Suitable hybrids will also be screened for resistance to PCN. Incorporating PCN resistance into breeding clones having russet-skinned, long tubers suitable for Idaho and the Pacific Northwest will contribute to PCN eradication and prevention of further spread and is the first step toward; 1) developing a PCN-resistant commercial variety, 2) providing parental material to pyramid resistance genes, and 3) providing germplasm suitable as a recipient of immunity transgenes.

**Idaho Potato Commission** 

#### Title

International Business Development for Idaho Potatoes

## **Abstract**

Using marketing and business development tools such as training, store promotions, trade shows and face-to-face meetings and trade missions the Idaho Potato Commission intends to expand and or create awareness of and demand for the Idaho® potato and its products in markets outside its borders. Over the next two years the IPC is requesting \$116,407.50 in grant funds to enable the international department to design, coordinate, organize and implement tools in support of the Idaho® potato industry globally.

# **Applicant**

Idaho Preferred

## Title

Promoting Specialty Crops through Advertising, Retail and Foodservice Promotions

## **Abstract**

Promotion efforts through the Idaho Preferred program to increase awareness and intent to purchase Idaho specialty crops earned over 4.5 million consumer impressions in 2014! These effective promotions, conducted on behalf of specialty crop growers, have led to Idaho Preferred brand awareness of 52% of consumers statewide, according to research conducted by the University of Idaho in October 2014. Awareness among consumers in southern Idaho where advertising is most affordable, averages 60%, and 57% of consumers report seeing specialty crops including fruits, vegetables, wine, and nursery products, in advertising and promotion materials. Additionally, the number of consumers reporting having seen Idaho Preferred® signage at a retail locations has doubled from 19% in 2008 to 38% in 2014 and awareness of the logo on packaging has moved from less than 10% in 2008 to more than 15% in 2014. This level of awareness is due to the combination of an effective advertising campaign and successful retail and foodserve promotion strategies conducted on behalf of specialty crop producers. The goal of the 2015 Specialty Crop Block Grant is to continue this productive campaign through advertising and demand-building retail and foodservice promotions carried out by Idaho Preferred program staff.

Idaho-Eastern Oregon Onion Committee

#### Title

Building International Markets in Mexico and Central America through Foodservice Promotional Activities and Trade Missions

## Abstract

The proposal "Building International Markets in Mexico and Central America through Foodservice Promotional Activities and Trade Missions" outlines a project that will be conducted by the Idaho-Eastern Oregon Onion Export Committee (IEOOC). Idaho and Eastern Oregon's crop is 90% yellow onions and it is important to stay in front of the Mexico foodservice professionals, importers, and consumers and let them know of the versatility, the availability, and the benefits of yellow onions. The two-year project will include yellow onion foodservice promotions with cooking seminars, menu promotions, and recipe development in 2015 in several Mexico cities.

Trade missions are an effective way to learn new markets; they provide opportunities to meet new buyers one on-one. Trade Missions provide in depth information about the country visited giving the shippers and business owners an insight to the demographics of the country and other useful information when making a decision to sell to a certain country. Participating in trade missions is an economical way to gather information to help make educated decisions about new markets, and to meet potential customers.

# **Applicant**

Northwest Nazarene University

#### Title

IdaBOT: An Autonomous Utility Robot for Managing Idaho Specialty Crops

## **Abstract**

Precision agriculture techniques hold much promise for Idaho specialty crops potentially allowing growers to maximize yield while controlling crop input costs. However, the detailed monitoring of crop inputs and health required by precision agriculture adds to an already expensive manual labor burden that specialty crop growers must shoulder. One way that labor costs can be reduced and labor-intensive precision agriculture techniques made feasible is through the use of robotic automation. This research proposal seeks to design and prototype an IdaBOT – a low-cost, autonomous utility robot to assist Idaho specialty-crop growers in the day-to-day maintenance and harvesting of their crops. The first prototype of the IdaBOT will be capable of autonomously navigating a vineyard or orchard and demonstrating the precision application of chemicals. By increasing the productivity of laborers, the IdaBOT has the potential to save Idaho specialty crop growers millions of dollars in labor costs.

