

SPECIALTY CROP BLOCK GRANT AWARDS 2014

In 2014, the Washington State Department of Agriculture awarded approximately \$3.9 million to 27 projects:

The Washington Hop Commission to establish scores of new pesticide maximum residue levels (MRLs) for hops in the key new and expanding export markets of Australia, Korea, China, Hong Kong, and Taiwan. Such submissions will result in numerous new hop MRLs in these markets that are harmonized at US levels, thus allowing US hop farmers to export without fear of costly rejections.

WSDA Grant Award: \$149,972

The Washington Apple Commission is seeking funding to update the www.bestapples.com consumer website and translate it into key foreign languages to enhance consumer engagement and outreach in those markets. By updating and translating the website, the goal is to provide information that helps the consumer choose Washington apples, as well as increase awareness and engagement with the brand.

WSDA Grant Award: \$50,000

The Washington State Wine Commission is conducting wine promotions in Canada that represent an effort to increase awareness and improve distribution for Washington wine in its highest-potential export market. Canada is Washington's leading export destination, but only 0.5% of the state's wine production goes to the market. The project will benefit those wineries through increased sales, wineries looking to export through new distribution opportunities, and non-exporting wineries through the growth of wine tourism in Washington.

WSDA Grant Award: \$97,353

The Pear Bureau Northwest to enhance domestic markets and domestic market sales of pears through increasing foodservice usage of pears. The goal is to get more pears on national multi-unit restaurant menus, thereby increasing pear sales. This project is funded in partnership with the Oregon Department of Agriculture.

WSDA Grant Award: \$20,000

Washington State University to increase crop value by using clonally-propagated Douglas-fir, Nordmann, Turkish, and Canaan firs to determine the role of ethylene in needle loss on these four additional species of trees. The project is also proposing to investigate the effectiveness of common treatments that are used to inhibit the effects of ethylene on other crops in reducing needle loss on cut Christmas trees.

WSDA Grant Award: \$62,666

Washington State University to leverage new data on direct marketed specialty crops in WA from both the WSU Small Farms Project and USDA NASS 2012 Census of Agriculture. Benefits include increased customer understanding and awareness of the economic, community and environmental benefits of buying specialty crops directly from producers; more professional and targeted specialty crop promotion by farmers market organizations; and more effective consumer education and targeted promotions.

WSDA Grant Award: \$69,965

Washington State Farmers Market Association to enhance the Washington State market for local distribution of a wide variety of Washington's specialty crops by leveraging farmers markets' direct and repeated contact with shoppers to increase the sales of their specialty crop farm vendors. This project

SPECIALTY CROP BLOCK GRANT AWARDS 2014

adds new strategies, thereby addressing the needs of specialty crop farmers from market, farm, and shopper perspectives.

WSDA Grant Award: \$122,738

The Community Ag Development Center to conduct a Feasibility Study which will provide crucial information needed to specify a small scale specialty crop processing facility. The eventual facility will be used by farmers to produce value-added products from their own specialty crops. At the completion of this study, CADC will be ready to seek funding and proceed to construction of an actual facility.

WSDA Grant Award: \$41,540

Snoqualmie Valley Preservation Alliance to address water needs on a system-wide basis has been long identified as critical to successful specialty crop production in the Snoqualmie Valley. This project will undertake the necessary steps to investigate, identify and vet irrigation specific water strategies on a system wide basis in the lower Snoqualmie Valley.

WSDA Grant Award: \$68,000

Eloptia Communications LLC to allow orchard managers to use precision soil moisture measurement practices to make irrigation management decisions. The project will test a simpler, cost effective and accurate irrigation decision-making tool that has the potential to reduce disease and improve Washington's cherry crop. The project will field-test the effectiveness of bistatic ground penetrating radar (BGPR) technology to measure soil moisture and test the effectiveness of BGPR to provide a 3-D model of moisture volume and drainage characteristics

WSDA Grant Award: \$245,000

WSDA Office of Compliance and Outreach increase market opportunities for small-scale and direct marketing farmers and processors by eliminating the mystique of local, direct buying. By leading local buying missions and bringing direct specialty crop buyers onto farms and into food processing plants and bringing growers into buyers' markets. The work begins on the buying missions, culminates in a regional trade show, and all participants are offered one-on-one technical assistance.

WSDA Grant Award: \$249,992

Washington State University to determine honey bee subspecies foraging differences in Washington during wet and/or cool pollination conditions. Washington tree fruit and small fruit growers will benefit through improved pollination security/efficiency for crops that bloom during times of inclement weather. In addition, the research proposed here will benefit the honey bee industry and those that rely on pollination services by identifying honey bee stocks that exhibit improved pest and pathogen resistance.

WSDA Grant Award: \$249,059

Washington State University to identify genotypes that are truly more efficient in the genotypes use of agronomic inputs and tolerance of various stresses. Identification, selection and development of clones with increased tolerance to heat, water and nutrient stress for yield and retention of postharvest quality would greatly increase the efficiency, sustainability and competitiveness of the potato industry.

WSDA Grant Award: \$249,838

SPECIALTY CROP BLOCK GRANT AWARDS 2014

Washington State University to develop rapid non-contact apple bitter pit detection technique(s) for identifying the disorder during early to asymptomatic stages. Computer tomography based imaging, and visible-near infrared and Fourier transform infrared spectroscopy techniques will be evaluated on ‘honeycrisp’, ‘granny smith’, and ‘red delicious’ apples. Such techniques will aid growers in reducing in-field crop losses by making timely decisions on appropriate management practices.

