

Fruits and Vegetable Programs

Specialty Crop Block Grant Program Description of Funded Projects

Fiscal Year 2006

The Specialty Crop Block Grant Program (SCBGP) was authorized on December 21, 2004, by Section 101 of the Specialty Crops Competitiveness Act of 2004. The Act authorized the Department of Agriculture (USDA) to provide grants to states to enhance the competitiveness of specialty crops. The agency, commission, or department responsible for agriculture within the 50 States, the District of Columbia, and the Commonwealth of Puerto Rico are eligible to apply for grant funds directly to the USDA. Specialty crops are defined as "fruits, vegetables, tree nuts, dried fruits, and nursery crops (including floriculture)."

Fifty-two U.S. States and Territories were awarded Fiscal Year 2006 funds. All the elibigible states submitted their applications by the established deadline of October 11, 2007. The approved awards are listed alphabetically.

Alabama Department of Agriculture and Industries

Amount Funded: 108,926.78 **Number of Projects:** 3

- The Alabama Department of Agriculture and Industries (ADAI) partnered with Auburn University to identify, for the first time, the economic impact of Alabama's fruit and vegetable crops on the Alabama economy. The study looked at the impact of total cash receipts on the Alabama economy, the dollar value of specialty crop exports, the indirect business tax impacts, and the number of jobs created by specialty crop production. Project staff sent a questionnaire to 3,000 subjects, resulting in various data collection including the average size of the fruit and vegetable farms, the major source of labor, and the type of specialty crops allocated for farm production among non-limited and limited resource farmers,. The study was distributed to industry associations and the information they provided will be used by the ADAI to evaluate the steps needed to encourage beginning farmers and help the industry continue to grow.
- The Alabama Department of Agriculture and Industries (ADAI) partnered with Auburn University to identify the economic impact of Alabama's horticultural industry on the Alabama economy. Project staff sent more than 6,500 surveys to the nursery/greenhouse, lawn and landscape, and retail garden center sectors. These surveys identified sales trends, job numbers in the industry, and the number of new retail firms. In addition, the survey looked at the impact of domestic and export sales, output and value added impacts, and indirect business taxes. The study results were distributed to all interested parties and the information will be used by the ADAI to evaluate the steps needed to encourage growth in the industry.
- The Alabama Department of Agriculture and Industries (ADAI) conducted promotions to enhance the competitiveness of Alabama specialty crops using the A+ Alabama Agriculture Logo. Project activities included creating point of purchase materials and conducting chef demonstrations at retail outlets which highlighted the local specialty crops sold in their stores. Additionally, billboards were placed along the interstate to attract customers to Alabama's two year-round state farmer's markets as well as using television and internet radio advertising to highlight local specialty crops and growers. These materials and promotions helped increase visibility of Alabama specialty crops. In fact, based on vendor interviews, sales increased about 25 percent at the two state farmer's markets.

Alaska Division of Agriculture

Amount Funded: 100,520.67 **Number of Projects:** 3

- The Alaska Division of Agriculture launched a media campaign to capitalize on the abundance of local specialty crops available at the tail-end of the growing season. The campaign reminded consumers of the agricultural component of the Alaska Grown logo and encouraged Alaskans and visitors to seek out Alaska Grown specialty crops. In addition, an Eat Local Challenge was created to encourage restaurants throughout Alaska to increase the amount of Alaska Grown products sourced and utilized. A total of 38 restaurants participated in the week-long event and as a result, one wholesaler had a 30 percent increase in Alaskan Grown romaine purchases as well as a 15 percent increase in Alaska Grown green leaf purchases. Due to the advertising campaign, the alaskangrown.org website had a significant increase in activity and farmer's sales, based on previous years' sales.
- The Alaska Division of Agriculture created a Farmers Market Match Grants Program for the local farmers markets in Alaska that have been limited in growth due to their lack of advertising funds. Eleven markets successfully applied for and received funding through the program. The Haines Farmers Market utilized the funds to attract vendors and new customers by advertising for the first time in the local Visitor's Guide, newspaper, and on the radio as well as creating signs and a banner. The Northway Mall used their funds to purchase and promote reusable cloth shopping bags to successfully incentivize customers to attend in the first two markets of the season. The Kenai Saturday Market utilized their grant money to update signage and radio ads, and performed a targeted newspaper ad that helped increase attendance by six percent over the previous season.
- The Alaska Division of Agriculture launched the Horticulture/Nursery Match Grants Program to help five nursery and greenhouse operators raise consumer awareness about the differences and benefits of sourcing Alaska Grown nursery products versus those produced in the lower 48 states. Examples of the specific projects include Gray Owl Farm which produced a television ad that contributed to their sales and customer base increasing by approximately 15 percent. The Risse Greenhouse ran weekly ads that focused on educating the public about the benefits of Alaska Grown nursery products and their availability of those products. They attributed the ads to their retail sales increase of 10 percent. O'Brien Garden & Trees utilized the grant money to advertise three special events at their greenhouse. Those events resulted in increased revenue of 25 percent.

Arizona Department of Agriculture

Amount Funded: 133,290.44 Number of Projects: 12

- The Arizona Department of Agriculture (ADA) produced and printed 5,000 copies of the Arizona Specialty Crop Guide. The guide was designed to educate consumers about where our food comes from and the benefits of buying Arizona-grown produce. The guides have been distributed to libraries, educational institutions, farmers' markets, and conferences with a link posted to the ADA website, www.azda.gov. ADA conducted a survey to determine the efficacy of the guide in educating consumers. Thirty-three percent of the respondents said they had changed their shopping habits or consumption practices since reading the Arizona Specialty Crop Guide. The most common change for respondents was that they now try to make more "locally grown" purchases. Sixty percent of respondents reported having shared information from the Arizona Specialty Crop Guide with 1-3 people and 7 percent reported having shared information with four or more people. ADA estimated that, by the end of the grant, the guide had already reached approximately 12,500 consumers and a second printing of the guide was already scheduled.
- The Arizona Department of Agriculture (ADA) partnered with the Community Food Bank, Community Food Security Center, to make and distribute an educational marketing video that raises awareness of the personal health and community benefits of eating fresh fruits and vegetables. The project was carried out by Community Food Resource Center (CFRC) staff, who collaborated with local farmers, market managers and local food enthusiasts in designing a script. A local video company then created the video in English with Spanish subtitles. The video was distributed through a variety of outlets in Tucson, including the Community Food Bank (CFB) website (communityfoodbank.com), YouTube, local theaters, educational events and local food organizers who presented the video to their community groups. The educational potential was further enhanced by a Peace Corps Fellow who worked at the CFB to develop a supplemental handout including discussion questions and up-to-date information on farmers' market locations in Tucson.

- The Arizona Department of Agriculture (ADA) partnered with the Western Growers Charitable Foundation (WGF) to connect educators with nutrition education curricula and encourage students to develop gardening and life skills with improved attitudes towards fruits and vegetables. Through this project, 30 school gardens were established or improved and training was provided to educators. WGF initially solicited applications from interested schools and received 126 applications, from which 30 were selected to participate. These schools served more than 15,000 students. Teachers and administrators then participated in "train-the-trainer" training and received various materials and access to resources to assist them in their efforts to educate the children about fruits and vegetables. Efficacy of the project was measured through pre- and post- assessments administered to students at the participating schools. Among those students who participated in these tests, a 20 percent increase in health and nutritional knowledge was observed. In addition, there was a 10 percent increase in the number of students eating at least 1 serving of vegetables a day, a 12 percent increase in the number of students having a fruit or vegetable snack after school, and a 16 percent increase in the number of students asking parents to purchase fruits and vegetables.
- The Arizona Department of Agriculture partnered with the Arizona Nursery Association to conduct an Economic Impact
 Survey of the Arizona Nursery Industry. The study included full market research of the entire nursery crop industry. The
 resulting report was summarized and published as a brochure, which was distributed to more than 1,000 interested
 parties through conferences and Association distribution mechanisms. In addition, the report was submitted to the USDA's
 National Agricultural Statistics Service and was posted to the Arizona Nursery Association's website, www.azna.org.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to develop and test strategies to stop or prevent the loss of effectiveness of critical chemical tools (like fungicides) that growers use to combat powdery mildew on melons. The researchers conducted two field trials on cantaloupe plants and evaluated the effectiveness of various fungicide treatments, utilizing products with different modes of action that are registered for use on melon crops. The unexpected outcome of this study was the fact that products less effective in controlling powdery mildew by themselves could be incorporated into treatment programs in alternation with highly effective fungicides and result in the achievement of a high level of disease control. These results represent a significant cost savings potential to growers when less effective fungicides are typically less costly. Results of the research were presented to approximately 2,000 stakeholders through conference presentations as well as various online and written publications.
- The Arizona Department of Agriculture (ADA) partnered with the Yuma County Task Force to take the first step to better understanding Cucurbit Yellow Stunting Disorder Virus (CYSDV), a whitefly-transmitted crinivirus that resulted in \$25 million in losses to the US fall melon crop in 2006. Through this study, researchers were able to get a better understanding of the enemy by putting into place a sensitive, rapid turn-around molecular assay for Cucurbit Yellow Stunting Disorder Virus (CYSDV) detection. They developed a technology for sample collection and elution to provide a method that surpasses presently available approaches. Researchers then implemented this virus-specific diagnostic assay to identify CYSDV in cultivated and wild plant hosts where the results were mapped throughout the production season. Results of the study were shared through presentations and publications, outreach to growers, and the distribution of fact sheets.
- The Arizona Department of Agriculture (ADA) partnered with the USDA's Agricultural Research Service to determine the inheritance of tipburn resistance in lettuce and develop molecular markers linked to tipburn resistance genes that are suitable for marker assisted selection. The team conducted field experiments and classic quantitative genetics analysis, developed an SSR marker and genetic map, and conducted analysis of quantitative trait loci (QTL). Furthermore, given the results of the study, the team was able to select and characterize individual recombinant inbred lines with improved tipburn resistance for potential release to the lettuce industry. Field trials on these lines are ongoing, but promising, with the possibility of the release of a superior performing recombinant inbred line as early as 2012.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona and the Yuma Agricultural Center to examine the effect of irrigation systems and schedules on the microbial quality of lettuce. Risk levels associated with the different water management programs and the survivability of E. coli, under the conditions prevalent in Arizona during winter, were also reviewed. Through testing, the team demonstrated the effectiveness of drip, sprinkler and furrow irrigation schemes to determine final postharvest quality, estimate uptake and survival of E. coli in romaine and head lettuce grown in Yuma, and cost/benefit analysis were all examined. Results confirmed the enhanced risk of E. coli contamination when using overhead sprinkler irrigation, but also revealed the importance of an early irrigation termination for both spray and furrow irrigation. In addition, the team confirmed that the E. coli survival rate is longer in colder months. The results of this study have helped the industry establish new guidelines. For example, knowing the survival rate of E. coli in the field when it is transmitted by water that was in contact with leaf tissue has prompted several companies to develop more stringent guidelines for crops that are sprinkler irrigated.

- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona and the Yuma Agricultural Center to assess the heavy metal content and its potential health risks on fruit and vegetable crops produced in Arizona. To do so, the team collected vegetable and fruit crops irrigated with Colorado River water, prepared and processed them as if they had been ingested and digested, and measured the levels of various heavy metals. In general, accumulations of metals were generally higher in edible leafy vegetables, such as lettuce and spinach, compared to fruiting crops such as citrus, tomatoes, and dates. The team has presented its findings to more than 1,000 stakeholders at various conferences and workshops and anticipates the release of its findings through fact sheets, publications and websites.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to develop a biocontrol strategy for management of lettuce drop disease. One effort included the optimization of the application rate and timing of Contans in the development of effective, yet economical biocontrol of lettuce drop caused by Sclerotinia minor. Through their experiments, researchers learned that 6 lbs of Contans per acre is just as effective as 10 lbs and significantly more effective than 4 lbs, at medium inoculum levels. This finding alone could have significant economic impact for lettuce growers. The research supported by this project will directly translate into improved disease management strategies. If enacted, this could potentially result in increased productivity for lettuce producers in Arizona and an overall increased competitiveness of the winter lettuce industry in southern Arizona. More broadly, this research will advance agriculture in desert areas, and elucidate at least one mechanism by which many biocontrol strategies fail upon moving laboratory findings to field applications.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to evaluate changes in harvest and postharvest leafy vegetable nutritional value in response to nutrient solutions of increasing salinity. The results suggest that while the influence of salinity on antioxidants in crucifers may be unique to a specific species or cultivar. They do support the premise that moderate salinity levels do not compromise the quantities of the polyphenols, vitamin C, and yields. While the focus of the research was not concerned with the utility of a re-circulating ebb and flow irrigation system as a viable production system for leafy greens, research does demonstrate the efficacy of recycling a nutrient solution with a loss in quality. A system that limits water use, in arid land agricultural regions where irrigation water is an increasingly limited resource, compromised by salinity, suggests value. The findings from this work were presented at an International Society of Horticultural Science conference held in Tucson, AZ in October 2008 and are being disseminated through various websites and publications.
- The Arizona Department of Agriculture (ADA) partnered with the University of Arizona to generate data that will allow the Arizona date producers to be more efficient with their nitrogen applications while maintaining or improving yield, fruit size and fruit quality. Through this study, researchers collected growth data which suggests that for young trees on both flood and drip irrigation, one to two kilograms of nitrogen per tree leads to the greatest tree growth rate. For older trees on flood irrigation, one to two kilograms of nitrogen per tree appears to lead to the greatest growth rate as well, however for older trees on sandy soils using drip irrigation, as much as 3.5 kilograms of nitrogen per tree appears to lead to the greatest growth rate. This may be because nitrogen is applied much less efficiently on sandy soils than on the heavier soils that are commonly flooded. Data developed through this study has been shared with date producers, who use it to ensure that they are maximizing yields and plant growth and meeting the needs of their plants.

Arkansas Agriculture Department

Amount Funded: 102,675.16 Number of Projects: 3

• The Arkansas Agriculture Department (AAD) developed and implemented a marketing program to increase consumer awareness and consumption of locally grown Arkansas specialty crops. AAD provided signage and promotional materials at various venues, created an Arkansas Grown logo, developed the Arkansas Grown website (www.ArkansasGrown.org), and provided support for the participation of Arkansas producers in the Fresh Summit International Convention and Exposition in October 2010. By the end of the project, the Arkansas Grown website had received more than 15,000 hits and the Arkansas Grown program had resulted in the establishment of a new farmers' market with a focus on promoting Arkansas Grown produce. In addition, Arkansas producers who participated in the Fresh Summit convention brought in sales contracts valued at more than three times the cost of the project.

- The Arkansas Agriculture Department provided point of sale promotional items in the form of decorative sacks that touted the Arkansas Agriculture Product Market website (www.naturallyarkansas.org), the Arkansas Grown brand, the Arkansas Farmers' Market Association and the state's farmers' markets. One hundred thousand bags were distributed at various sites throughout the state, resulting in a marked increase in visits to the Naturally Arkansas and later the Arkansas Grown websites.
- The Arkansas Agriculture Department (AAD) educated Arkansas growers and handlers about following and documenting Good Handling/Good Agricultural Practices (GHP/GAP) in their businesses to address liability issues and market accessibility. Initially, AAD organized and promoted a workshop on GHP/GAP for growers, handlers and packers. More than 70 producers, industry representatives, packers, county extension agents, food safety program managers and government representatives participated. In addition, AAD trained six cooperative extension agents to conduct third party audits. In the first year alone, 12 producers successfully completed a recognized GHP/GAP audit, as compared to only seven in the previous year. In the second year of the project, an additional 18 growers received fee assistance for GAP/GHP audits.

California Department of Food and Agriculture

Amount Funded: 652,477.90 **Number of Projects:** 17

- The California Department of Food and Agriculture partnered with the Buy California Marketing Agreement to present retail grocery partners with a set of user-friendly templates, via a web connection, with the intent to share the "California Grown" logo, and other generic marketing related materials, in combination with in-house materials. The online download center is featured on the homepage of the California grown campaign website (www.californiagrown.org) in a section titled "attention retailers". A "lift kit" was promoted to help retailers boost sales by using the CA GROWN logo on their instore materials. The project provided the "California Grown" campaign and the California agriculture industry a very valuable tool for promoting California grown specialty crops and helped the Buy California Marketing Agreement gain access to retail locations that would not accept preprinted point of sale materials. Other uses for the site and download center, outside its original purpose, have been discovered since the launch date. For instance, companies who license the CA GROWN logo for product packing and marketing materials now can access the online download center to obtain the logo. Previously licenses were sent to users on a disk containing the logos. In addition, the download center provides easy access for other stakeholders such as media, board members, agencies and other industry cooperators. As a result of this project, 168 total users, 58 of which are retailers, have registered and are using the download center today.
- The California Department of Food and Agriculture partnered with the Central Coast Vineyard Team (CCVT) to develop a certification program that furthered the adoption of conservation practices through market-based incentives. Project activities included conducting a pilot certification program to certify, through a third-party, the sustainable wine growing practices of ten Central Coast vineyards. Project staff also developed a report of findings and recommendations based on lessons learned during the pilot program, disseminating the results of the pilot program and developing a financial plan to create a sustainable long term program. Marketing materials were also developed to promote the program and certify vineyards while summarizing the acreage and overall certification program. As a result of the pilot program, 14 Central Coast vineyards representing over 3,700 acres achieved third party certification in 2008 through implementation and documentation of practices as stated in the certification standards. This represents twenty-four (24) wines that are eligible to use the certification seal on the bottles. Following the pilot certification program, second year vineyard applicants totaled over 9,000 acres applying for sustainable certification. CCVT anticipates between 40 and 50 wines to be eligible to use the certification seal by the end of 2009.
- The California Department of Food and Agriculture performed pre-award and post-award activities in order to
 administrate the Specialty Crop Block Grant Program funding and ensure that the State Agency and sub-awardees abide by
 Federal and State requirements and regulations.

