

Idaho State Department of Agriculture  
**2013 Specialty Crop Block Grant Program**

<b>Applicant</b>	<b>Project Title</b>	<b>Funding Amount</b>
Idaho Apple Commission	In Search of Suitable Rootstocks to Improve Yield Efficiency, Precocity, Mineral Nutrient Uptake, and Fruit Quality of Apples in Idaho	\$ 106,491.00
Idaho Bean Commission	Slow Release Nitrogen Trials for Dry Bean Production	\$ 13,397.00
Idaho Bean Commission	Trials of Peruano Dry Bean Seed in the U.S. and Mexico	\$ 122,525.40
Idaho Grape Growers and Wine Producers Commission	Increase the Exposure of the Idaho Wine Industry	\$ 40,000.00
Idaho Nursery and Landscape Association	Plant Something Idaho Marketing & Promotion Campaign	\$ 16,250.00
Idaho Potato Commission	Monitoring Potato Psyllid Biotypes as well as Off-Season and Overwintering Distribution and Abundance of Potato Psyllids and Candidatus Liberibacter Solanacearum in Idaho	\$ 157,363.00
Idaho Preferred	Promoting Specialty Crops through Advertising and Retail Marketing	\$ 157,000.00
Sunnyslope Wine Trail Group	Sunnyslope Wine Trail	\$ 30,000.00
University of Idaho	Eradication of the Necrotic Isolates of PVY from Idaho Potato	\$ 155,442.00
USDA-ARS	Impact of Grapevine Viruses on Idaho Grape Quality	\$ 93,960.00

### **Selected Projects to be Included in ISDA's State Plan**

Grants will be submitted in ISDA's State Plan due July 2013 and must be approved by USDA.

**Applicant:** Idaho Apple Commission

**Project Title:** In Search of Suitable Rootstocks to Improve Yield Efficiency, Precocity, Mineral Nutrient Uptake, and Fruit Quality of Apples in Idaho

**Abstract:** The presence of excellent climate and soil conditions make southwestern Idaho an outstanding region for production of high quality apples. However, the increasing world population and decreasing suitable land and water mandate establishment of high-density orchards. The use of size-controlling rootstock is absolutely essential for establishment of high-density orchards. Rootstock can influence a wide range of physiological characteristics and tree performance of the scion cultivar, including tree vigor, precocity, fireblight and other disease susceptibility, mineral nutrient uptake, and fruit quality. Rootstock performance needs to be tested in each climate before it is recommended for commercial plantings. The project leader of this proposal is the chairman of a national group, consisting of the top fruit scientists in the USA. In this capacity, he introduced and established a high technology of 'Fuji' apple orchard with 32 newest rootstocks, each with 6-12 replications at the U of I Parma Research and Extension Center in 2010. These trees are 4-years old, which will be an excellent age for data collection in 2014 and 2015. We propose to study the influence of these rootstocks on precocity, yield, and fruit quality attributes and leaf mineral nutrition during 2014 and 2015.

**Applicant:** Idaho Bean Commission

**Project Title:** Slow Release Nitrogen Trials for Dry Bean Production

**Abstract:** Idaho ranks 5th in the nation for dry bean production. Most of the dry beans are produced in the Magic and Treasure Valley regions of Idaho. Beans are a valuable rotational crop in Idaho and they are an excellent crop to plant in years where water inputs will be limited. There is much discussion among growers, consultants, and university faculty about proper nitrogen rates and application timing for beans. Beans require less nitrogen input than most other crops. In the past few years new products have come to market that theoretically allow nitrogen to be more available to plants later in the growing season by slowing the release of the nitrogen sources from the fertilizer prill or by reducing volatility of the nitrogen. There has been very little research conducted on slow release nitrogen products in Idaho and the University of Idaho does not have a recommendation for using these products in dry bean production. The Idaho Bean Commission (IBC) has approached University of Idaho Extension faculty to see if they can help determine the efficacy of slow release nitrogen products for dry bean production and if possible to create recommendations for the use of these products.