Snake River Economic Development Alliance

#### Title

Western Treasure Valley Pumpkins

## Abstract

The Treasure Valley of western Idaho has the opportunity to grow and harvest pumpkin snack seeds as a viable option in the grower's rotation of crops. Stores such as Whole Foods and Trader Joes in the food industry are demanding that their snack seeds be sourced locally in the USA and not imported from China. The growers in the area have experience with Jack-O-Lantern type pumpkins as well as several other types of cucurbits. In 2014, we have started doing observation plots with a variety of squash that is known as a naked seeded (or hull less) pumpkin used primarily for seed snacks. After interviewing 5 food companies that market flavored pumpkin seeds, the interest in obtaining USA grown seeds is substantial. For the 2015 growing season, over 1 million pounds of seed is needed by the 5 companies. Pumpkin seed products have become increasingly more important in certain types of diets as they are high in protein. We have the growing climate and markets, but we are missing the unique harvesting and processing parts of the equation. With the full equation, we will have the added opportunity to recruit or develop snack seed companies here in the region.

## **Applicant**

University of Idaho

# Title

The Impact of Canopy Design, Cluster Management, the Newest Cultivars and Selections on Fruit Quality, Yield, and Vine Performance in Table Grapes in Idaho

## **Abstract**

The University of Idaho Pomology and Viticulture Program in Parma has experimented with numerous genotypes of table grapes and as a result, a new table grape industry, is emerging in Idaho. However, there are challenges facing this industry, and this study will address two of these major areas of needed research in Idaho. In this proposed project we will study the effects of various canopy designs and cluster numbers in 'Alborz' table grapes (the major table grape in Idaho, introduced from our program) on yield, berry and cluster quality, cold tolerance, and disease infections. We will also study performance, fruit quality, and sustainability of the newest 14 cultivars and 15 selections of table grapes under conditions of the Intermountain West. We will also establish "pilot plantings" of these techniques with growers and home gardeners. We expect to increase berry size, quality, and packable grapes, and thus enhance the net return to the growers.

University of Idaho

#### Title

Identifying How Potato Skin Wastes Produced in Idaho Can Be Used to Modulate Glycemic Response

## **Abstract**

This project is designed to investigate the nutritional benefits of potato peel waste, and promote a healthy image of potato products through their potential health benefits in providing a source of dietary fiber and modulating glycemic response. This will be achieved by: (1) investigating the influence and mechanism of potato peel waste in glycemic response in a model system, (2) quantifying the functional compounds, calystegines (natural inhibitors of digestive enzymes) and dietary fiber (physical barrier of digestive enzymes) in potato peel waste and tubers, (3) and screening the most commonly grown potato varieties in Idaho for calystegines and dietary fiber content.

## Applicant

USA Dry Pea & Lentil Council

#### Title

**Education and Outreach for Media Professionals** 

## **Abstract**

The USA Dry Pea & Lentil Council (USADPLC) was established in 1965 as a non-profit organization to promote and protect the interests of U.S. growers, processors, warehousemen and sellers of dry peas, lentils and chickpeas.

The objective of this proposal is to increase the use of the regions peas, lentils and chickpeas in the United States as an ingredient in food products, food-service menus and for the at home cook. To do this, the USADPLC is requesting funds to host an educational, informative and hands-on product development course that will target and educate a specific audience in the food industry including editors of high-end trade publications, dietitians and Directors of national health movements like Michelle Obama's Let's Move! Campaign.

The USADPLC will design a two-day course introducing pulses along with demonstrations at the Culinary Institute of America in Napa Valley California and follow up activities to increase buyer/consumer interest in the region's pulse industry. Pulses are considered so nutrition-packed and misunderstood that the General Assembly of the United Nations has declared 2016 the International Year of Pulses (IYOP) which we plan to begin planning for in FY15 in order to fully capitalize on the momentum here in the U.S.