- The California Department of Food and Agriculture partnered with the California School Nutrition Association to provide 33 elementary schools with salad bars ("Garden Bars") and promotional materials to help increase the access and consumption of nutritious fruits, vegetables, and nuts at breakfasts and lunches on campus and at home. Participants in the project were elementary schools that had no previous salad bar equipment and therefore, limited student access to specialty crops as part of their daily school meal program. Prior to adding a Garden Bar, the average purchase of specialty crops per student was \$2.41 per month. With the Garden Bar, the average purchase increased to \$3.96 resulting in an increase of \$1.55 per student, per month on specialty crop purchases. In addition, the "Garden Bar" project brought parents into the process through a survey that required parent/child discussion. The surveys showed that 90 percent of parents believed the Garden Bar was an improvement, 71 percent said their child's opinion of fruits and vegetables improved, and 71 percent said their child eats more fruits and vegetables on a weekly basis.
- The California Department of Food and Agriculture partnered with the University of California, Davis (UCD) to supplement the \$15 million California Instructional School Gardens Program (CISGP) that funds gardens in public schools and develops training courses that link garden activities to California instructional standards. Project activities included the UCD Children's Garden Program (CGP) and the Life Lab Science Program (LLSP) offering "Creating and Sustaining Your School Garden" (CSYSG) Train-the-Trainer Workshops to increase the number of personnel equipped to instruct school children in garden-based education. A total of 135 participants representing 64 different organizations attended the five train-thetrainers' workshops. The University of California Children's Garden Program, in collaboration with the California Department of Education (CDE), researched successful middle school instructional garden programs across California. Eleven schools were selected as model programs, with program activities captured through observations and photographs. In collaboration with the California School Garden Network (CSGN), UCD created a middle school area as part of the content for the "California Instructional School Garden Program" web pages. On a per month basis, these pages had a 71 percent increase in visits. The "California Instructional School Garden Program" webpage was created within www.csgn.org. The page includes information on the program, where the funding went, which schools received funding, and links to help schools that are applying for or receiving the grants. On average, the number of unique visitors to the CSGN website has increased by 2560 visits per month between 2007 and 2009 and since the start of the project, 1466 new CSGN members have joined, bringing the total to 3066. Over 3,849 schools applied for the CISGP. A Garden Grant Follow-up Survey was sent to schools that completed the application process and a subset of schools that did not apply. The survey resulted in 749 schools (38 percent of pool) used in the analysis finding that schools were 3.7 times more likely to apply for CISGP if they had a garden coordinator, 3.1 times more likely to apply with dedicated parent or community volunteers, but only 1.4 times more likely to apply if other funding sources were present. A manuscript detailing the findings from the project was written and submitted to a peer reviewed journal so that the findings will be accessible to schools throughout the state.
- The California Department of Food and Agriculture partnered with the California Sustainable Winegrowing Alliance (CSWA), in collaboration with industry and academic partners, to examine existing climate change knowledge and research pertaining to vineyard greenhouse gas (GHG) emissions and offsets in order to gain a fuller understanding of the sector's GHG footprint. Grant funding was used to produce and disseminate a comprehensive report and user-friendly handout that consolidates information on topics such as carbon sequestration by vines, energy use, nitrogen management, and other vineyard farming practices. Information was shared with partner organizations and their respective wine, raisin and table grape memberships, and incorporated findings into a GHG footprint project that takes into account both winery and vineyard emissions and offsets. The report was also integrated into CSWA's outreach and education efforts through the Sustainable Winegrowing Program.

- The California Department of Food and Agriculture partnered with the University of California, Davis to provide walnut growers with information on the potential impacts of climate change on walnut production and the economic and environmental impact tradeoffs of various pest management strategies as a consequence of reducing impacts to water quality. A recommendation from the project is the adoption of the Dynamic Model of chill portion by California walnut growers as their standard method for estimating winter chill. The commonly used Chilling Hours Model appears to overestimate the chilling decline as climate gets warmer. Another project conclusion is that overall pest pressure can be expected to increase substantially. More information on the impact of climate change on complex agro ecological food webs and the response of pests to high temperatures is needed to improve the reliability of projections. The results from the water quality study indicated that 96 percent of the pest management strategies analyzed were candidates for reducing the impact on water quality. Replacement of current pesticides by alternative pest controls lowered probable impact, but resulted in an economic tradeoff in the form of higher costs for the majority of growers. If biological control could eliminate the need for miticides and aphicides, this tradeoff could be replaced by savings for nearly half of the samples analyzed. The results of the project were published in six peer reviewed journal articles and over 50 articles, blogs, and summaries via a diverse range of organizations, including many local grower and commodity sites, environmental non-profits, scientific research based sites, as well as many high impact news sites with wide distributions such as the LA Times, the San Francisco Chronicle, and Fox News.
- The California Department of Food and Agriculture partnered with the University of California, Davis to research environmentally sensitive control alternatives that will control the spread of Diaprepes and allow the nursery industry to continue to meet quarantine restrictions. The following project goals were accomplished: 1) identify insecticidal products (conventional, biological and bio-based) that either alone or in combination will prevent neonate (first instar), and provide control for larvae up to the third instar from establishing in potted nursery plants; 2) identify insecticidal products that will result in the death of adult weevils after feeding on treated foliage, and/or causes the adult weevils to avoid feeding on treated foliage; 3) identify the combination of insecticidal products that will eliminate large (6th 8th instar) larvae from potted nursery plants; and 4) determine the effects of soil type and watering regimes on the successful combinations of insecticidal products found in goals 1 through 3. The results of the project were presented at scientific meetings, in a publication, and two manuscripts. Successful management programs will be submitted to State regulators for approval. If accepted, the programs will be made available to nurserymen.
- The California Department of Food and Agriculture partnered with the University of California, Davis to assess the likely spread of the Tomato yellow leaf curl virus (TYLCV), from the initial introduction point and identify plant reservoir hosts for the disease to form the basis for an integrated pest management strategy. Project staff monitored the spread of TYLCV in Southern California in 2008-2009. Through surveys, TYLCV was detected in homeowner gardens and commercial tomato fields in the Imperial Valley. In addition, TYLCV infection was also found in a late-planted tomato field in Riverside County and in a single plant in a late-planted fresh market field in Merced County. A third survey was conducted that found two tomato plants from a field in Niland infected with TYLCV. These results indicate that TYLCV is established in the Imperial Valley, but not at levels sufficient to have high populations of virus-carrying whiteflies. Surveys of processing tomatoes in Fresno and Merced County failed to reveal TYLCV-infected plants, except for a single fresh market tomato plant from a late-planted field in Merced. Rapid tests to detect TYLCV in weeds and whiteflies were developed and applied to show that the virus could be detected in weeds and whiteflies from Imperial County. This indicates that the virus is persisting in certain weeds, especially those in the Solanaceae family. A rapid and quick test to differentiate Trialeurodes and Bemisia whiteflies was developed and helped show that Bemisia whiteflies are able to move north into some of the major tomato growing areas of California. As a consequence of the California drought, the goal to conduct field trials with TYLCV-resistant tomato varieties could not be accomplished. A vector-independent means, agroinoculation, was developed for screening tomatoes for their response to the California isolate of TYLCV. It was shown that the major processing tomato varieties grown in California were susceptible to the virus, that different varieties show different types of symptoms, and that it was age-dependent. Numerous talks and presentations to growers provided symptoms of the virus and the relative threat it provided to tomato production in California. In addition, samples from growers and homeowners are routinely tested for TYLCV. Finally, tools are in place to facilitate breeding efforts for incorporating TYLCV resistance into tomato varieties for California.

- The California Department of Food and Agriculture partnered with the University of California, Davis to evaluate a broad range of combinations of natural product herbicides and surfactants for effectiveness and economy. Natural product herbicides, including Vinegar, C-Cide, Green Match, Green Match EX, Matran, Raps, Racer, and Weed Zap were tested in the greenhouse (GH) on both junglerice (Echinochloa colonum) and yellow mustard (Brassica sp.). Products were applied at different concentrations (depending on product label and previous results), spray volumes (35 and 70 GPA), and with and without different organic surfactants (Natural Wet, NuFilm P, NuFilm 17, Humex, Mix Well, Bio-link, and Monterrey Organic Adhesive). GH trials were ongoing throughout the two years of the study (2007 to 2008), and were used to guide decisions regarding treatments used in field trials. Results showed that GreenMatch EX, Racer, Matran and Raps were the most effective herbicides. Vinegar and C-Cide were the least effective in controlling weeds in the GH trials. Mustard was much easier to control than junglerice in GH studies. The addition of surfactants generally improved weed control, regardless of the type of herbicide or surfactant. Higher surfactant concentrations initially appeared to give improved control, particularly with Natural Wet, NuFilm P, and NuFilm 17. Thus, in GH trials, increasing concentration or spray volume improved control of mustard and junglerice, increased concentration of surfactant improved control although it does not seem dependent on the product used. The information generated in these studies, on efficacy and ideal application conditions for each organic herbicide, has been and will continue to be made available to extension agents, pest control advisors and growers through extension presentations, journal articles, the UC Weed Research and Information Center (WRIC) website, and through the UC Integrated Pest Management (IPM) guidelines. This information should support the expansion of environmentally friendly weed management options in specialty crop systems, making production in California both more sustainable and more competitive, and will benefit both organic and conventional growers.
- The California Department of Food and Agriculture partnered with the University of California, Davis to field-test an automatic system for mechanical weed control, using a real-time kinematic global positioning system. The study successfully developed an automatic, one inch-level precision transplant mapping and in-row weed control system for Californian vegetable crops. The system utilized RTK GPS location and planting wheel sensors to produce highly accurate GIS maps of crop plant location. A ruggedized, real-time, embedded controller was developed that could automatically control a pair of weed knives to provide in-row weed control based upon the GIS maps. The system is suited for use in both organic and conventional vegetable crop production systems and shows excellent potential to help Californian farmers reduce their weed control costs and decrease their reliance on chemical herbicides.
- The California Department of Food and Agriculture partnered with the USDA, Agricultural Research Service to explore the feasibility of using various combinations of new generation environmentally sensitive pesticides and lures for maximum effectiveness in the statewide detection and eradication programs for exotic fruit flies. The goals of the project were to: 1) determine how long spinosad takes to effectively kills fruit flies when deployed in male annihilation treatments in Hawaii and California and whether the addition of UV light inhibitors will extend the effective period of the spinosad; 2) determine whether the trap catch of ME and C-L baited traps using spinosad can be made equivalent to those using Dibrom (naled) using either the current wick dispenser or a solid matrix dispenser; 3) determine if melo-lure will enhance the effectiveness of cue-lure for flies attracted to this C-L analog; 4) determine if new plant-derived extracts are more effective at attracting female fruit flies to our traps than the current hydrolyzed-protein based lure; and 5) determine if we can substitute spinosad on a solid matrix for Dibrom on a wick in our fruit fly traps. The results and accomplishments of this project were published in several articles and the data will be the basis for recommendations on detection and eradication of exotic fruit flies.
- The California Department of Food and Agriculture partnered with Project Apis m (PAm) to develop field evaluation of honey bee health and nutrition status. A study was conducted that focused on the technical feasibility of a program for infield sampling of honey bees for health. The feasibility study proposed three methods for field testing of bees: 1) train pest control advisors; 2) develop easy-to-use field test kits; and 3) provide access to diagnostic laboratories. The project highlighted that a beekeeper's primary challenge is keeping bees alive and successful over-wintering of bees is key to complete and efficient pollination of California specialty crops. In addition, pollination services have become the primary income-producing activity for beekeepers, rather than honey production. Interviews conducted through this project illuminated the fact that beekeepers do not have the tools they need to determine if a colony is healthy or not and growers of pollinated crops have little information on bee supply and health. This project resulted in the development of diagnostic laboratories and services to more objectively evaluate bee health.

- The California Department of Food and Agriculture partnered with the California Agricultural Export Council to organize and facilitate an Agricultural Trade Roundtable to discuss common trade issues and to arrive at a list of important trade issues that impact a large number of CA specialty crops and to convey these to Federal officials and trade negotiators as "high priority" items for California agriculture. A total of 28 agricultural entities participated in the two-day forum. As a result of the Roundtable, seven priority trade issues were identified. Of these, the four highest priority issues were explored by the group, with regard to possible "action items" to meet and overcome those issues. A total of 21 "action items" were identified and associated with the individual trade issues. The four high priority trade issues included trade agreements, market access (tariffs), TASC (Technical Assistance for Specialty Crops), and China. One key item, of strong interest to most participants, was the concept of jointly marketing California Agricultural Products along with California Tourism in foreign markets. The key California issues will be provided not only to the industry participants, but also to both Federal and State Government entities to provide insight into the most current items of importance in California. As a follow-up activity to the Roundtable, project staff conducted a survey of the participants to determine their feelings on the value of participation. The draft responses indicated that 100 percent of the participants gained value from the event, and would participate again in the future, if the opportunity arises.
- The California Department of Food and Agriculture aimed to increase public awareness of the effect of invasive species on specialty crop production. Project staff printed and distributed 10,000 Invasive Species Booklets, created by the California Invasive Species Advisory Council, that include highlights and information from the list of invasive plants, vertebrates, arthropods, invertebrates, and diseases as well as 5,000 Invasive Species Posters showing what Californians can do about invasive species from each of the invasive groups. These materials were also posted to the Invasive Species Council of California website, www.iscc.ca.gov. A video explaining the effects of invasive species in California, including commentary from various members of the California Invasive Species Advisory Council, was unveiled at the Invasive Species Council of California meeting. A thirty-second public service announcement (PSA), that focused on the damage caused by invasive species on fruits and vegetables and introduced the "Don't Pack a Pest" message, was submitted to three main network affiliates. These networks have an audience exposure of over 1.4 million households in the Sacramento, Stockton and Modesto region. The PSA currently runs 3 to 15 times a month on a filler basis, continuing for over and year until it is revisited.
- The California Department of Food and Agriculture (CDFA) partnered with the Fresno Center for International Trade Development (CITD) to qualitatively evaluate which export services significantly increase exports for California specialty crop growers. A series of roundtable discussions with 28 specialty crop companies and 32 exporters were held on June 3 and June 10, 2010. The CITD/CDFA used input from these discussions to tailor current export services and implement new programs that will assist specialty crop growers in doubling their exports. The outcome of these sessions showed that the most noted barriers that experienced exporters reported can be sorted into 3 categories: finance, logistics, and business development/sales and marketing. The top barriers that new exporters face are finance, inexperience and market knowledge. Based on the sample of exporters who participated in the focus group, several areas of opportunity for the Center and for California's trade programs emerged. One area is the development of an up-to-date on-line trade portal that contains information and links to relevant trade information, including creation of a database of information on importers and detailed country briefs. It was also illustrated that there are significant differences in the needs and ability to pay for CITD services between experienced and new exporters. New exporters, who often would benefit most from the training, technical assistance, and matchmaking functions of the Center, reported limited resources to pay for such services at anything close to market rates. Larger exporters appeared to long for the days when California was able to do more on the marketing side, but seemed realistic in accepting the need for some fee-based services. This suggests a staggered offering for the Center, which would offer relatively inexpensive "Getting Started" programs and progressively more expensive information services and consulting. Also, participants report the highest value service of CITD is connecting qualified importers and exporters. This has traditionally been done through the trade mission. These missions where highly recognized and utilized by participants. Focusing on improving the quality of the delegates on inbound missions was a consistent theme. This may require better coordination between trade program sponsors. Lastly, the top markets exporters are currently involved and want to expand along with China, Mexico, and Canada who are also in the program. The CITD/CDFA can use this information to plan future trade shows and better match buyers and exporters.

• The California Department of Food and Agriculture organized a specialty crop trade mission to Australia to raise awareness and educate California farmers and agricultural and water officials on the impact of long-term drought on specialty crop viability and competitiveness. In 2010, California entered its fourth consecutive year of drought and the on-farm challenges associated with this drought can be likened to Australia's environmental conditions. Australia has experienced similar environmental conditions for over the course of a decade. Two specialty crop and agricultural representatives traveled to Australia to meet with farmers and tour irrigation projects. This trip allowed the representatives to see first-hand how irrigators are responding, with application technology, to the critical challenges of reduced rainfall/reductions in irrigation water availability for specialty crops. The trade mission results were presented in two public forums. The State Board of Food and Agriculture held a public meeting attended by 20 specialty crop stakeholders including the California Department of Water Resources, Agriculture Commissioners, and industry trade groups. A second public meeting was held at the World Affairs Council. A panel roundtable discussion was held at this meeting on what participants observed and learned as well as their insights on Australia's response to the long term drought. Further success will occur when members of the State Board use their newly acquired knowledge to use innovation water saving techniques that increase California specialty crop production and efficiency.