WSDA Grant Award: \$180,628

Washington State University to conduct research to identify virus(es) associated with ‘fanleaf-like’ symptoms, develop reliable methods for the detection, monitor affected vineyard blocks for nematode vector(s) and study the vineyard’s ability to transmit virus(es). The project outputs will be shared with industry stakeholders and regulatory agencies for increased awareness of nepoviruses and to foster sustainable growth of Washington’s grape industry.

WSDA Grant Award: \$153,080

Washington State University to characterize and study the biology and pathogenicity of the *Botrytis* species on peonies in the Pacific Northwest (PNW) and AK. The research will allow growers to target applications to critical periods in the disease cycle. The information from the studies will be used to develop integrated *Botrytis* disease management guides for tulips, lilies and peonies. This project is funded in partnership with the Alaska Department of Agriculture.

WSDA Grant Award: \$140,861

Washington State University to increase watermelon production in WA due to crop losses from Verticillium wilt (caused by *Verticillium dahliae*). In a previous field study, grafting watermelon with two commercial rootstocks provided improved resistance to *V. dahliae* but did not improve yield. Results from this project will be relevant to both conventional and organic growers, and will help jump-start a grafted vegetable transplant industry in WA.

WSDA Grant Award: \$143,365

Washington State University to augment the ability of organic and conventional apple growers to produce high yields of premium quality fruit. The WA apple industry will benefit economically through improved aphid control (reduced crop losses), effective soil management (greater yields), and reduced number and/or cost of pesticide treatments. Benefits for Washington farm workers, the general population, and the environment will derive from more effective and sustainable apple management.

WSDA Grant Award: \$194,910

The Washington Hop Commission to reduce impacts of powdery mildew and sustain the economic and environmental sustainability of hop production through strategic disruption of the overwintering phase of the disease. The project is foundational for effective disease management in individual yards, farms, and region-wide when disease management efforts are coordinated.

WSDA Grant Award: \$129,189

Washington State University to prevent crop loss due to new strains of *Potato virus Y* (PVY). The project will provide new understanding about novel strains of PVY. The potential economic benefit of this could be in the millions of dollars should it succeed as anticipated in identifying effective PVY monitoring methods and disease management measures.

WSDA Grant Award: \$203,802

SPECIALTY CROP BLOCK GRANT AWARDS 2014

WSDA Office of Compliance and Outreach to build on earlier SCBGs to provide resources and guidance to institutional buyers and support specialty crop growers in selling to schools, preschools, senior programs and other institutions. Work with DES, DOH, UW and state agencies to examine current purchasing and food promotion policies and practices and identify opportunities to increase purchases and promotion of Washington-grown specialty crops, research best practices for institutional local-foods purchasing, and develop resources for institutions and state agency food service facilities to support their farm to institution efforts.

WSDA Grant Award: \$224,523

Washington State University to address the threat posed to Washington's \$350 million sweet cherry crop by Little Cherry Disease (LCD), a viral disease of sweet cherry. This project aims to determine the probability of non-symptomatic trees being infected, and to correlate infection with measurable factors, in order to develop a comprehensive management plan. The proposed project will provide growers with new management tools for controlling LCD vectors (apple and grape mealybug).

WSDA Grant Award: \$199,820

North Yakima Conservation District to help approximately 3,000 apple growers in Washington maintain export or gain access to new markets by alleviating the barriers to free movement of apples in the market place. In addition to alleviating the barriers to free movement of apples in the market place, it is proposed that state agencies eliminate black hawthorn in close proximity to commercial apple orchards.

WSDA Grant Award: \$222,505

Washington State University to increase sales of fresh-market strawberries in Washington by proposing foundational pre-breeding work, in which available parental material is thoroughly evaluated for important traits to incorporate into advanced breeding selections. Additionally, powdery mildew information is lacking for proposed parental genotypes. Results generated from this study will directly inform breeding efforts to increase the stability of remontancy and powdery mildew resistance in adapted day-neutral cultivars.

WSDA Grant Award: \$32,109

Neighborhood Farmers Market Alliance to increase shoppers and specialty crop sales at seven Seattle Farmers Markets by: increased low income shopper sales through specialty crop-focused Fresh Bucks and SNAP incentives, new marketing strategies utilizing digital and multi-media approaches, and strategic partnerships with the University of Washington. By capturing a larger proportion of those food dollars through a number of innovative outreach methods, this investment will increase sales to specialty crop farmers by at least \$750,000 over two years.

WSDA Grant Award: \$115,267

The Center for Produce Safety to develop data to support academic, industry, and public health evaluations for the replacement of nonfunctional quantitative irrigation water standards with a simpler semi quantitative threshold. The project objective is to develop an initial baseline of comparative data for indicator *E. coli*, Total *Bacteroides* (an alternative and more robust indicator) in surface water sources to the presence of human pathogenic *E. coli* and *Salmonella*. This project is funded in partnership with the Oregon and California Departments of Agriculture.

WSDA Grant Award: \$77,964

SPECIALTY CROP BLOCK GRANT AWARDS 2014

WSDA Natural Resource Assessment Section to identify barriers that are currently reducing the ability of red raspberry growers in Whatcom County to use manure to improve soil quality as necessary, and to target and support potential solutions that will increase opportunities for these growers to make necessary applications. Based on the success of WSDA's approach, the project will be expanded to other areas of the state where it could benefit growers of other specialty crops, including other berries, tree fruits, and grapes.

WSDA Grant Award: \$250,000