**Applicant:** Idaho Bean Commission

**Project Title:** Trials of Peruano Dry Bean Seed in the US and Mexico

Yellow beans are a popular market class in Mexico and command a premium price. Growers in Sinaloa, Mexico are eager to enhance the quality and disease resistance of their yellow beans, since the quality of Mexico-bred seed cannot compare to Idaho certified seed. For the past four years, with funding from Specialty Crop Block Grants and the support of Idaho's bean industry, the University of Idaho and Oregon State University have cooperated with the Idaho Bean Commission to begin breeding a virus-resistant yellow bean seed that may be grown in the US for export to Mexico. Significant progress has been made and many lines will be ready for field trials in Mexico in 2014. Field trials accompanied by a grower field day and continued resistance testing will give the Mexican growers in Sinaloa an

opportunity to see first-hand the value of certified Idaho seed. At the completion of the trials, the research team should be able to identify one or more successful varieties with resistance to multiple viruses that will be publically released.

**Applicant:** Idaho Grape Growers and Wine Producers Commission

**Project Title:** Increase the Exposure of the Idaho Wine Industry

**Abstract:** As Idaho's wine industry continues to steadily grow, consumers as well as other wine regions are taking notice. The Idaho Grape Growers and Wine Producers Commission (IWC) would like to maximize the current wave of momentum stirring around Idaho wine and take it to the next level of awareness by utilizing new and longer-lasting avenues of marketing. Previously, the IWC has been successful in raising awareness of the wine industry to local Idahoans and we will continue with this success. Now it is time to expand beyond Idaho's borders. The goal is to increase the exposure of the Idaho wine industry in markets outside of the state and help industry members to get in front of more consumers.

**Applicant:** Idaho Nursery & Landscape Association

**Project Title:** Increase the Exposure of the Idaho Wine Industry

**Abstract:** The Idaho Nursery & Landscape Association (INLA) represent greenhouse growers, tree growers, turf growers, retail nurseries, landscape contractors, nurseries and growers of indoor and outdoor vegetables, herb plants, perennial and annual flowers. The ***Plant Something Idaho*** marketing and promotion campaign is focused on building the state's green infrastructure by expanding on an action oriented brand and messaging that will lead to additional revenues for the horticulture industry in Idaho. Our 2014 ***Plant Something Idaho*** expanded marketing campaign includes building additional web pages and consumer resources and information tips on the ***Plant Something Idaho*** website, consumer outreach display booth banners, Social Media presence on the Pinterest website and ***Plant Something Idaho*** Facebook page.

**Applicant:** Idaho Potato Commission

**Project Title:** Monitoring potato psyllid biotypes as well as off-season and overwintering distribution and abundance of potato psyllids and *Candidatus Liberibacter solanacearum* in Idaho

#### **Abstract**

Zebra chip (ZC) is a serious, emerging disease of potato that has resulted in multi-million dollar losses annually since about 2000. Found in the Pacific Northwest (PNW) during 2011 and 2012, ZC is caused by the bacterium *Candidatus Liberibacter solanacearum* (Lso) which is transmitted by the potato psyllid (*Bactericera cockerelli*). Infected potato produces tubers with striped necrotic patterns that become dark when fried, making chips and fries unmarketable. During 2012, estimated increases in production costs from additional insecticide sprays for potato psyllids were \$125-175, \$85-125, and \$35-85 per acre for southwestern, south-central, and eastern Idaho, respectively. Potato psyllids migrate to the PNW annually and also have been observed to overwinter in the PNW despite previous reports to the contrary. Three different geographically based psyllid biotypes have been identified, and characterization of the biotypes found in Idaho over the year would clarify the relative importance of overwintering versus migration in Idaho. We propose to characterize the seasonal phenology of different Lso-carrying psyllid biotypes both during and beyond the growing season and to develop and implement tools for biotyping psyllids in Idaho. This would fill a critical gap in our understanding of the ZC disease epidemiology in Idaho.

**Applicant:** Idaho Preferred®

**Project Title:** Promoting Specialty Crops through Advertising and Retail Marketing

**Abstract:** Idaho Preferred® is a program managed by the Market Development Division of the Idaho State Department of Agriculture (ISDA) to identify and promote Idaho food and agriculture products. The Idaho Preferred® program conducts television and radio advertising, retail and foodservice promotions, public relations activities, consumer events and educational programs to increase consumer awareness and demand for locally grown and produced products.