Colorado Department of Agriculture

Amount Funded: 116,139.35 Number of Projects: 6

- The Colorado Department of Agriculture partnered with Colorado State University to conduct variety trials for high value organic vegetable crops. The research included use of high tunnels to evaluate the feasibility of mitigating insect vectored diseases by means of insect inclusion and market season extension. Special focus was placed on melon, tomato, spinach and brassicae salad mix. Researchers tested 330 varieties of 21 crops. Producers received and viewed results and recommendations from the variety trials through a Field Day event along with various presentations and online information. The production results and varietal recommendations were beneficial to small acreage and other organic fruit and vegetable producers to identify varieties that will consistently produce well in Colorado.
- The Colorado Department of Agriculture partnered with the Colorado Foundation for Agriculture to develop and distribute a Colorado Specialty Crops Reader to Colorado schools to promote a broader awareness of Colorado's specialty crops among elementary students. Educators in the schools received a guide to assist in teaching using various ideas to help with demonstrations such as agriculture word finds, flower and fruit coloring pages, using fruits for math problems, and recipe creativity sheets. Project staff distributed a total of 60,000 Specialty Crops Readers, of which 34,000 were provided to students in 1360 elementary school classrooms across Colorado. The Readers were also handed out at the National Western Stock Show on National Ag Day at the State Capital. As a result of to the distribution, a broader awareness of Colorado's specialty crop industry has been reached, as well as providing information on buying locally.
- The Colorado Department of Agriculture partnered with Denver Youth Farmers' Market Coalition to help students learn basic business skills, the importance of teamwork, and personal responsibility by growing, marketing and selling fruits and vegetables. Students participated in youth-run fruit and vegetable gardens and farmers' markets, which were coordinated by Slow Food Denver. The youth's participation led to an average of 110 families purchasing fruits and vegetables weekly. Findings suggested that the youth that participated in the program consumed produce in which they normally would not have tried and consumed more produce as a whole. Positive feedback from consumers on the market was documented, such as, "the market has allowed the neighborhood to buy vegetables rather than junk food."
- The Colorado Department of Agriculture promoted the Colorado Proud state branding program to encourage consumers to buy food and agricultural specialty crops grown, raised or processed in Colorado. Funding was utilized to extend television advertising to include Colorado's Western Slope reaching 53 of the 64 counties in Colorado. The campaign efforts generated 330,000 impressions in the Western Slope and contributed to increases in awareness of the Colorado Proud logo. Findings from a survey conducted in the Denver metro area reported that 82 percent of those customers surveyed purchased at least some Colorado products in the last 30 days. Although this survey was only distributed to Denver metro area consumers, the Colorado Department of Agriculture believes results for Western Slope consumers would be comparable. The Western Slope is the prime fruit growing region in Colorado and advertising reach and frequency for the Western Slope advertising was nearly identical to advertising placed in the Front Range.

- The Colorado Department of Agriculture coordinated the development of a Colorado Pavilion at the Produce Marketing Association's 2008 Fresh Summit Exposition held in Orlando, Florida. This opportunity provided needed marketing support to produce growers. Colorado Pavilion participants included three associations and four companies. These participants reported a total of \$3.7 million in sales during the Exposition and projected additional sales of \$5 million within the next 12 months. The Pavilion aided in creating awareness among produce buyers of Colorado as a supplier of a wide array of fruits and vegetables, encouraged industry participation in the Expo, and expanded export sales.
- The Colorado Department of Agriculture partnered with Rocky Ford Melon Company to develop new out-of-state sales channels to complement existing commercial, road-side, and farmers' market sales channels. Staff created a direct-to-consumer advertising campaign ("World Famous Melons Delivered to Your Door") and launched it in the Chicago metro area through utilization of newspaper advertisements. The Denver market also had advertisements ("Not Everyone Can Live in Colorado") with signs promoting gift purchases for those living out-of-state. A total of 16 million impressions were made and 1,665 distinctive website hits from Chicago and Denver were results from the campaign efforts.

Connecticut Department of Agriculture

Amount Funded: 107,934.62 Number of Projects: 15

- The Connecticut Department of Agriculture created customized banners that included the Connecticut Grown logo and
 distributed them to all 114 Connecticut Farmers' Markets. In the year of its implementation, the number of farmers
 markets increased by 24 percent and helped these new markets establish themselves. The banners also helped increase
 visual presence and brought additional customers into the markets which consequently increased the awareness and
 profits of specialty crop producers.
- The Connecticut Department of Agriculture purchased costumes and created and distributed coloring books to increase support from school food service directors at schools and with wholesalers, farmers and other groups to purchase and use CT Grown specialty crops. Project staff distributed a total of 3,915 coloring books to schools, libraries, town halls, cooperative extension offices, state USDA offices, and food service directors across the state that explained the process of growing produce. The costumes were borrowed by 83 groups in 2008 which was up from 27 in 2007. At the end of this project, 46 farmers were members of the farm to school program and 87 schools pledged to be farm-to-school program participants, which is 40 percent of the public schools in the state.
- The Connecticut Department of Agriculture conducted two tours and workshops at farms in Milford and Bridgewater for 99 chefs to increase their understanding and appreciation for Connecticut Grown specialty crops. Project staff also held a farm-to-chef program meeting that attracted 120 registrants to facilitate communication between chefs and producers in order to utilize CT Grown specialty crops. Attendees were asked to complete a follow up survey and of the 18 culinary professionals, or users of CT Grown products, that responded, 39 percent had increased their use of Connecticut Grown fruits, vegetables, greens, and herbs by at least 50 percent, along with 24 percent who had increased their use of Connecticut Grown honey, maple, floriculture, and nursery crops by at least 50 percent. The meeting resulted in 100 percent of the attendees stating that the program led to increased awareness, understanding and utilization of Connecticut Grown produce and aided in communication between chefs and producers.
- The Connecticut Department of Agriculture created a project that responded to the lack of marketing for farm stands and stores in Connecticut. Project staff designed a total of 30,000 brochures listing CT farm stands and farm stores for Connecticut consumers to have easier access to Connecticut Grown specialty crops. The brochures were distributed to 122 participating farms, six Connecticut Welcome Centers, USDA and Cooperative Extension offices, and 169 town halls and libraries. The website (www.ctgrown.gov) was also created listing farm stands and stores, sorted by county. After the brochures were distributed, all brochure participants received a survey. The respondents reported an average increase of on-farm revenue of 1-3 percent and an average increase of specialty crop direct sales of 4-7 percent.
- The Connecticut Department of Agriculture purchased promotional materials for supermarkets, roadside markets, farmers
 markets, and schools to promote their CT Grown specialty crops. Some of the promotional items purchased consisted of
 tents, pens, pencils, magnets, t-shirts, pins, hats, sweatshirts, and aprons. The marketing items were so popular that
 supply did not meet the demand of Connecticut specialty crop producers and a waiting list was established. The items
 provided were useful and effectively spread the message about CT Grown specialty crops.

- The Connecticut Department of Agriculture partnered with the Center for Survey Research and Analysis at the University of Connecticut to conduct a telephone survey with Connecticut residents to learn whether or not they had any recollection of the 2007 state-wide, multi-media advertising and marketing campaign promoting Connecticut Grown products. Project staff contacted a total of 500 residents with a 25 question survey regarding the consumer's recollection of the campaign materials, recognition of the CT Grown logo, use of www.CTGrown.gov, and food buying habits. Of the five different marketing campaign materials (television, posters, radio, billboards, and bus tails), survey participants cited television ads and posters as the most memorable. Sixty-six percent of those who saw the advertisements remembered seeing television spots, while 48 percent recalled seeing CT Grown posters or signs. Eighty percent of respondents who recalled seeing advertisements thought the message was effective in showcasing CT Grown variety and availability.
- The Connecticut Department of Agriculture partnered with the Connecticut Apple Marketing Board to redesign the Connecticut apples logo as well as two brochures that contain a collection of recipes, grower, and apple varietal information. The Board's website, www.CTApples.com was also redesigned with new photos and graphics including grower information, apple information and uses, and links to the Connecticut apple industry. In 2009, project staff printed and distributed a total of 43,500 brochures. During this time period, the website received a total of 196,010 hits. Growers and consumers expressed the importance and benefit of the brochures and website to increase apple sales.
- The Connecticut Department of Agriculture partnered with the Connecticut Beekeepers Association to create a brochure and update their website to educate the public and beekeepers on important issues facing bees. The website, www.ctbees.com, was redesigned for use with ease in exploring the 'links' section so people can navigate to other websites concerning bee issues. Other additions included forms for membership, short video clips, a history of the club, and hive registration. The brochure addressed why honeybees are so important to the human race as well as basic bee information. Project staff also designed a one day Bee School for new beekeepers to network with experienced beekeepers. Of the 170 new beekeepers that signed up for the school, about 160 started a hive in the spring of 2008.
- The Connecticut Department of Agriculture partnered with the CT Christmas Tree Growers Association to educate and update growers, award scholarships, hold a coloring contest, and update the website www.ctchristmastree.org in order to encourage growers to practice successful habits to ensure that Christmas trees are promoted in Connecticut. Scientists performed experiments at several farms and presented research findings at meetings and a field day. Project staff awarded four \$500 scholarships to help students in college who pursued studies in plant science, horticulture, forestry or the Christmas tree industry. The coloring contest was announced on the website and over 900 entries were received from Connecticut school children. Website hits were up 16 percent during this time because parents not only had to submit their entry online, but also surf the web to find "choose and cut farms". To complete the competition parents also had to take their children to harvest a tree, which, in return, increased tree sales.
- The Connecticut Department of Agriculture partnered with the Connecticut Farm Wine Development Council to enhance the consumer awareness of local wineries. Specifically, project staff created a Passport program that listed all the farm wineries in Connecticut and encouraged the consumers to have their passport stamped by 14 of the 30 wineries. Once the passport was stamped, consumers could submit their Passport to win international and local prizes. Project staff distributed 50,000 passports to customers, which were attributed to an increase in the amount of visitors to all wineries, and their purchase of at least one bottle of wine which added up to approximately \$15 22,000 in cash flow for each winery.
- The Connecticut Department of Agriculture partnered with the Connecticut Greenhouse Growers Association and the Connecticut Nursery and Landscape Association to create a "trail" as a way of marketing the facilities that display, grow, and sell ornamental garden plants. Project staff designed a logo used by the state's green industry companies to signify that they are on the "trail." Solicitations were mailed out to 3,000 green industry companies asking for their participation and to place ads in the initial Trail brochure. Fifty thousand full-color Garden Trail brochures were printed and distributed with maps inserted into the centerfolds that contained information on the newly created CTGardenTrail.com website. The new "trail" was released and unveiled during the Connecticut Flower and Garden Show, in Hartford which received 30,000 attendees. Over 70 advertising orders were received from green industry companies in support of the Trail brochure. A major television market and local newspapers promoted the Trail as well. With all the media coverage, companies noticed an increase in customer traffic.

- The Connecticut Department of Agriculture partnered with the Northeast Organic Farming Association (NOFA) to address the growing interest from Connecticut residents, businesses, and institutions in buying local and organic food from Connecticut's organic and sustainable farmers. In both 2008 and 2009, project staff printed and distributed a total of 25,000 copies of an updated Connecticut NOFA Farm and Food Guide and posted the Guide on their website, www.ctnofa.org. The data from the farms and businesses listed in the Guide was used to create a Google Map that can be found at http://www.ctnofa.org/Farms.php to assist consumers in finding organic and sustainable specialty crop producers in their area.
- The Connecticut Department of Agriculture partnered with the Connecticut Greenhouse Growers Association and the Connecticut Nursery and Landscape Association to create a "trail" as a way of marketing the facilities that display, grow, and sell ornamental garden plants. Project staff designed a logo used by the state's green industry companies to signify that they are on the "trail." Solicitations were mailed out to 3,000 green industry companies asking for their participation and to place ads in the initial Trail brochure. Fifty thousand full-color Garden Trail brochures were printed and distributed with maps inserted into the centerfolds that contained information on the newly created CTGardenTrail.com website. The new "trail" was released and unveiled during the Connecticut Flower and Garden Show, in Hartford which received 30,000 attendees. Over 70 advertising orders were received from green industry companies in support of the Trail brochure. A major television market and local newspapers promoted the Trail as well. With all the media coverage, companies noticed an increase in customer traffic.
- The Connecticut Department of Agriculture partnered with the Maple Syrup Producers of Connecticut to enlighten the public that maple syrup is a viable part of Connecticut's farming economy through signage, maple syrup kits, education materials for producers, and a Connecticut maple cookbook. Project staff produced and distributed 250 public awareness signs and one thousand maple syrup kits to producers that enabled consumers to see differences in maple syrup color, grade, and taste. A total of 125 maple syrup producers attended two educational events that were held to increase their knowledge and skills to produce and sell high quality maple syrup. A template was created and added to the Association's website for people to submit recipes for the cookbook and plans to publish 500 cookbooks were underway.
- The Connecticut Department of Agriculture partnered with the six New England state departments of agriculture (Harvest New England Association) to offer a conference on how producers can market their product to consumers. Project staff contacted nearly 28,000 farms and developed promotional materials to increase awareness of Harvest New England program and the conference itself. Over 800 producers attended the conference, which was a 10 percent increase in attendance from the previous year. Feedback entailed comments about the conference "being helpful," "networking and connecting was extremely beneficial," and "being surrounded by other farmers was a great learning experience."

District of Columbia

Amount Funded: 100,000.00 Number of Projects: 1

• The Agricultural Experiment Station of the University of the District of Columbia (UDC) expanded specialty crop production in Washington, DC by conducting research to evaluate and identify herbs and spices that will thrive in the DC climate and by sharing their research results with the gardening community. Based on field and greenhouse trials, the team recommends the following varieties of herbs and spices for the District of Columbia: Basil, Coriander, Hot Peppers (Scotch Bonnet), Coriander, Oregano, Sage, Tarragon and Thyme. The team conducted numerous outreach activities, including a number of field days, dissemination of fact sheets, and presentations at events such as the Rosedale Community Quality of Life Day. In addition, the team established a farmers' market on the UDC campus, which sold herbs and spices to 225-300 individuals during its first year. The farmers' market will now be an annual event, running May-November every year.

Delaware Department of Agriculture

Amount Funded: 102,403.75 **Number of Projects:** 8

• The Delaware Department of Agriculture (DDA) planned to fund Delaware's participation in MarketMaker, a national network of state websites that connect farmers and processors with food retailers, consumers and food supply chain companies. When it learned of an existing virtual marketplace being used by other states, it opted to participate in this marketplace through "Food Trader" and "Ag Trader" websites instead. After developing Delaware's portal, the Department of Agriculture launched a marketing campaign to draw Delaware specialty crop growers and consumers into the marketplace. The marketing campaign was limited due to insufficient funds and farmers were less willing to participate than anticipated. Furthermore, while the Food Trader sites had been an important tool for stimulating the buying, selling, and trading of local food, the local food economy may have expanded to the point that Food Trader is no longer needed and Delaware ceased participation at the end of this project. As a result of the project, DDA learned a lot more about the needs of the specialty crop farmers in the state and is making further efforts to meet those needs.

- The Delaware Department of Agriculture partnered with Delaware State University to identify and evaluate ethnic crops that can be grown successfully in Delaware. The team evaluated a number of new crops for production performance in the state including kabocha squash, snow peas, mei ching choi, mizzen, scotch bonnet hot pepper, aji dulce hot peppers, callaloo spinach, calabaza squash, tomatillo and ethnic eggplant. In addition, the project team reached out to local ethnic populations and farmers through demonstrations, presentations, and marketing materials. As a result, 10 farmers have planted ethnic crops through the Ethnic Crop Expansion Program. An additional 12 farmers were anticipated to begin planting ethnic crops the year after this project ended.
- The Delaware Department of Agriculture (DDA) developed marketing materials designed to connect specialty crop growers with consumers, retailers, and wholesalers. DDA created "The Farm Market Directory and Agritourism Map" to target consumers. The Directory highlights Delaware's on-farm markets, farmers' markets, farms that promote agritourism, Christmas tree growers, retail garden centers and riding stables. By the end of the project, more than 16,000 copies had been distributed. At the same time, DDA reached out to retailers and wholesalers through the Produce Buyer's Guide which showcases 151 product sources. Forty-thousand copies of the Buyer's Guide were distributed to wholesalers, retailers and commercial enterprises. DDA distributed more than 200,000 recipe cards and placards to market Delaware's specialty crops.
- The Delaware Department of Agriculture partnered with other jurisdictions to fund the Cucurbit Downy Mildew Website. The website was designed to forecast and track the spread of Cucurbit Downy Mildew, a significant threat to Delaware's pickling cucumbers, watermelons, cantaloupes, pumpkins, squash, and other cucurbit crops. The Website allowed Delaware farmers and Extension personnel to track the movement of the disease up the East Coast and know when to begin scouting carefully for the disease and when to begin applying fungicides. Although the full dollar value of Delaware's pickle industry is not published due to disclosure issues, the forecasting website has made the difference between having a pickle industry and not having a pickle industry.
- The Delaware Department of Agriculture partnered with the University of Delaware to breed and evaluate new lines of lima beans. These new lines were evaluated in comparison with commercial lines and, in many cases, produced significantly higher yields than standard commercial cultivars. Some also showed promise in resistance to downy mildew although no lines with useful levels of resistance to white mold were identified. The research conducted through this project has built a foundation upon which lima bean breeders can build to ultimately breed beans that have resistance to all known races of lima bean downy mildew and improved yield.
- The Delaware Department of Agriculture partnered with the Mar-Del Watermelon Growers Association to develop the "MarDel-icious" brand of watermelon and to implement a marketing and promotional campaign to increase consumer awareness and sales by targeting the region's major chain grocery stores. To begin with, the partners created and trademarked the brand name and logo and developed in-store promotions at retail stores. They also created several radio ads and television spots to promote the new brand. To top it all off, they held a large promotional event on the Rehoboth Beach Boardwalk in Delaware and the Baltimore Inner Harbor in Maryland. The branding strategy was successful and MarDel-icious watermelons can now be found in Redners, Harris Teeter, Giant Foods, Wal-Mart and Sam's Club, Acme and BJ Price Club.

- The Delaware Department of Agriculture partnered with the University of Delaware to lay the foundation to allow them to provide science-based information outlining a more sustainable approach to processing vegetable production. To launch the study and establish a baseline, the team utilized a variety of cropping systems, including a diversity of tillage intensity, crop residue returned to the soil, and crop rotations. Using these systems, they planted no-tillage peas, kale, tillage peas, tillage lima beans, no-till snap beans, pumpkins, and spinach, interspersed with various grains and other cover crops. They then measured soil health and quality. As anticipated, no differences were detected in the soil health characteristics after only one year. However, this project has established solid baseline data, which will enable the team to achieve its long-term goal of providing opportunities for a more sustainable approach to vegetable production. The systems will be run for an additional 3 to 5 years which will allow these systems to begin to show detectable differences between the treatments.
- The Delaware Department of Agriculture partnered with the University of Delaware to develop a quantitative economic analysis of the contributions of the specialty crops industry to Delaware's overall economy. The study found that the economic contribution of all categories of specialty crops production is \$162.2 million in total industry output. However, despite significant increases in the market value of production in all of its three major commodity groups since 2002, the value of specialty crops production as a percentage of total cropland production dropped from 39.5 percent in 2004 to 28.58 percent in 2007. The specialty crops sector will play a significant role in the evolution of U.S. agricultural policy, targeting the growing national concern over health and nutrition and the resulting government programs addressing these issues. It is important that policy makers in Delaware are proactive in seeking market-based policies to promote the growth of the specialty crops industry in the state. The results of the study were shared with 350-400 attendees at AgWeek in January 2011.

Florida Department of Agriculture and Consumer Services

Amount Funded: 253,750.10 **Number of Projects:** 5

- The Florida Department of Agriculture and Consumer Services partnered with the University of Florida, Institute of Food and Agricultural Science to develop and deliver food safety educational materials and training. These materials were disseminated statewide by Florida extension professionals to producers, field workers, packers and repackers of fresh fruits and vegetables. In addition, the team developed the UF/IFAS Produce Safety Center website to act as a clearinghouse for produce safety information. This website, resulting from feedback received from stakeholders, is located at http://fshn.ifas.ufl.edu/foodsafety/. Next, the team launched a series of 24 workshops in various venues throughout the state. Through the workshop events, they trained more than 1000 attendees, primarily from management and extension services. Attendees then passed along the knowledge they gained to their own employees, creating a significant multiplier effect.
- This project was not completed as planned.
- The Florida Department of Agriculture and Consumer Services (FDACS) raised awareness of the role of specialty crops in a
 healthy lifestyle by participating in "Speaking of Women's Health," a one-day annual event that attracts more than 1,200
 women. In addition to providing an exhibit, FDACS also hosted one of the educational breakout sessions, through which
 FDACS staff promoted specialty crops through a cooking demonstration on preparing baby food, food for a toddler and a
 meal for the entire family utilizing the same fruit and vegetable ingredients.
- TThe Florida Department of Agriculture and Consumer Services (FDACS) promoted Florida specialty crops by partnering
 with Lifetime studios and filming a program segment for nationally syndicated morning talk show "The Balancing Act." The
 Department's Certified Executive Chef and The Balancing Act host used a kitchen setting to display a variety of fruits and
 vegetables and recipes created specifically for children. Since the show is nationally broadcast, thousands of people were
 exposed to Florida's specialty crops.
- The Florida Department of Agriculture and Consumer Services (FDACS) facilitated the participation of two local specialty crop producers at the Florida Nursery, Growers, and Landscape Association Trade Show. Both companies reported sales at the event (selling their exhibit stock) as well as potential future sales opportunities.

Georgia Department of Agriculture

Amount Funded: 129,864.25 **Number of Projects:** 7

• The Georgia Department of Agriculture promoted Georgia's specialty crops by connecting producers and farmers with local restaurants, chefs and caterers throughout the state at the "Georgia Grown Agricultural Fair" to increase awareness and interest in local specialty crops. Around 290 attendees visited the Fair, including chefs and restaurant professionals. Out of the 66 booths set up at the fair, Georgia farmers and producers occupied 62 and educational materials were provided to attendees at the 4 other booths. A follow up survey conducted six months after the show indicated that 18 out of the 62 exhibitors generated \$130,900 in sales based on contacts and leads made at the Fair.

- The Georgia Department of Agriculture partnered with Georgia Organics to support local organic producers and farmers through a grower education and consumer awareness conference, the distribution of the Local Food Guide, and promotion of the "Buy Local" campaign. The conference saw a 50 percent increase in attendance, a 45 percent increase in the number of workshops offered and a 76 percent increase in the number of Trade Show exhibitors over the previous year. Project staff distributed nearly 50,000 print copies of the Local Food Guide statewide in 2007 at 160 distribution points contributing to the Georgia Organics website receiving over 5 million hits. In2008, print copies went up to 60,000 and were distributed at 175 points. A Buy Local Campaign including an "Eat Local Week" was launched and publicized through partnerships with 36 restaurants and five events statewide. Georgia Organics tracked growth of the food movement in Georgia from 2007 to 2008 and has seen a 97 percent increase in certified organic acreage, a 51 percent increase in their conference attendance, a 90 percent increase in community supported agriculture membership, and a 22 percent increase in farmers markets.
- The Georgia Department of Agriculture partnered with the Georgia Green Industry Association (GGIA) to enhance the competitiveness of the horticulture industry in Georgia through projects that were aimed at developing informational material to consumers to promote the vast array of Georgia-grown plants and their landscape uses. Project staff developed two websites, www.outdoorwateruse.com and www.ggia.org. One website is for gardeners and commercial entities planning a landscape installation to register under the Outdoor Water Use Program and the other for GGIA to provide further outreach to members, industry and consumers. Additionally, the groups worked with the University of Georgia Horticulture Department to develop an educational program that provided information to consumers about efficient outdoor watering for landscapes. At the end of the educational program, participants could take a test, which if passed successfully, allowed them to legally irrigate newly installed landscapes. The program impacted over 20,000 households and/or commercial businesses, leading to an estimated \$150 million in sales during the spring gardening and landscaping season.
- The Georgia Department of Agriculture partnered with the Georgia Fruit and Vegetable Growers Association in conjunction with the Southern United States Trade Alliance to coordinate farm visits and promotional presence in the Canadian produce markets. To achieve this goal, Georgia farms hosted ten Canadian producers during the packing and growing season. Specifically, the Canadian producers visited a total of nine farms where a variety of produce was showcased. Following the tour, many growers reported an increase in orders from the retail chains represented by the 10 Canadian buyers. Additionally, eight watermelon farms conducted tours which led to several connections between buyers and farmers in marketing their produce. Several stores held in-store promotions which included watermelon signage, brochures, and guest appearances by the Georgia Watermelon Queen. As a result of the promotions, farmer's watermelon sales increased.
- The Georgia Department of Agriculture partnered with the Georgia Pecan Growers Association (GPGA) to undertake a marketing and promotional campaign in China. Specifically, three growers participated in the SIAL China Tradeshow and the GPGA participated in a trade mission to China to meet with buyers interested in importing pecans. At the tradeshow, growers distributed samples and an export grower directory, showed videos of a pecan farm, and talked about the nutritional value of pecans. More than 90 quality leads were obtained from the trade shows. In 2007, GPGA exported around 40 million pounds through the port of Savannah. Georgia had never exported more than 15 million pounds prior to this event. Due to the promotions undertaken, Georgia pecan growers boosted their exports. Georgia managed to sell 100 percent of its pecan production.

- The Georgia Department of Agriculture partnered with the Georgia Department of Education to supplement all 27 schools in the USDA Fresh Fruit and Vegetable Snack Program with additional fruit and vegetable purchases, snack display racks, and carts, as well as to educate 18,991 students on healthy eating choices. As a part of the snack program educational goals, many of the schools have planted classroom gardens so the students can learn how fruit and vegetables are grown and enjoy the fruit of their labors when the produce is harvested. Once the gardens began producing, growers and industry officials spoke to the students about the benefits of fresh fruit and vegetables in their diets.
- The Georgia Department of Agriculture established a crisis communication plan for Georgia's fruit and vegetable industry to help the industry effectively interact with the media and concerned consumers during a crisis. The plan was communicated through the industry press and the SE Regional Fruit and Vegetable Conference. Project staff educated more than 1,500 growers and industry suppliers on the key elements in the plan. A communications checklist and grower card with contact information for media and crisis management assistance were among the materials created for preparedness of the program. A Crisis Issues Team was created to annually review the plan, update materials, and identify and monitor future challenges.

Hawaii Department of Agriculture

Amount Funded: 109,201.37 **Number of Projects:** 16

- The Hawaii Department of Agriculture participated in the Ko' Olina Taste of Kapolei to help enhance the visibility of specialty crops and the Seal of Quality (SOQ) program. Specifically, the project staff worked in cooperation with two of the largest truck crop farms on Oahu to host a Farmers' Market at the event. During the event, both fresh and processed food products were featured through the provision of samples and sale of various farm products to event attendees. SOQ banners were placed on all event collaterals, which included paid advertisements in print, radio, and television media; interviews; and provided event spaces to display. Participation in this event exposed over 1,500 individuals to Hawaii specialty crops and the SOQ program.
- The Hawaii Department of Agriculture purchased a pull-up display screen in order to allow Seals of Quality (SOQ) participants and project staff to promote specialty crop producers and products throughout Hawaii. Project staff designed the pull-up display screens in collaboration with a professional designer and procured five units. These screens are convenient to transport and set up as well as to display a great amount of information to potential customers. The pull-up screens were deployed at every SOQ event since delivery to highlight the SOQ program and specialty crops. An estimated 100,000 attendees at various events have seen this panel display. Particularly, the pull-up screens were displayed at the FoodEx Expo in Tokyo, Japan and at various chef events in California and Washington State.
- The Hawaii Department of Agriculture promoted the Hawaii Seals of Quality (SOQ) Market Enhancement Program through supporting celebrity chef events throughout the State. Project staff participated in four celebrity chef events, which included the 2008 Chefs du Jour and the Hale 'Aina Awards for 2009, 2010, and 2011. All four were big multi-media events with extensive media exposure in Hawaii. These events increased the visibility of the SOQ program through coverage and increased participation of SOQ members in the events. Specifically, project staff focused efforts to increase the promotion of specialty crops associated with the SOQ program. Products and producers were also promoted in advertisements, pairings of chefs with producers to feature the specialty crops, procurement of products to be featured, as well as collaterals to provide information and increase awareness.
- The Hawaii Department of Agriculture purchased a graphic panel display and computer kiosk to promote and showcase specialty crops and specialty crop producers through a combination of static prints and dynamic videos used to feature them through the Seals of Quality (SOQ) branding concept. The graphic panel display was designed in collaboration with a professional designer and was procured in April 2008; while the computer kiosk was procured in August 2008. During the project period, the graphic panel display was utilized at many events to showcase SOQ participants and their products to event attendees. An estimated 30,000 attendees at various events viewed this panel display of special events, which included the 2008 Chefs du Jour event, the 2008 Hawaii Agriculture Conference, the 2008 Hawaii Farm Bureau Convention, and the 2010 Made in Hawaii Festival.

- The Hawaii Department of Agriculture worked with Melonie Kosaka to conduct a web-based media program with multiplatform tie-ins to broadcast and print media outlets in order to promote the Hawaii Seals of Quality (SOQ) Market Enhancement Program. An online promotion campaign was established through the provision of links to the Hawaii Department of Agriculture website and video clips on ShareYourTable.com. Project staff also developed a special SOQ recipe database section (online recipe book) in the website that features recipes from SOQ farmers, friends, and chefs. Through this website, Hawaii chefs and noted culinary experts also gave video cooking classes, farm tours, and discussions concerning Hawaii's local foods. This multi-media promotion concept targeted men and women between the ages of 34 and 55. An estimated 130,000 consumers were exposed to these promotional channels.
- The Hawaii Department of Agriculture designed and redeveloped the Hawaii Seals of Quality (SOQ) Market Enhancement Program's website http://hawaii.gov/hdoa/add/soq. Project staff hired a programming consultant to perform the migration and troubleshoot issues encountered with the updated website. Project staff migrated the website to the Plone software infrastructure a free and open-source software. With the assistance of the consultant, project staff improved the Department's understanding of Plone software and their improved ability to troubleshoot common issues will allow for better problem-solving and support for the website users.
- The Hawaii Department of Agriculture designed and developed a Seals of Quality (SOQ) Program Guide with general and specific information on producers and product offerings. Specifically, project staff worked with a graphic artist to design and develop a unique SOQ program brochure in English and Japanese. Approximately 4,000 copies of this brochure were printed for distribution at different marketing venues. The project staff also designed and developed a set of rack cards that featured 18 SOQ producers and their products to distribute throughout the State. The program brochure and rack cards were available at a variety of promotional events and public awareness campaigns.
- The Hawaii Department of Agriculture designed and developed Seals of Quality (SOQ) posters, which include images of
 fresh produce, macadamia nuts, coffee, and taro chips. Specifically, project staff worked with a professional photographer
 to take photos of SOQ producers and products at their worksite. After the project staff established a collection of
 photographs, they designed and developed a set of 18 posters for public display. The SOQ program has received much
 positive feedback on poster displays from featured members at various promotional events.
- The Hawaii Department of Agriculture showcased locally grown specialty crops at two special event venues, which included the Whole Foods Market in Kahala and the Whole Foods Market in Maui. Project staff invited a total of 43 Seals of Quality (SOQ) companies to participate in the events held at the Whole Foods Market in Kahala (18) on May 30, 2009 and the Whole Foods Market in Maui (25) on March 14, 2009. Each event consisted of three parts, which included SOQ products sampling, cooking demonstrations, and media promotion. Project staff also provided point-of-sale materials, displaying the SOQ logo that included tablecloths, banners, brochures, photos, tents, and tote bags. Over 5,000 customers entered both locations during the event hours. In fact, 18 of the SOQ participants at the Whole Foods Market in Kahala reported an increase in sales by 128 percent the day of the event.
- The Hawaii Department of Agriculture increased the visibility of specialty crops through the provision of shelf-talkers and labels to retail stores that offered specialty crops under the Seal of Quality (SOQ) program. Project staff printed over 1.85 million labels and a total of 20,000 shelf-talkers. Over the course of the grant period over 100 shelf-talkers were distributed to each SOQ member. Many members of SOQ have received positive feedback on the design. In fact, Whole Foods Market in Maui requested the graphic file of the SOQ shelf-talker for further distribution.
- The Hawaii Department of Agriculture provided an appropriate venue at the Made in Hawaii Festival for interested Seal of Quality (SOQ) members to feature their fresh produce and products with leading local chefs directly to consumers on various islands throughout the State. The Made in Hawaii event utilized cooking demonstrations to promote locally produce foods and goods. Project staff cooperated with PacificBasin Communications to promote the SOQ program by featuring various producers and their specialty crop products with some of the attending local celebrity chefs. Hard copies of recipe cards were produced and distributed to attendees. The event lasted three days and attracted 37,889 attendees.
- The Hawaii Department of Agriculture provided opportunities for interested Seal of Quality (SOQ) members to feature their fresh produce and products at the Hawaii Ag Conference in order to foster business relationships with potential institutional buyers. Project staff secured six booths to anchor the tradeshow program by featuring the SOQ program and several member producers, which included: Sugarland Farms, Coffees of Hawaii, and Manoa Honey Company. Over 400 people attended this biennium conference to hear from nationally renowned speakers. The tradeshow event also received widespread media attention.

- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program through the participation in 2011 Hale 'Aina Awards. As part of the overall marketing, the SOQ logo was prominently displayed on all collateral, which included the event program, invitations, cover tip-on, specific events, and the presentation that was aired throughout the event. Key specialty crops were also incorporated into menus presented by chefs who were contracted to provide tasting portions to the crowd of attendees. The SOQ program was also featured prominently in promotions via honolulumagazine.com, HONOLULU Magazine, and an e-newsletter. A contest also featured an 'opt-in' to receiving more information from SOQ producers. Over the course of the project, the reach of the event related advertisement campaign included a total of over 750,000 impressions and 640,000 print advertisements.
- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program through the participation in 2009 Hale 'Aina Awards. The 2009 awards program marked the Silver Jubilee celebration and attracted the participation of more than 130 restaurants statewide. The October 2008 issue of HONOLULU Magazine contained a section that introduced the 2009 theme "Eat, Drink, Mingle, Repeat" in which the SOQ logo was shown as a sponsor. The event attracted 1,500 participants to the Sheraton Waikiki Hawaii Ballroom on November 16, 2008 and was publicized with media coverage via television, radio, and print.
- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program through the participation in 2010 Hale 'Aina Awards. The October 2009 issue of HONOLULU Magazine contained a section that invited readers to "Eat, Drink, Mingle, Repeat" in which the SOQ logo was shown as a sponsor. The event attracted 700 participants to the Royal Hawaiian Hotel Ballroom on November 8, 2009 and was publicized with media coverage via television, radio, and print.
- The Hawaii Department of Agriculture continued to enhance public visibility for specialty crops in the Seal of Quality (SOQ) program by participating in the 2008 Chefs du Jour. This event took place on June 21, 2008 at Tamarind Park in Downtown Honolulu. It included a diverse selection of culinary creations that showcased locally-grown produce and products from the SOQ program. Chefs that participated in this event came from the local, national, and international venues. Media coverage included full page advertisements in the Honolulu Advertiser, Honolulu Star-Bulletin, Honolulu Weekly Magazine, Modern Luxury Magazine, articles in the HONOLULU Magazine, and articles and advertisements in local newsletters for a total distribution estimated to be over 500,000. In addition, SOQ producers were present alongside the celebrity chefs to answer any questions relating to the ingredients utilized at the event.