As a result of successful promotions conducted on behalf of specialty crop growers, the Idaho Preferred® program has attained brand awareness of 50% of consumers statewide, according to research conducted by the University of Idaho in October, 2012. Awareness among young consumers 18-34 is even higher at 60% and 51% of consumers report seeing specialty crops, including fruits and vegetables, wine, and nursery products, in advertising and promotion materials. Additionally, the number of consumers reporting having seen Idaho Preferred® signage at retail location has more than doubled from 19% in 2008 to 40% in 2012. This level of awareness is due to the combination of an effective advertising campaign and successful retail promotion strategies.

The goal of the 2013 Specialty Crop Block Grant is to continue this productive campaign through advertising and demand-building promotions carried out by staff. Specifically, this grant would support three weeks of television, radio, print and/or online advertising to supplement the previously funded campaign, allowing for 6 weeks of advertising in 2014 and 6 weeks of advertising in 2015 to help maintain current levels of consumer awareness. This grant would allow the extension of a Specialty Crop grant-funded staff person for one year to carry out retail and foodservice programs, as well as consumer and education events, designed to increase consumer demand for Idaho specialty crops through 2015.

**Applicant:** Sunnyslope Wine Trail Group

**Project Title:** Sunnyslope Wine Trail Group

**Abstract:** Sunnyslope Wine Trail is a single crop organization wanting to conduct an advertising campaign in order to increase visitors and sales for the wineries located in the Sunnyslope community. This campaign will be used to increase awareness of the Trail in the Treasure Valley of Southern Idaho as well as the State of Utah. This type of activity will increase agri-tourism giving added value to the current economic impact the wine industry provides to the Idaho State.

Wines made in the Sunnyslope region are mostly made by hand, increasing the cost of production, leaving a smaller profit margin. To use a wine distributor to promote sales in a grocery store or restaurant removes a large portion of the profit margin. In addition, the yearly case production may not be large enough to satisfy demand in a large grocery store chain. The small wineries located in this community mostly rely on their sales generated in the tasting room.

By planning a year-long calendar of monthly events, Sunnyslope Wine Trail group will be providing activities that may appeal to all ages of wine consumers and their families. The key is to spread the word locally and across the state line to Utah.

**Applicant:** University of Idaho

**Project Title:** Eradication of necrotic strains of *Potato virus Y* in Idaho

**Abstract:** In the past five years, *Potato virus Y* (PVY) has emerged as the most serious threat to Idaho potato production, both directly through yield reduction, and indirectly by affecting tuber quality and rendering tubers unmarketable. The emergence of PVY as a new threat is attributed to the high propensity of the virus to undergo genetic recombination, resulting in the development and spread of new strains of PVY, many of which can cause severe tuber necrosis. The necrotic damage caused by these new strains includes both internal and external symptoms on tubers. These new PVY strains have been tracked down through systematic typing of the PVY strains found during the winter grow-outs conducted by the various seed certification agencies. In order to eradicate these necrotic PVY strains, and devise a plan to control PVY in the State of Idaho, we propose to survey all seed potato lots that undergo winter testing in Idaho for prevalence of PVY strains with subsequent elimination of lots containing necrotic PVY from the seed potato system. The proposed project will lead a comprehensive strategy to control PVY and eradicate necrotic PVY strains from the State.

**Applicant:** USDA-AMS

**Project Title** Impact of grapevine viruses on Idaho grape quality

**Abstract:** This proposed work is a multi-state (Idaho, Oregon, and Washington) and multi-institution (University, Federal agency, and industry cooperators) collaborative project that is being submitted to the State Departments of Agriculture, Specialty Crop Block Grants program in each of the three states. The project goal is to expand on our preliminary research efforts regarding Idaho grapevine viruses and relate this to its influence on fruit quality. A new virus of grapevine, first reported in October, has been detected in Oregon, Washington, and California. Idaho vineyards will be surveyed to see if this newly emerging virus (*Grapevine red leaf blotch virus*, GRLBV), along with other newly described viruses (*Grapevine virus E* and *F*) are present in Idaho vineyards. *Grapevine red leaf blotch virus* was reported from California and New York in October 2012 and causes ripening issues (drastically reduced sugar accumulation). Fruit quality component analyses will accompany the virus detection, since not all grapevine viruses are known to reduce quality (color, sweetness, acidity, etc.). This project will also provide our state its first baseline survey of its grape phytochemicals (compounds that are potentially good for human health). The projects in each state will also determine vectors of the GRLBV.