Idaho State Department of Agriculture

Amount Funded: 121,388.06 **Number of Projects:** 5

- The Idaho State Department of Agriculture created a spring retail promotion to increase the awareness of Idaho Preferred® nursery crops. With input from the Idaho Nursery and Landscape Association members, project staff produced tree tags, plant stakes, retail headers and large banners. The Idaho Preferred® program created a new slogan for the promotion, "Grown with Pride in Idaho." Campaign materials were offered to all Idaho Preferred® nursery growers and retailers via email and mail as well as the Idaho Preferred® website. In 2008, plants with Idaho Preferred® logos were marketed in major retail chain stores as well as local grocers and home and garden stores. A television ad was also aired for three weeks in March of 2009. One grower reported that spring sales increased from 5653 units in spring 2007 to 21,221 units in spring 2008 and eight new stores were added to his customer base as a result of the Idaho Preferred® nursery promotion. Idaho Preferred® participation grew from 16 nurseries in 2008 to 35 nurseries in 2009.
- The Idaho State Department of Agriculture conducted a fall retail open-air market produce promotion to increase awareness of the Idaho Preferred® brand at one Wal-Mart store to test the concept in 2006. For ten days during the peak of harvest season, the store had a 60 foot display outdoors that featured peaches, plums, pears, grapes, corn, onions, tomatoes, pumpkins, peppers, potatoes and more. The sale of fresh produce at that store increased by nearly 17 percent during the promotion, and as a result of that successful test, the concept was expanded to additional store locations and other retail partners. Consumer research confirmed that 41 percent of consumers statewide had seen or heard the Idaho Preferred® advertising message, which was a 10 percent increase from the year before. The research also showed that 20 percent of consumers increased their purchases of more local products. Retailers who participated in the fall produce promotion reported sales increases ranging from about 5 percent to over 15 percent during the promotion period.

- The Idaho State Department of Agriculture conducted three 30 second television commercials to increase the awareness of the Idaho Preferred® brand. Each ad featured food shots representative of the wide variety of specialty crops grown in Idaho such as potatoes, tomatoes, fruits, vegetables and wine. Each version used a different style of music and voice. Because the ads also included some non-specialty crop foods, expenses for production and airing of the ads were split proportionate to content. The new television ads ran statewide for 4 weeks in May and June 2008 and three weeks in September 2008. The ads are viewable via the Idaho Preferred® website, www.idahopreferred.com. Consumer awareness of the Idaho Preferred® products statewide reached 41 percent and in the Treasure Valley of Southern Idaho the ads achieved 48 percent consumer awareness.
- The Idaho State Department of Agriculture conducted an Idaho Preferred® foodservice promotion in the fall of 2007 to increase the awareness of Idaho foods and wines among chefs, restaurant owners and managers. The Treasure Valley Dine-Around promotion included participation by seven restaurants that placed and promoted Idaho Preferred® items on their menu. The Dine Around menu focused on restaurant promotion via print and radio advertising for two weeks, which made approximately 230,000 gross impressions. The promotion directly impacted the 20-25 producers whose products were included on the promotional menus.
- The Idaho State Department of Agriculture partnered with the Idaho State Department of Education Child Nutrition Program to promote local produce through the Fresh Fruit and Vegetable (FF&V) program. During September, project staff encouraged 25 FF&V schools to buy and serve local produce with their FF&V funds. All school food service directors at 25 participating schools received "My Idaho Pyramid" tear pads, magnets and Idaho Preferred signs and stickers to use in the cafeteria. During the 2007-08 school years, 175-200 teachers received Idaho Preferred® educational materials. In addition, approximately 300 teachers and 600 school cafeterias each month received "Incredible Edible Idaho" posters. Project staff produced a 12 page Healthy Harvest booklet with activity ideas for teachers and then distributed approximately 100 booklets to teachers who requested them through Idaho Ag in the Classroom workshops. All 97 specialty crop producers who participated in the Idaho Preferred® program benefited from having additional staff resources to carry out educational programs.

Illinois Department of Agriculture

Amount Funded: 111,450.21 Number of Projects: 2

- The Illinois State Department of Agriculture provided 54 grants to direct marketers and farmers markets to promote their products or market. Market managers observed many positive results when asked to compare the market season during which the advertising campaign was undertaken to the previous year's market season. The markets receiving a grant reported a 25 percent increase in the number of vendors participating in the farmers markets and a 33 percent increase in farmers' market customers. All projects utilized the "Illinois...Where Fresh Is" logo, where appropriate and possible, in grant related works. Many comments were received by the Illinois Department of Agriculture on the positive benefit of the logo and the increased amount of recognition that was achieved amongst the market customers. The grant benefited the 54 farmers markets and their surrounding communities and assisted approximately 1,000 vendors in 2007 and over 1,200 vendors in 2008.
- The Illinois Department of Agriculture supported the printing and distribution of 40,000 Illinois Farm Activity Guidebooks that included a listing of agritourism businesses. As a direct result of the success of the guide, a statewide website was created, www.agfun.com, that mimics the guide. The website was acknowledged by the Illinois Bureau of Tourism during the Illinois Governors Conference on Tourism as being the best website in the state. Project staff, in coordination with the Illinois Ag in the Classroom, produced a second publication called Ag Mag. The Ag Mag was written at the 4th grade level on various Illinois specialty crops, highlighting the 'Illinois...Where Fresh Is' program promoting locally grown commodities. The program addressed the common misconceptions that 'food comes from the grocery store' common among both students and adults. The publication included interviews and photos of 13 specialty growers across the state of Illinois. Local county Agriculture Literacy Coalitions received a total of 140,000 copies and teachers and students across the state received a lesson plan booklet featuring links to Illinois specialty crops. A survey conducted with teachers at the 2009 Summer Teacher Training indicated that 68 percent of the teachers would utilize the Specialty Crop Ag Mag and companion lesson plans. Over 483,000 Illinois students benefitted from this project.

Indiana State Department of Agriculture

Amount Funded: 109,567.29 Number of Projects: 4

- The Indiana State Department of Agriculture worked with Purdue Extension and the Indiana Office of Tourism Development to create and distribute a directory of Indiana's farmers markets, u-pick and agritourism opportunities to conventions and visitors' bureaus around the state. The directory contained 70 farmers markets, 35 wineries, listed by county and showed consumers where else in the area they could visit, making a day of their trip, instead of stopping at one place. Through the use of a media tracking service, the Department was able to count 57 news articles published around the state about the directory and/or individual markets, wineries, u-pick stands.
- The Indiana State Department of Agriculture implemented the Farmers' Market cost-share reimbursement program to provide grants to Indiana farmers' markets by reimbursing 50 percent of the cost of farmers' market advertising, displays and promotional materials, up to \$500. The program was promoted through the annual farmers' market workshops sponsored by Purdue Extension and the Indiana Cooperative Development Council as well as running news releases, email blasts and utilizing the Department's website. The Department awarded funding to 25 farmers' markets around the state to promote their markets. Farmers' markets in Indiana provided a venue for over 2,000 Hoosier producers and farmers' markets that received advertising funding reported an average increase in sales of ten percent.
- The Indiana State Department of Agriculture provided the Indiana Watermelon Growers Association with booth space at the Produce Marketing Association Fresh Summit. This was the first time the watermelon growers attended the Produce Marketing Association Fresh Summit which gave them access to 17,000 produce and floral buyers. Watermelon sales to direct retailers were up by 8 percent at the conclusion of the project.
- The Indiana State Department of Agriculture partnered with Purdue Extension and the Purdue Center for Regional Development to pilot the Indiana Flavor program in Jackson County to promote interest in local specialty crops. Jackson County chose to focus on the development of a maple syrup festival in 2008 in an attempt to increase awareness of locally produced syrup. In 2009, project staff conducted several workshops to train others on the Indiana Flavor model. The website, containing training materials (http://pcrd.typepad.com/ecd/indiana-flavor) was provided to all those attending training and is now being utilized in several communities.

Iowa Department of Agriculture and Land Stewardship

Amount Funded: 103,249.43 Number of Projects: 11

- The Iowa Department of Agriculture and Land Stewardship developed and distributed specialty crop recipe cards; brochures for apples, pumpkins and strawberries that included nutritional information, recipes, locations, uses; and a brochure on marketing channels for specialty crops growers. Producers requested over 54,000 specialty crop brochures for their use in distributing to consumers and to the media. Project staff printed and distributed 50,000 recipe packets to the public through the Iowa State Fair and farmers markets.
- The lowa Department of Agriculture and Land Stewardship purchased specialty crop costumes and other display items for promotional uses. Project staff put up a display at the National Farmers' Market Week/lowa Farmers' Market Week featuring specialty crop produce from around the state. Vegetable costumed personnel passed out 30,000 recipe packets to participants. Additionally, a chef conducted cooking demonstrations at farmers' markets to highlight specialty crops, increase awareness to the public and in turn increase sales for producers. The chef traveled to 13 farmers' markets throughout the state and gave cooking demonstrations using produce he purchased at that farmers' market. The market managers alerted media of his upcoming visit to their market, monitored attendance at cooking demonstrations, and collected information from vendors regarding sales. Shopper attendance increased an average of 22 percent on the day of the demonstration and the vendors indicated an average 33 percent increase in sales.
- The lowa Department of Agriculture and Land Stewardship partnered with Cedar Falls Main Street Farmers' Market to advertise and promote the market in the newspaper and at the market. These activities led to an increase of the farmers' market consumer base by 47 percent, a 34 percent increase in sales, and a 50 percent increase in the number of vendors at the one-year old market.

- The Iowa Department of Agriculture and Land Stewardship partnered with the Iowa Fruit & Vegetable Growers Association to provide more in-depth marketing topics at their annual educational session. Project staff recruited and brought in nationally known speakers to the session which resulted in a nine percent increase in attendance over the
- The Iowa Department of Agriculture and Land Stewardship partnered with Mississippi Valley Growers Association, Inc. to provide nutritional education to consumers and to increase sales of fruit and vegetables through advertising and demonstrations. Over 600 farmers' market consumers received on-site education on the nutritional value of fruit and vegetables along with easy preparation ideas. Market attendance increased by 52 percent and sales increased by 22 percent from the previous year.
- The lowa Department of Agriculture and Land Stewardship partnered with Southeast lowa Nut Growers to develop a website, a logo, labels, and packaging for retail sales; update an existing brochure for marketing; and purchase chestnuts for testing of new processing equipment. Project staff developed a logo and put the branding program in place, along with successfully testing processing equipment for previously unmarketable small-sized nuts. As a result, retail sales of medium-sized chestnuts by internet increased by two percent.
- The Iowa Department of Agriculture and Land Stewardship partnered with Practical Farmers of Iowa to conduct a feasibility study for a direct-to consumer distribution system for Iowa specialty crops. Project staff conducted surveys, purchased software and tabulated results to identify the barriers to direct-to-consumer distribution.
- The Iowa Department of Agriculture and Land Stewardship partnered with Iowa Nursery & Landscape Association to increase attendance at their annual summer conference and to increase the number of members using the internet for marketing. As a result, there is a ten percent increase in members now using the internet for marketing.
- The Iowa Department of Agriculture and Land Stewardship partnered with the Iowa Christmas Tree Growers Association to increase awareness of the real tree, increase sales during the 2007 Christmas tree season, and provide more education to growers. Project staff conducted advertising through local TV stations, local newspapers and magazines as well as by distributing educational brochures at the Iowa State Fair Christmas tree exhibit. As a result, sales of real trees increased by eight percent. A follow-up survey of attendees on the marketing topics presented at the growers' educational program indicated a four percent increase in implementing marketing strategies by individual growers.
- The Iowa Department of Agriculture and Land Stewardship partnered with the Iowa Honey Producers Association to participate at the Iowa State Fair to increase awareness of honey and increase honey sales. Better exposure increased the public's awareness of honey and increased sales of honey by 31 percent.
- The lowa Department of Agriculture and Land Stewardship produced 10,000 magnets displaying harvest/availability of specialty crops schedules and included the Choose Iowa logo. Eleven thousand five hundred "green" re-usable tote bags were also printed with "Freshness is our Specialty" surrounded by an oval of specialty crop names with the Choose Iowa logo included in the design. These items were distributed at the Iowa State Fair and various Choose Iowa events. The distribution of these items increased consumer awareness of the Choose Iowa marketing campaign for specialty crops.

Kansas Department of Agriculture

Amount Funded: 102,197.15 **Number of Projects:** 7

• The Kansas Department of Agriculture partnered with Kansas State University to build a sweet potato seed program to ensure the availability of foundation seed for preferred sweet potato cultivars. The group also developed educational materials that outlined production methods and budgets for organic and conventionally grown sweet potatoes. A certified organic sweet potato seed program was started at the John C. Pair Horticulture Research Center. This program was started to serve producers in Kansas and surrounding areas. Organic and conventional sweet potato storage roots were bedded in the field to produce planting material, or slips, for sale to producers and for the group's own seed multiplication and research plots. In fact, the number of slips ordered increased from 113,000 in 2008 to 136,000 in 2011. The program also saw a significant jump in the overall number of buyers between 2008 and 2011; 33 individuals purchased slips in 2008, compared to 77 in 2011.

- The Kansas Department of Agriculture partnered with Kansas State University to provide a hands-on teaching and demonstration of labor saving equipment as well as practices in open field high tunnel vegetable production. Project staff members bought several pieces of equipment for this project, which included a flex tine weeder, a rotavator, and polyethylene cover for the Haygrove high tunnel. This equipment was incorporated into the array of tools and implements used in the food crops research and extension operations at the Kansas State University's Horticulture Research and Extension Center. Visitors to the center were exposed to the equipment during the center's field days, during which the theme of scaling up was directly addressed. These individuals also had the opportunity to see the ways that these new supplies contributed to the efficiency of the program's research efforts.
- The Kansas Department of Agriculture partnered with Kansas State University to develop a student farm to teach fruit and vegetable production and marketing techniques. A farm site was identified for agricultural and educational use and a student was hired to manage the property. The project staff also formed a student farm club in order to assist in the development of marketing campaigns and special events, which facilitated agricultural education for 15 members. Students participated in hands-on learning activities associated with growing vegetable crops, fruit crops, sustainable agriculture, and in managing a greenhouse. In fact, five classes with studies related to the production of fruit and vegetables, sustainable and organic agriculture, and greenhouse management utilize the farm site for laboratory discussions. The University's Horticulture Production Program's presence increased with the number of students involved in fruit and vegetable production growing from the initial three to more than ten after three years.
- The Kansas Department of Agriculture partnered with the Douglas County Extension and Lawrence Area Horticultural Producers' Association to develop a website that contains profiles for 69 farms and farmers in a seven-county area of Eastern Kansas. This website provides a searchable list of farms and farmers for consumers to find local specialty crops and farms. The online directory is also meant to build awareness amongst member farms about the marketing and production practices of other farmers. The project staff also provided information about marketing to their association in order to help the farmers develop new ways to sell their product, new value-added products, new products, and more appealing presentation styles. The results of a 2009 survey indicated that 60 percent of farms developed new methods to sell their product and that they initiated the growth or sale of new products. Another 52 percent indicated that the presentation of their product was changed as a result of information retrieved from the website.
- The Kansas Department of Agriculture partnered with the Kansas Rural Center to assist 11 farmers' markets with the development of business plans to promote markets and specialty crops, which include cut flowers, garlic, ginger root, herbs, honey, lavender, mushrooms, potatoes, and sweet corn. As part of the planning, the markets developed a simple promotion plan and a budget to stimulate the growth of specialty crop sales. The project staff facilitated this process by hosting business planning workshops. These workshops educated market managers on consumer research, successful markets, and other business planning tools. Participating markets then submitted a market promotion plan that included a \$1,000 budget, which was approved by an oversight committee. The marketing strategies implemented included paid radio and newspaper advertisements, partnerships with local businesses and chambers of commerce, market coupons, food demonstrations, displays, fliers, promotional items, website development/revitalization, special events, and newsletters. Over the course of the project period, the participating markets reported an average increase of sales by 25 percent and customer attendance by 22 percent.
- The Kansas Department of Agriculture partnered with the Kansas Rural Center to work with farmers' markets and farm stands to promote the purchase of fresh, local foods including specialty crops through the development of a buy local campaign. Specifically, project staff facilitated the development of the Our Local Food-Kaw River Valley (OLF-KRV) program, which is a network of local food businesses and consumers committed to increasing the production and sales of fresh, local food in northeast Kansas. Project staff developed marketing materials, which were tailored for use in the Kansas River Valley. These materials included OLF-KRV labels, bumper stickers, and a website. In fact, once the label was designed, 5,000 stickers were printed and distributed to food business members. Project staff also printed 2,500 bumper stickers to distribute to food business members. The "Vocal Local", a consumer education and outreach tool, was also developed to include customer comment cards, which allowed customers to document the demand for local foods to area businesses. Project staff also partnered with a local grocery store to host an Eat Local Challenge in which more than 400 participants spent at least \$30 at 14 businesses.

• The Kansas Department of Agriculture partnered with the Kansas Rural Center to develop a website that facilitates commercial transactions between local growers and six institutional meal programs for school children and the elderly. Participating institutions were encouraged to use the buy local website to find growers. The project staff also provided \$1,000 in cost-share funds per institution to buy local food or assist in additional preparation of unprocessed specialty crops. Three institutions made an active effort to perform direct purchases of specialty crops with the cost-share funds. Through this effort, at least 500 children as well as 50 parents and school officials ate locally produced specialty crops. Cafeteria workers at three schools worked with specialty crops and reported that they had a positive experience. In fact, one cost-share participant, a hospital, purchased more than \$23,000 in local food in 2010.

Kentucky Department of Agriculture

Amount Funded: 102,827.56 Number of Projects: 6

- The Kentucky Department of Agriculture facilitated direct marketing seminars that focused efforts on assisting specialty crop producers find ways to increase their market share, improve product quality, and grow their customer base. These seminars took place at the inaugural Kentucky Agriculture Direct Marketing Conference held in Lexington, Kentucky in November 2009. Over 200 attendees and approximately 15 tradeshow exhibitors participated in this two-day event. The speakers helped producers focus on topics that included merchandise placement, signage, consumer buying trends, and how to set prices. While Kentucky producers learned from keynote speakers, they were also educated through the usage of farm tours. Each farm/business visited during the farm tour made an additional effort to answer questions that were asked during their presentations.
- The Kentucky Department of Agriculture worked with restaurants and hotels to host chef cook-offs, product demonstrations, and media advertising to promote "Kentucky Proud" produce. An integral part of this project was the compilation of a hospitality kit, which functioned as a press kit for the specialty crop industry. This kit consisted of a folder that held a DVD that featured Kentucky specialty crop producers, two inserts meant for meeting planners and chefs, as well as other materials. Over 5,000 hospitality kits were produced and distributed by project staff and cooperative partners. Another strategy implemented by project staff focused on two events comprised entirely of locally produced ingredients, presentations product usage, and discussion on the elimination of institutional barriers. In fact, one event held at the University of Kentucky horticulture research farm presented a broad mix of 180 participants. These individuals represented hospitals, universities, state government, and private businesses as well as students, farmers, chefs and food distributors. The event included educational programs concerning organic farming practices, community supported agriculture, and the use of Kentucky grown foods in commercial foodservice settings.
- The Kentucky Department of Agriculture attended state and national events to promote the produce industry and purchased a produce-specific tradeshow display to attract potential customers. Specifically, project staff attended several events, which included the 2009 and 2010 Produce Marketing Association (PMA) Fresh Summit, the World Equestrian Games, and the Incredible Food Show. The 2009 and 2010 PMA Fresh Summit tradeshows provided an opportunity promote Kentucky produce as well as learn about company food safety plans, third party audits, the locally grown movement, new technology to promote specialty crops, as well as traceability of produce. The World Equestrian Games also enabled project staff to promote Kentucky's fall specialty crops (gourds, pumpkins, etc.) in the Kentucky Experience Courtyard. Over 500,000 people attended the games, which allowed the visitors' center and agricultural information desk to provide information on local producers. The specialty crops of Kentucky were also promoted at the main entryway of the Incredible Food Show. Project staff provided information to patrons and directed them to specialty crop producers to promote the sale of locally grown specialty crops.
- The Kentucky Department of Agriculture developed audience-specific directories, brochures, and video to inform interested individuals about "Kentucky Proud" produce. The informational video, "A Taste of Kentucky", was developed and distributed to over 100 interested parties, which include foodservice directors, cafeteria managers, extension agents, and wholesale buyers. "A Taste of Kentucky" is a seven-minute video that highlights and promotes the purchase of Kentucky's specialty crops. An availability chart for specialty crops was also developed that incorporates produce availability months and nutritional benefits of Kentucky specialty crops. This chart was distributed to all 120 extension offices, registered farmers' markets, tradeshows, school systems, and food service directors.

- The Kentucky Department of Agriculture developed a comprehensive wellness program that incorporated "Kentucky Proud" produce into schools and other institutions through sponsorship and food demonstrations. Specifically, this project maintained two components, which included an Eat to Win program and the creation and distribution of a specialty crop recipe card. The Eat to Win program utilized a visual medium marketing campaign that featured celebrity endorsements. Particularly, posters were developed and distributed to 120 counties in Kentucky for display at schools. Most counties reported displaying these posters in school lunchrooms or gymnasiums. Project staff also chose three recipes that featured multiple commodities for the recipe cards. Demonstration guides and media scripts were also developed for use by farm and community service agents featuring the three recipes. Approximately 60,000 recipe cards were printed and distributed to local families in order to promote the usage of local specialty crops.
- The Kentucky Department of Agriculture conducted a pilot program that experimented with institutional infrastructure and communication channels to increase the use of locally grown produce in schools and commercial cafeterias, conduct food demonstrations and sampling, and incorporate education for foodservice directors, lunchrooms materials, and promotional giveaways. Project staff facilitated 10 Farm-To-Fork events, from 2008 to 2010, that encouraged residents to buy local produce by fostering relationships among local producers, restaurants, retailers, tourism/hospitality entities, and residents. Through these events, the project staff also partnered with local chefs to showcase the specialty crops, which has led to more local specialty crops being purchased through local restaurants. Over 160 specialty crop growers were directly affected by the events that took place through this project. Additionally, attendance for these 10 events was reported at approximately 13,225, which doesn't account for print, radio and electronic media which also helped to promote buying local specialty crops.

Louisiana Department of Agriculture and Forestry

Amount Funded: 104,950.42 **Number of Projects:** 9

- The Louisiana Department of Agriculture & Forestry conducted research designed to ascertain the most efficient strategy to promote Louisiana fruits and vegetables including sweet potatoes, floral and retail nursery stock, and horticultural stock. The study consisted of a variety of research methods, including a comprehensive literature review, surveys, and focus groups and resulted in two reports which were immediately made available to industry and producer stakeholders. At the conclusion of the studies, researchers recommended the following promotional strategies: market research, branding, focus on public relations, and various promotional tactics, and provided specifics for using these strategies.
- The Louisiana Department of Agriculture & Forestry conducted research designed to ascertain the most efficient strategy to promote Louisiana fruits and vegetables including sweet potatoes, floral and retail nursery stock, and horticultural stock. The study consisted of a variety of research methods, including a comprehensive literature review, surveys, and focus groups that resulted in two reports which were immediately made available to industry and producer stakeholders. At the conclusion of the studies, researchers recommended the following promotional strategies: market research, branding, focus on public relations, and various promotional tactics, as well as providing the specifics for using these strategies.
- The Louisiana Department of Agriculture & Forestry conducted research designed to ascertain the most efficient strategy to promote Louisiana fruits and vegetables including sweet potatoes, floral and retail nursery stock, and horticultural stock. The study consisted of a variety of research methods, including a comprehensive literature review, surveys, and focus groups that resulted in two reports which were immediately made available to industry and producer stakeholders. At the conclusion of the studies, researchers recommended the following promotional strategies: market research, branding, focus on public relations, and various promotional tactics, as well as providing the specifics for using these strategies.

- The Louisiana Department of Agriculture & Forestry (LDAF) conducted five trade promotion activities to assist specialty crop producers with costs and staffing associated with participation at local, regional and national trade shows. At the 2008 Louisiana Restaurant Association Expo, LDAF sponsored a double booth for specialty crop producers to display their products. More than 30 growers provided product for the display. In addition, LDAF sponsored a "Farm to Table" chef demonstration stage where eight chefs from Louisiana prepared dishes and provided seminars on using fresh Louisiana produce throughout the expo. Two months later, LDAF partnered with the Louisiana Sweet Potato Commission for a sweet potato booth at the Produce Marketing Association (PMA) Fresh Summit. More than 17,000 people from 61 countries attended the Summit. LDAF also sponsored a Louisiana specialty crop booth at the 13th Annual Epcot International Food and Wine Festival in Orlando, Florida. And finally, LDAF reserved space at the 2010 North Louisiana Agri-Business Council Annual Expo where ten specialty crop producers provided information, food sampling, and demonstrations of new recipes featuring strawberries, blueberries, pecans and sweet potatoes. In all, more than 40 producers participated in these trade shows and at least nine reported an increase in sales.
- The Louisiana Department of Agriculture & Forestry (LDAF) worked to stimulate increased sales of specialty crops and to improve consumer awareness of local products by providing materials and supplies to growers, wholesalers, and retailers. LDAF contracted with GMc Advertising to work directly with retailers and producers to identify the types of point of sale material that would be most beneficial, design the materials, and purchase and distribute the pieces. As a result, GMc designed a bin sign and two different shelf talkers. Five thousand bin signs and 27,000 shelf talkers were distributed to 26 farmers' markets and roadside stands. Retailers and producers reported that the distributed materials were a valuable tool that created awareness of the local products available. Several retailers expressed their commitment to purchase more local produce due to requests from their customer base.
- The Louisiana Department of Agriculture & Forestry (LDAF) developed and implemented a product demonstration program featuring Louisiana-produced specialty crops. The demonstrations featured new and reinforced current uses of specialty crops at the point of sale. One hundred and thirty-three specialty crop product demonstrations were conducted at Whole Foods, the 13th Annual Epcot International Food and Wine Festival, and Rouses Supermarket. Whole Foods reported an average 71 percent increase in sales resulting from the five demonstrations conducted in its stores. Overall, of the 25 locations that hosted product demonstrations, 11 reported increased sales.
- The Louisiana Department of Agriculture & Forestry (LDAF) developed consumer materials to educate the public on the availability and uses of specialty crops. In partnership with the Louisiana State University Ag Center, the team developed a Specialty Crop Agri-Tourism Brochure. Two thousand copies were printed and distributed and the brochure is also available online. In addition, LDAF contracted with GMc to create two additional brochures. The team designed and printed a harvest calendar brochure and a recipe brochure to give consumers suggestions on how to prepare specialty crops. Twenty-five thousand copies of each were distributed to industry stakeholders such as retailers, farmers' markets, roadside stands and individual producers.
- The Louisiana Department of Agriculture & Forestry (LDAF) conducted a radio marketing campaign to raise awareness of the locations and hours of local farmers' market. To do so, LDAF developed and purchased radio advertisements for Louisiana farmers' markets to inform the public of their locations and hours of operations. The ads pointed the listeners to LDAF's new internet page that lists all of Louisiana farmers markets and roadside stands (http://www.lafarmers.net/). LDAF contracted with Louisiana Radio Network (LaNetwork) to air the radio spots. The 30-second ads aired 25 times on 64 radio stations throughout Louisiana, for a total of 1,600 advertisements. To assess the success of the campaign, the team conducted a sampling survey of 20 percent of Louisiana's farmers' markets. Of those markets surveyed, 100 percent indicated that their consumers had heard the radio spots and 100 percent indicated that they had experienced an increase in attendance or sales during the time period that the spots were running.
- The Louisiana Department of Agriculture & Forestry (LDAF) partnered with the Louisiana Strawberry Promotion Board to develop a focused TV ad campaign to increase strawberry sales. TV advertisements were 30 seconds in length and ran from two to four weeks on seven television stations, reaching approximately 2,778,294 households. To assess the success of the campaign, the team conducted a survey of ten percent of the state's strawberry producers. Fifty-five percent of those who participated in the survey reported an increase in sales during or after the spots aired. The average reported increase in sales was 20 percent.

Maine Department of Agriculture, Food and Rural Resources

Amount Funded: 105,806.75 **Number of Projects:** 4

- The Maine Department of Agriculture, Food and Rural Resources designed and developed a database that houses data about all Maine specialty crop producers to provide needed information for print and electronic promotional business development materials. Department staff worked with database developers to design and develop the database and couple it with a web-based front end for consumer and producer usage. At the 2009 Maine Agricultural Trade Show, project staff encouraged producers to establish accounts in the new database through presentations at commodity groups meetings and at the Department of Agriculture booth. The new farmer database went live with the new database and website (www.getrealmaine.com) on January 15th, 2010. As a result of this new producer website, as of January 2011 the number of farmer accounts has increased by 10 percent (from approximately 850 to over 1,000).
- The Maine Department of Agriculture, Food and Rural Resources assisted specialty crop producers with the costs associated with first-time Good Agricultural Practices/Good Handling Practices audits. The Department set up a system to provide direct funds to farmers to help reimburse them for their audits. The program provided reimbursements to a total of 98 producers; these reimbursements did not exceed \$400 per audit. The project was also promoted to the fruit and vegetable industry through a variety of mechanisms, including presentations, educational and promotional material dissemination, trade show participation, and direct contact with growers through commodity association meetings, newsletters, and direct mail.
- The Maine Department of Agriculture, Food and Rural Resources worked with Harvest New England to assist specialty crop producers through advertising opportunities and promotional materials, including exhibits at regional events. Specifically, the six New England States represented in Harvest New England (Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, and Connecticut) coordinated the 2009 Direct Marketing Conference. The conference was designed to assist producers in marketing their specialty crops directly to consumers and wholesalers. Pamphlets and point-of-sale materials were provided to enhance the visibility of New England products. Additionally, an Online Ordering Workshop was presented at the Conference, which included 75 farmers in attendance. This conference was successful, boasting an increase in attendance of 20 percent to 800 participants in 2009.
- The Maine Department of Agriculture, Food and Rural Resources worked with the Maine Potato Board (MPB) to build awareness and promote the purchase of Maine potatoes through the facilitation of a potato marketing campaign. The MPB marketing and promotional campaign contained four components: the 2009 fall promotion, the 2009 Produce Marketing Association (PMA) Show attendance, a 2010 industry support campaign, and the 2010 National Potato Council Seed Expo. At the PMA show, project staff promoted Maine potatoes to over 18,500 attendees from approximately 50 different countries. The project staff also networked with over 600 attendees from both Canada and the United States at the National Potato Council's Seed Expo. Both the 2009 fall promotion and the 2010 industry support campaign included two distinct 30-second television ads that aired in central and southern Maine for two months. These television advertisements reached an estimated 150,000 to 225,000 people throughout Maine.

Maryland Department of Agriculture

Amount Funded: 111,602.37 Number of Projects: 1

• The Maryland Department of Agriculture improved Maryland's Best logo, website, and "buy local" promotion campaign to increase consumer and buyer awareness, and sales of Maryland's specialty crops. Specifically, project staff leveraged the demand for local produce through media promotions including press releases and paid advertising (i.e., radio and print ads). The promotion program also offered web coupons, recipes, producer profiles, point of purchase materials for grocery stores, and events such as contests or festivals. As a result of this project, the demand for Maryland grown produce increased from just over half of a sampled population to approximately 78 percent of those surveyed in 2008.

Massachusetts Department of Agricultural Resources

Amount Funded: 107,596.35 **Number of Projects:** 4

• The Massachusetts Department of Agricultural Resources researched culinary tourism opportunities, identified interested farm participants, investigated consumer audience demographics, provided training to interested growers and identified partnering agencies to ensure project sustainability. Surveys were sent to growers and food producers about their interest in attracting culinary travelers. Of the 150 completed surveys, 30 area growers indicated they were interested in expanding their markets to include selling to restaurants. Project staff held two culinary tourism workshops as part of the Harvest New England Agricultural Marketing Conference & Trade Show. Conference attendees provided feedback, and as a result, a website (www.mass.gov/massgrown) was developed specifically relating to culinary tourism opportunities in Massachusetts. The initiative was branded with the logo "Savor Massachusetts: One Taste at a Time." The surveys also helped develop new resources including on and off-the-farm culinary education, a monthly calendar of farm festivals & culinary events, ethnic market tours, and behind-the-scenes farm tours. Over 20,000 brochures were created with the logo and disseminated at area farmers markets, at agricultural fairs, and other appropriate culinary related events. It is estimated that Massachusetts has reached up to 400 agri-tourism farms filled with a variety of activities.

- The Massachusetts Department of Agricultural Resources partnered with Cape Cod Cranberry Growers Association (CCCGA) to develop and implement multi-media materials that document the health benefits of cranberries, explain the daily intake required to obtain those benefits, and provide recipes. Project staff created and distributed recipe brochures and a CD of recipes directly to growers and restaurants. An "Ask the Expert" feature was also provided on the CCCGA website where consumers could email in questions about cranberries. Approximately 17 percent of "Ask the Expert" questions were about where to purchase cranberries and 41 percent were about recipes for utilizing cranberries. During the 5th Annual Cranberry Harvest Celebration, several hundred participants observed a cooking demonstration using cranberries. The overall visits to the CCCGA website increased by 10,000 from September 1, 2008 to August 25, 2009 compared to the previous year.
- The Massachusetts Department of Agricultural Resources partnered with the New England Apple Association to improve the appearance and navigation of their website www.newenglandapples.org and provide orchards the ability to update their listings from remote locations. The website enhancements included a user-friendly, state-by-state listing of orchards. Member orchards were able to enter current information about conditions, activities and availability of individual varieties and other fruits when they provided their user name and password. A pop-up Google map and directions are included for each orchard and photographs of many of New England's apple varieties are available for those seeking illustrations. A PDF version of the Association's newsletter, "McIntosh News," can also be downloaded. Project staff promoted and developed the new website through links on major internet search engines. Data from the first 11 months of use show nearly half a million hits and more than 29,000 visitors to the site.
- The Massachusetts Department of Agricultural Resources partnered with the six New England State Departments of Agriculture (Harvest New England Association) to support specialty crop growers participating in the Harvest New England Program at a 17 day fair. Annually, approximately 1.5 million visitors attend the conference. Regional and nationally recognized chefs performed cooking demonstrations that highlighted New England grown/produced products for the entire 17 days. Additionally, a Harvest New England banner was purchased and used in a Harvest New England display at the New England Vegetable & Berry Growers Conference in December of 2009.

Michigan Department of Agriculture and Rural Development

Amount Funded: 136,342.33 **Number of Projects:** 1

• The Michigan State Department of Agriculture enhanced the existing Select Michigan Program with a goal of re-connecting consumers with agriculture in a retail setting. One of the featured projects used radio, magazine, website, and billboard advertising to increase consumer demand for Michigan specialty crop products. The Select Michigan radio broadcasting played each hour, 24 hours per day, and seven days for a schedule of ten, four-week periods. A total of 807 radio spots ran that included the Select Michigan logo/information on the radio stations' websites each month. Project staff placed eight full page color advertisements in four monthly issues of Women's LifeStyle magazine in the Grand Rapids area, which were available free at partnering retail stores. Each advertisement reached an estimated 200,000 people for a total of 1.6 million consumers. The Select Michigan program also placed a billboard for Michigan Apples during November on the U.S. 31 and I-96 intersection in Grand Rapids. Each element encouraged the purchasing behavior of Michigan consumers and retailers to purchase 'Select Michigan' specialty crops.

Minnesota Department of Agriculture

Amount Funded: 113,274.97 **Number of Projects:** 3

- The Minnesota Department of Agriculture partnered with the Northern Plains Potato Growers Association and the North Dakota Department of Agriculture to maximize profits for the potato growers in Minnesota and North Dakota through an aggressive breeding program, producer education program, marketing and promotional initiatives, and improving the financial position of process growers through improved negotiated agreements. Through the breeding programs in cooperation with North Dakota State University and University of Minnesota, the number of potato varieties released increased. One variety that was produced at North Dakota State University was pulled into the process system in the fall of 2008. The advertising campaign resulted in coverage and infiltration in target markets. A total of 15 new negotiation team members were trained. As a result of the strategic planning sessions, contracts were successfully negotiated realizing the largest single year contract price increases of any region in the U.S. and Canada. As a result of all these efforts, researchers now have enough material to make two or three releases in each of the next four or five years.
- The Minnesota Department of Agriculture partnered with the Northarvest Bean Growers Association and the North Dakota Department of Agriculture to organize efforts leading to scientifically credible health claims on dry beans. Scientists in the Food Science and Human Nutrition Department of Michigan State University at East Lansing, Michigan conducted a comprehensive review of literature on dry beans and human health and then finalized a report in February 2008, titled "Beans and Health: A Comprehensive Review." Northarvest adopted the literature review recommendations and the model for scientific investigation utilized by the U.S. Soybean Board was initiated. Next, Northarvest convened a daylong conference with the intention of developing a strategy to guide research investments made and to focus on future requests for proposals in the respective scientific disciplines. The results of the conference lead directly to priorities for funding to be used by Northarvest in implementing its strategy to achieve a broader and stronger research foundation. Qualified researchers have now been attracted to the program and are able to conduct further research with dry beans and human health.
- The Minnesota Department of Agriculture enhanced the Minnesota Grown Program by improving marketing materials, more fully integrating the program spokesperson, increasing the reach and effectiveness of the Minnesota Grown Directory, and increasing consumer awareness of and use of the website, gardenminnesota.com. Project staff printed and distributed Minnesota Grown directories in 2007, 2008, and 2009. Each year there was a substantial growth in the number of copies made from 175,000 to 185,000 to 190,000, respectively. Two new point-of-sale items were developed which included twist ties and stickers with enough room for customers to write important information on about their produce. The website, www.minnesotagrown.com, was improved in appearance and functionality, and a pay-per-click advertising campaign was initiated with Google and Yahoo. From September 2007 when the pay-per-click campaign began, through December 2008, this campaign resulted in over 205,000 click-throughs to www.minnesotagrown.com and resulted in annual totals of unique visitors increasing by more than 7-fold from 2006 to 2008. Google accounted for over 90 percent of these clicks (over 192,500 out of 205,000 total clicks).

Mississippi Department of Agriculture and Commerce

Amount Funded: 103,626.70 **Number of Projects:** 2

- The Mississippi Department of Agriculture and Commerce promoted Mississippi's specialty crops at themed events held at the Mississippi Farmers' Market. Specifically, the Mississippi Farmers' Market hosted a total of 38 events (23 in 2006, nine in 2007, and six in 2009) that highlighted specialty crops through a variety of themes including "The Salad Days of Summer," "Pepper Day," "Farmer Appreciation Day," and "Celebrate Blueberries." These events were advertised through a variety of media outlets that included radio, print, and television. Project staff implemented a statewide radio campaign that encouraged consumers to shop at local farmers' markets. These radio spots referenced the Mississippi Department of Agriculture and Commerce website that listed all of the markets in the state. These themed events effectively increased the number of farmers who sold at the market during the peak of the produce season (June September) by 86 percent from 2006 (7) to 2007 (13).
- The Mississippi Department of Agriculture and Commerce partnered with the Mississippi Fruit and Vegetable Growers' Association and the Mississippi State University Extension Service to present a series of workshops that trained both new and existing growers on crop production practices and the benefits of selling specialty crops through direct-to-consumer markets. A total of 421 producers and farmers' market managers attended eight different workshops that highlighted fruit and vegetable marketing and production, cool season vegetable production and marketing, selling at farmers' markets, vegetable production season extension, and farmers' market management. In fact, farmers that participated in the workshops indicated increased implementation of some of the strategies and techniques presented during these workshops. Particularly, 48 percent of the participant farmers noted an increase in the variety of specialty crops grown, while 59 percent affirmed the initiation of the cultivation of cool season crops. Another 69 percent of the participants maintained that they sold produce to farmers' markets as a result of the knowledge gained from these workshops. Farmers' market managers also reported an increase in farmers selling produce at markets with an increase of 23 percent from 2006 to 2007 and 31 percent from 2007 to 2008.

Missouri Department of Agriculture

Amount Funded: 104,289.46 Number of Projects: 4

- The Missouri Department of Agriculture partnered with the University of Missouri to introduce Future Farmers of America (FFA) students to viticulture through educational opportunities such as workshops, in-field experiences, and larger special events that provide the essential aspects of winegrape production. Specifically, project staff conducted seven workshops for students that presented a broad range of topics including site selection and preparation, cultivar selection, pest management, vine training, and the economics of vineyard establishment and operation. A demonstration vineyard was also established and served as the site for in-field discussions and demonstrations. The project staff plans to use this vineyard to provide continuous in-field educational opportunities for interested individuals. The project staff also facilitated three different winegrape/specialty crop events, which included a Multi-State and FFA Viticulture Field Day, an FFA Specialty Crops Field Day, and a Specialty Crops Festival. These events were attended by over 1,000 participants and topics ranged from vineyard planning and development to grape cultivars and rootstocks. They also featured activities that included lectures, hands-on demonstrations, and children's activities.
- The Missouri Department of Agriculture worked with several Future Farmers of America (FFA) chapters to promote the purchase of local specialty crops at Missouri farmers' markets. Specifically, 18 FFA students and eight chapters participated in the purchase of equipment and specialty crop seed to start or continue their supervised agricultural experience project. These students and FFA chapters grew specialty crops throughout the summer and sold them at farmers' markets or roadside stands. Project staff developed and distributed teaching aids to assist students with the marketing of their specialty crop products while eight specialty crop producers actively mentored these students. Project staff also assisted FFA students in the development of a radio advertising campaign to promote buying local specialty crops throughout Missouri. Students learned marketing practices from a marketing specialist via promotional material examples and onsite visits. The students also received assistance in the development of signage, brochures, banners, and promotions of specialty crop events in the region to help promote regional agri-tourism.

- The Missouri Department of Agriculture offered eligible farmers' markets access to electronic benefit transfer (EBT) wireless machines, which enabled lower income families an opportunity to purchase fresh foods and vegetables at their local farmers' markets. Project staff placed wireless EBT machines in 17 markets across the state of Missouri, focusing on counties populated with lower income families. This effort promoted increased access of low-income Supplemental Nutrition Assistance Program (SNAP) recipients' to healthier food and increased sales for Missouri markets. Marketing materials such as posters were also distributed to venues including the State Fair. Consequently, farmers' markets were able to increase the accessibility of locally produced specialty crop to EBT cardholders. In fact, 2008 data reported by participating farmers' markets indicated that sales increased by an average of four percent.
- The Missouri Department of Agriculture partnered with the University of Missouri to help stimulate the development of a chestnut industry in Missouri through the establishment of working orchards linked to extensive grower training for new producers, Missouri University Extension specialists, and Future Farmers of America (FFA) students. Project staff established a demonstration orchard in order to serve as a site for future hands-on workshops in orchard establishment and maintenance for prospective new growers, extension specialists, and FFA chapters. Four hands-on chestnut production workshops were also offered during strategically selected phases of the growing season to optimize demonstration and learning opportunities. Workshop topics included site selection and preparation, planting and grafting efforts, orchard pruning and cultural techniques, maintenance, harvest and post-harvest chestnut efforts, as well as marketing and sales. Over the period of this project, a total of 60 individuals attended the chestnut workshop series. Project staff also hosted a specialty crop field day for 200 FFA students from four schools as well as a specialty crop festival. These field days expanded the awareness of current and potential grape and chestnut growers about essential aspects of successful wine grape and chestnut production.

Montana Department of Agriculture

Amount Funded: 102,726.15 Number of Projects: 4

- The Montana Department of Agriculture partnered with the Flathead and Lake Counties Cherry Fruit Fly Advisory Board to identify all the sources of the Western Cherry Fruit Fly in the Pest Management Area (PMA). Control activities focused the evaluation of two specific locations that were a chronic source of infestation. The growers at these locations were provided control measures to follow. Later, project staff trapped the trees at these locations where results indicated there were no fruit flies or were very few sites exceeding the standard for the allowable number of fruit flies per trap. Project funding sustained the program during a critical period so that there was no loss of continuity in the program. The project also improved the credibility and acceptance of the program among growers, substantially reduced the overall occurrence of the Western Cherry Fruit Fly within the PMA, and furthered the knowledge of the wild reservoirs where this pest is found.
- The Montana Department of Agriculture partnered with BVS, Inc. to demonstrate a new technology for honey bee health management and pathogen screening, known as Integrated Virus Detection System (IVDS), which was developed by the Army's Edgewood Chemical and Biological Center. During the first year of the project, BVS, Inc. collected and processed nearly 700 samples from Montana beekeepers and converted the data into reports delivered to 20 different beekeepers. Modifications of the support equipment increased throughput from six to 18 samples per day. In the second year BVS, Inc. processed over 1100 samples. The project team achieved significant results including the discovery for treatment of viral infections in bees (current research project partially funded by Project Apis m) and the use of monitoring over time to evaluate the health of a bee population. The first year results were reported in the form of bar charts and notation of the viral loads carried in the bees sampled. Reports in the second year were modified to reflect the greater detail of a line chart that could overlay the sequential data for the year.
- The Montana Department of Agriculture partnered with the Montana Field Office (MTFO) of the National Agricultural Statistics Service to provide county level estimates for a variety of specialty crops including dry edible peas, lentils, Austrian winter peas, and dry edible beans which includes pinto beans and both large and small chickpeas. These crops are small acreage crops with little or no historical information known about them. The MTFO selected a sample of the growers of these crops and then contacted them, mostly by telephone but also by a personal visit, to ask for acreage and production information. The response rate for the overall survey was about 70 percent. Annually, the MFTO publishes the county estimates by April 30. These detailed county estimates helped the Montana Department of Agriculture in marketing efforts with regard to these crops by knowing where they are located and in what quantities.

• The Montana Department of Agriculture (MDA) facilitated international marketing of specialty crops; developed enhanced forms for organic certification of specialty crop producers; and trained program staff to better understand and serve specialty crop growers. In 2008, the Organic Grower Awareness Campaign was publicized to promote the opportunities available in the organic market and to encourage crop producers to consider organic production. MDA negotiated a cooperative agreement with the Washington State Department of Agriculture (WSDA) to provide Montana organic growers with international certifications. Under this agreement, MDA acts as an inspection body for WSDA. MDA conducts the on-site inspections and provides reports to WSDA, which issues the international certifications. Additionally, MDA contracted with the National Center for Appropriate Technology to develop Organic System Plan forms that better accommodate the needs of specialty crop growers. The new forms are shorter, have more pertinent questions and have fewer questions that are "not applicable" to operators. Funding was also used to support a number of training opportunities for certification program staff in 2008 and 2009. In 2007, MDA certified 88 organic crop producers, including 45 growers of specialty crops. By the end of 2009, there were 105 certified crop producers and 64 specialty crop growers. This represents a 19 percent increase in the number of organic crop producers and a 42 percent increase in specialty crop growers. The percentage of organic growers producing specialty crops increased from 51 percent to 61 percent.

Nebraska State Department of Agriculture

Amount Funded: 104,133.83 Number of Projects: 4

- The Nebraska Department of Agriculture partnered with Nebraska Woody Florals to foster market expansion for woody florals, create brand awareness within the specialty crop industry, and research new technologies to preserve woody florals. A marketing representative was hired to promote the cooperative of woody floral farmers. In fact, the marketing representative built upon the original customer base of seven wholesalers in three markets to 16 wholesalers in 11 markets. This growth enabled the cooperative to expand from 32 producers to 42. The growth in the market was also supplemented by the increase of brand awareness, which was aided by the cooperative's attendance at two tradeshows: the Omaha Garden Show and the Fruit and Nut Jam and the Western Nursery and Landscape Show. Finally, project staff researched shelf life extension of fresh cut, dormant stems by using a freezer to preserve the products, which proved to be successful and was implemented by cooperative members.
- The Nebraska Department of Agriculture partnered with the Nebraska Dry Bean Commission to evaluate the nutritional values of damaged dry edible beans in order to determine their value as a human health food ingredient. Specifically, Great Northern Beans were characterized and compared to discern the lipid and phenol composition of split and whole beans. The antioxidative capacity of the lipid and phenol extracts were also determined and compared between the two different categories of beans. Once compared, specific classes and amounts of lipids and phenol groups that exhibited antioxidant properties were identified in the split Great Northern Beans. The project staff determined that the results of this study support the use of the consumption of split Great Northern Beans. This research will be available in two future publications, which will address either the lipid or the polyphenols composition profiles of the beans.
- The Nebraska Department of Agriculture partnered with the Potato Certification Association of Nebraska to support the training of a new manager for the Potato Certification Program. Project staff advertised and hired an assistant manager/manager trainee to focus on the planning, implementation, and evaluation of all summer virus tests, as well as post-harvest testing of Nebraska potato seed lots. This individual oversees nine Nebraska certified seed potato growing operations and 16 commercial potato growers and is the only U.S. Department of Agriculture Good Agricultural Practices/Good Handling Practices inspector in the state. Consequently, all Nebraska specialty crop growers and certified growing operations benefit from the new program manager.
- The Nebraska Department of Agriculture partnered with the Nebraska Rural Initiative, the University of Nebraska, and the Food Processing Center to increase awareness of various marketing venues available for specialty crop producers. Project staff collected and compiled information from the surveys to identify the topics addressed at training sessions and workshops in order to establish the direction for the project and steer the efforts of the Nebraska Local Foods Network. A promotional display and marketing materials were also developed to explain the various marketing venues and opportunities available to specialty crop producers. Through these efforts the Nebraska Local Foods Network increased the awareness of networking, training, and marketing opportunities that are available for specialty crop producers.

Nevada Department of Agriculture

Amount Funded: 101,478.01 Number of Projects: 1

• The Nevada State Department of Agriculture partnered with Churchill Economic Development Authority (CEDA) and the Nevada Association of Counties (NACO) to create a marketing initiative to assist Nevada agricultural producers by bringing communities and people together in order to support the growth and use of local produce. CEDA and NACO worked closely with Nevada Grown to develop marketing (website, fliers and branding tools) and promotion activities (workshops and farmers markets). A packaging company designed and fabricated printing plates with the NevadaGrown logo to be used on produce boxes for farmers, and 15,000 have been printed. Additional web development was contracted to provide more promotion of farmers and chefs on the NevadaGrown website (www.NevadaGrown.com). There was a 22 percent increase in web views from 2008 to 2009. Over the grant period there was more than a 31 percent increase of NevadaGrown website visits, which demonstrates that local restaurants and producers were being recognized. Additionally, several interviews were conducted with Nevada Public Radio, featuring the NevadaGrown and the advantages of shopping locally-grown produce. NevadaGrown was a non-profit vendor at the Nevada Women's Conference and at the Annual Tune Into Kids Day at Idlewild Park in April 2008. NevadaGrown volunteers educated attendees on the availability of local food and the reasons to buy local. Over 1500 flyers were distributed at these events. The website is rapidly becoming an invaluable tool for Nevada producers and is constantly growing in membership.

New Hampshire Department of Agriculture, Markets and Food

Amount Funded: 102,244.91 Number of Projects: 1

• The New Hampshire Department of Agriculture, Markets & Food partnered with the New Hampshire Division of Travel and Tourism Development to initiate a "Buy Local" program to identify and promote the purchase of local products through all possible outlets, on and off the farm, as well as through the internet. Project staff identified a variety of promotional components, which emphasized a multi-media approach to increase the competitiveness of specialty crops. These consisted of print, television, and web-based advertising. Project staff also awarded three mini-grants to the New Hampshire Christmas Tree Promotion Board, New Hampshire Plant Growers Association, and the New Hampshire Fruit Growers Association for improving the website capacity and design. A fourth mini-grant to the New Hampshire Maple Producers Association enhanced the organization's educational outreach at the Eastern States Exposition. Through these efforts to increase the public's awareness of the Buy Local campaign, New Hampshire Made membership increased by 211 members between December 2007 and 2008, which represents an eight percent increase.

New Jersey Department of Agriculture

Amount Funded: 117,036.97 Number of Projects: 3

- The New Jersey Department of Agriculture used television, radio, and print advertising to promote Jersey Grown horticulture products directly to consumers. Television, radio shows, and print publications that targeted the subject of gardening were selected to support consumer purchases of the State's important horticultural products produced for fall plantings. The Channel 12 News and The Backyard Gardener aired 30 and 10 second spots with a total of 168 spots being broadcast. The Ralph Snodsmith Show and the WOR-AM radio shows aired two 60 and 10 second spots per week for a total of 15 radio ads being aired. The Gardener News, The Born to Bloom, and Jersey Grown Ad appeared in one half page and four quarter page ads during the months of June, July, August and September totaling 20 Jersey Grown print ads. As a result, grower participation increased 26.9 percent in the Jersey Grown Program from the previous year.
- The New Jersey Department of Agriculture conducted the Jersey Fresh Matched Funds Program to award funding to 64 separate non-profit specialty crop industry organizations to use the Jersey Fresh brand name to promote their fruit and vegetable products. Thirty-three of the recipients were community based farmers markets that used the grant funds to advertise the availability of locally produced specialty crops using the Jersey Fresh brand name. Twenty-one of the grant recipients were 4-H, and other county based agricultural organizations that used the grant funds for promotional or educational programs supporting locally produced specialty crops. The remaining 10 of the SCBG grant recipients were non-profit industry wide commodity promotion organizations that used their grants to promote locally produced specialty crops through the use of the generic Jersey Fresh brand name. Each recipient organization was required to provide an equal or greater amount of their own funds for each Jersey Fresh Matched Funds Program project.

• The New Jersey Department of Agriculture created a beekeeping course for beginners. Project staff delivered classroom presentations on core business topics required of beekeeping businesses, including hive management, purchasing queen bees, assembling hives, opening and examining colonies, honey production, candle-making and other consumer products. The Sakai distance learning platform was used to create an on-line community around the topic of the "Business 4 Beekeeper." The site contains tools that include synchronous chat, asynchronous threaded discussion, and an electronic drop box to serve as a clearinghouse of high-value documents, such as tools and techniques for conducting affordable, highly targeted market research. Beginning beekeepers were offered two courses, one in April and one in May with 98 and 107 participants respectively. Out of the participants who took the course that year, 72 percent reported that they started keeping bees; 74 percent said they intended to add more colonies; and, 78 percent joined the New Jersey Beekeepers Association.

New Mexico Department of Agriculture

Amount Funded: 108,507.39 **Number of Projects:** 2

- The New Mexico Department of Agriculture partnered with five New Mexico green chile shippers and 20 retail chains in New Mexico, Texas, California, Arizona, Missouri, Nebraska, Kansas, Wisconsin, Colorado, and North Carolina to provide training workshops, educational materials, roasters, recipes, in-store demos, and support for the numerous events and special promotions concerning fresh New Mexico Green Chiles. Specifically, project staff traveled to seven states to conduct workshops for 293 retail store personnel. These workshops were conducted by a New Mexico food consultant that provided a hands-on discussion concerning green chile preparation, safety issues, and merchandising ideas. Project staff also extended working relations to 95 stores in six different states to conduct in-store sampling and promotion of New Mexico green chiles. These efforts facilitated the establishment of a market presence for the New Mexico green chile in 10 states.
- The New Mexico Department of Agriculture coordinated the development of a New Mexico Taste of Tradition pavilion at the 2007 Produce Marketing Association's Fresh Summit Exposition in Houston, Texas. Project staff sought out the participation of New Mexico companies to showcase New Mexico specialty crop products. This opportunity enabled these companies to identify both domestic and international buyers and increased their presence in the market, which fostered an increase in the sales of specialty crops grown statewide. Eleven companies participated in this exhibition and represented producers of green chiles, onions, melons, pecans, pumpkins, pinto beans, and many other specialty crops. The companies that participated in the New Mexico Taste the Tradition pavilion exceeded the project staff's expectations by completing over \$15 million in specialty crop sales at the Fresh Summit Exposition.

New York State Department of Agriculture and Markets

Amount Funded: 129,212.32 Number of Projects: 2

- The New York State Department of Agriculture & Markets created the Pride of New York "Buy Local" Cooperative Advertising Program. The pilot program was structured so that participating producers received cost-share funding (50/50 requirement), as well as assistance in developing marketing plans including television, radio and consumer print cooperative advertising. The matching funds, up to \$5,000 per participant, were distributed on a first-come, first-served basis. The program was designed so that participants had the opportunity to develop advertisements and/or promotional materials on a customized basis, based on the producer's marketing plan, goals, and budget. The Pride of New York offered 52 participants pre-negotiated media packages as well as technical advice with the development of advertisements, scripts and/or promotional materials. As a result of the advertising campaign, a total of 3,295 advertisements were placed statewide (2,807 radio; 60 television; 428 print). A total of 225,671 customized point of sale/promotional materials were created for distribution to consumers, including 129,000 brochures/rack cards; 45,930 postcards/business cards; 36,291 labels/product tags; 1,157 signs/banners/posters; 2,000 magnets; 1,000 pens; 2,000 bumper stickers; 2,000 business cards; and 6,902 bags/boxes. Over one million consumers have been reached as a result of these advertisements and promotional materials. According to the 24 producers who reported an increase in sales, the range of the increase was 3 percent to 100 percent (average increase 19.6 percent). An additional six producers reported sales increases totaling approximately \$58,544. Many of the grant recipients, when reporting the measurable outcomes from their projects, indicated that this program allowed them to conduct marketing efforts that they previously could not afford. Those producers that were already conducting some television and/or radio advertising were able to increase their media presence. Yet others indicated that they were able to include additional specialty crops that they did not have the means to advertise in the past. Numerous recipients were able to update their point of sale materials (brochures, rack cards, etc.), which they viewed as being highly beneficial for their long-term marketing plans.
- The New York State Department of Agriculture & Markets targeted expanding consumer awareness of harvest times, availability, and nutritional benefits of New York's diverse produce. The "Pride from A(pples) to Z(ucchini)" harvest chart and "Produce Trading Cards" were distributed to Spanish speaking residents, which had never been done before. Additionally, project staff produced and strategically placed large promotional posters of the harvest chart at farmers markets, school cafeterias and other key consumer locations throughout the State. As a result of this project, approximately 40,000 Produce Trading Cards, 40,000 New York State Harvest Charts and 400 posters in total were distributed at farmers markets, schools and community events, etc.

North Carolina Department of Agriculture and Consumer Services

Amount Funded: 136,155.66 **Number of Projects:** 4

- The North Carolina Department of Agriculture and Consumer Services developed and implemented a marketing program which targeted North Carolina consumers in order to increase demand for North Carolina grown plants as well as the sustainable usage of water for plants during the dry season. This campaign was initiated through the development of a new consumer website (TarHeelGardening.com). The website was promoted to consumers through multimedia advertisements executed in five metropolitan areas that were most affected by water restrictions including Triangle, Triad, and Charlotte. The project also promoted North Carolina plants through participating at major regional trade shows. Specifically, North Carolina nursery representatives participated in the exhibition and buyer marketing meeting at the Mid Atlantic Nursery Trade Show. The website garnered some interest by the facilitation of over 34,000 visits in 2008. It was also estimated that the multimedia campaign connected with over 4 million consumers.
- The North Carolina Department of Agriculture and Consumer Services implemented a program designed to increase the number of schools involved in farm-to-school programs as well as the amount of locally grown produce sold within North Carolina schools. One aim of the program was to support a stronger appreciation for specialty crops among the children of North Carolina. Specifically, project staff designed an agricultural and nutritional education component as an incentive for schools to participate in the program and purchase more locally grown produce. This component included the development of a new website to promote the Farm-to-School program and provided educational materials to teachers. Large banners were also developed and distributed to 1,200 school cafeterias across the state in order to promote the consumption of fruits and vegetables. School system nutritionists provided positive input concerning the farm-to-school materials due to its nutritional message and focus to increase awareness of locally grown produce.

- The North Carolina Department of Agriculture and Consumer Services implemented a program that focused efforts to increase the number of North Carolina grower and packers that apply food safety plans and become certified in "good agricultural practices" (GAP). Specifically, this project provided cost-share assistance for small and medium size producers to receive GAP audits, which enabled participants to become GAP certified. The cost-share program offered up to \$600 in assistance for a GAP third party audit. This GAP cost-share program attracted many first time participants to the GAP program. In fact, 37 specialty crop producers took part in the program in order to receive assistance for GAP audits.
- The North Carolina Department of Agriculture and Consumer Services partnered with North Carolina State University in order to develop and introduce new specialty crops for commercial production through the North Carolina Specialty Crops Program. As part of this project, a marketing assistant was hired to help growers market their medicinal herbs in western North Carolina by fostering the development of contacts with potential buyers of medicinal herb products. Greenhouse facilities were also repaired and upgraded to facilitate the continued expansion of research capabilities to investigate the potential for new and existing specialty crops in North Carolina. Ultimately, this project assisted in the development of new honeydew and Asian melon varieties, lettuce for processing, and medicinal herbs that will provide new sources of income for North Carolinian farmers.

North Dakota Department of Agriculture

Amount Funded: 109,135.59 **Number of Projects:** 6

- The North Dakota Department of Agriculture partnered with the North Dakota Farmers Market and Growers Association (NDFMGA) to provide opportunities for five North Dakota schools to learn about the production and marketing of vegetable crops, and to provide a blueprint for a business entity that can provide services to fruit and vegetable producers. Through this project, students used school land and a greenhouse facility to plant gardens in which the produce grown was utilized for school meals or frozen for later use. Children, staff, and community members expressed excitement about the utilization of the fruits of their labor. The NDFMGA also examined possible avenues to assist members in the production and marketing of their products. This study provided a framework and a sense of direction for the NDFMGA to mature as an organization as well as understand the needs of their members.
- The North Dakota Department of Agriculture partnered with the Northern Plains Potato Growers Association and the Minnesota Department of Agriculture to maximize profits for the potato growers in Minnesota and North Dakota through an aggressive breeding program, producer education program, marketing and promotional initiatives, and by improving the financial position of process growers through improved negotiated agreements. Through the breeding programs in cooperation with North Dakota State University and University of Minnesota, the number of potato varieties released increased. One variety that was produced at North Dakota State University was pulled into the process system in the fall of 2008. The advertising campaign resulted in coverage and infiltration in target markets. A total of 15 new negotiation team members were trained. As a result of the strategic planning sessions, contracts were successfully negotiated realizing the largest single year contract price increases of any region in the U.S. and Canada. As a result of all these efforts, researchers now have enough material to make two or three releases in each of the next four or five years.
- The North Dakota Department of Agriculture partnered with the North Dakota Nursery and Greenhouse Association to develop a marketing campaign for nursery and floriculture products. A committee met to develop North Dakota grown criteria for trees, shrubs, evergreens, perennials, and bedding plants. The developed criteria was reviewed, modified, and approved by the committee, which enabled the association to identify current North Dakota growers in nursery and floriculture production. The North Dakota Grown information was presented during the Fall Horticulture seminar (70 participants) and the annual North Dakota Nursery and Greenhouse Association Convention (419 participants). Project staff also developed and distributed over 1,000 marketing brochures in order to promote the sale of North Dakota nursery and floriculture products.
- The North Dakota Department of Agriculture partnered with the Northern Crops Institute and U.S. food companies to evaluate the ingredient and new product uses for dry peas, lentils and chickpeas to nutritionally enhance existing product lines. Project staff analyzed the moisture, protein, starch, fiber, fat and microbial quality of pea starch, pea protein and pea fiber products. Results indicated that pea ingredients offer a wide range of protein, starch and fiber contents which may improve the nutritional and technological properties of food products. Consequently, a packet of information was developed that supplied technical quality specifications for pea, lentil, and chickpea crops. This information was distributed to pulse industry representatives at regional meetings, which included the annual convention, Pulse Days, and field trips.

- The North Dakota Department of Agriculture partnered with the Northarvest Bean Growers Association and the Minnesota Department of Agriculture to organize efforts leading to scientifically credible health claims with regard to dry beans. Scientists in the Food Science and Human Nutrition Department of Michigan State University at East Lansing, Michigan conducted a comprehensive review of literature on dry beans and human health and finalized a report in February 2008, titled "Beans and Health: A Comprehensive Review." Northarvest adopted the recommendations from the literature review, and the model for scientific investigation utilized by the U.S. Soybean Board was initiated. Next, Northarvest convened a daylong conference with the intention of developing a strategy to guide research investments made and to focus future requests for proposals in the respective scientific disciplines. Results of the conference lead directly to priorities for funding to be used by Northarvest in implementing its strategy to achieve a broader and stronger research foundation. Qualified researchers have now been attracted to the program and are able to conduct further research with dry beans and human health.
- The North Dakota Department of Agriculture partnered with the North Dakota Farmers Market and Growers Association to assist farmers markets to better market their products through educational seminars, printing of a farmers market guide book, and providing mini-grants to local farmers' markets for advertising and promotion. Surveys done at the markets showed that approximately 115,470 customers frequented the markets. Project staff produced and distributed a farmer's market guide that included a directory listing the names of fruit and vegetable producers and farmers markets throughout the state. As a result of this effort, five new farmers markets were created. Fruit and vegetable producers and farmers market managers attended a state-wide educational seminar to increase their effectiveness as producers and marketers. Some of the topics covered included, The Basics of High Tunnels & Extending Your Growing Season, Success with High Tunnels Plants that will work for you!, and Organic Production with High Tunnels. The efforts helped to reach over 250 people and evaluations showed that producers were overwhelmingly pleased with the presentations and the tour and these events motivated them to expand production in the state.

Ohio Department of Agriculture

Amount Funded: 122,689.29 Number of Projects: 6

- The Ohio Department of Agriculture purchased a mobile kitchen unit that began travelling around the state in July 2009 promoting Ohio made and grown products through cooking demonstrations featuring Ohio's specialty crops. The mobile kitchen unit attended 31 events for 57 days during 2010 and reached 978,579 consumers. One of the major events was the 12 day Ohio State Fair. As more people became aware of the kitchen, the requests for the unit to attend events increased from 14 in 2009 to 31 in 2010. Through the use of the mobile kitchen, the Department learned that consumers purchased certain produce if they knew how to prepare it in different ways.
- The Ohio Department of Agriculture contracted with the "In Ohio Country Today" television program to produce and develop 14 video vignettes highlighting various Ohio specialty crop operations. The 14 specialty crop operations were located across the state and highlighted specific products such as nursery and garden centers, farmers' markets, wineries and vineyards, Christmas trees, pumpkins, hydroponics, orchards, as well as small and large-scale produce growers. The videos aired on the "In Ohio Country Today" television program and were edited down to 3-5 minute vignettes and shared with 66 television media outlets across the state via DVDs. The videos were placed on the Ohio Proud web site www.ohioproud.org and media advisories were sent to all print media outlets promoting the availability of these videos on the Ohio Proud web site. Several media outlets will continue to utilize the footage of various specialty crop operations throughout the specific growing seasons, such as the Devine Farms video being highlighted during the fall pumpkin harvest season and the Kaleidoscope Farms video being highlighted during the winter holiday season.

- The Ohio Department of Agriculture (ODA) re-launched the Ohio Proud program with a brand new logo and interactive website. Consumer intercepts were conducted at 22 sites across the state of Ohio 13 grocery stores and nine farmers' and farm markets to determine consumer preference for an appealing logo. ODA staff also participated in store promotions at the retail level by building a large tossed salad with all Ohio produce topped with Ohio salad dressing which was served to the public. Project staff produced point-of-sale items such as stickers, window decals, price cards, and banners. A new interactive website (www.ohioproud.org) was developed, allowing Ohio Proud partners to do everything online from registering for events to editing their information and downloading the logo and special signage or order promotional items. The site also allows consumers to search for products/companies/farmers' markets through an online directory. An administration tool was developed allowing ODA staff to showcase an Ohio Proud partner of the month, add feature stories, and recruit for programs. As a part of the re-launch, ODA focused on recruiting farm and farmers' markets by reducing the membership fee and offering banners and signs to showcase Ohio's specialty crops. As a result of these efforts, 32 farmers' markets are now members of Ohio Proud. At the conclusion of the project, 435 companies were partners in the Ohio Proud program. The majority of the new partners are small specialty food companies with 32 of them being farmers' markets. This is an overall increase in membership of 133 percent since April 2008.
- The Ohio Department of Agriculture (ODA) offered a passport program during the 2009 Summer/Fall tourism season to increase awareness and visits to Ohio's agritourism sites in conjunction with The Ohio Magazine. The Ohio Magazine developed, designed and printed materials for this project beginning April/May 2009. In addition to the passport, The Ohio Magazine also issued a special Farm and Farmers' Market section in their July 2009 issue which promoted Ohio's specialty crops in conjunction with the program. The Passport Program along with the Markets was also featured on Ohio Proud and the magazine's websites. Consumers began visiting and using their passports at Ohio farm/farmers' markets at the end of June which is when they received the July issue of the magazine. ODA provided signage and stickers to the participating markets. Participating consumers had the opportunity to forward their completed passport to ODA for a gift of Ohio products made from specialty crops. Items such as popcorn, jam, fruit butter, honey, maple syrup, candy and nuts were purchased from Ohio Proud partners along with a reusable grocery bag. This allowed ODA to promote the fall crops and agritourism sites who rely on Fall visits. The Passport Program was promoted in the Ohio Magazine with a circulation of 378,000 readers ages 35 54 with an annual household income of \$100,000. As of December 31, 2009, the ODA received 184 completed passports.
- The Ohio Department of Agriculture helped Ohio's specialty crop producers sell their locally made and grown products by hosting the Ohio Food Summit featuring "Local Food Trade Talks." Ohio producers had the opportunity to spend one-on-one time in one location with specific buyers. These local food trade talks allowed the producer to introduce their products as well as offer time for the buyer to explain their expectations. In addition to the table top displays, buyers and producers had the opportunity to meet and network during the lunch hour which featured local foods. The Ohio Food Summit included 39 buyers representing 20 companies and 42 Ohio producers. The producers (20) represented products from the specialty crop industry such as jam, hot pepper relish, pasta sauce, wine, potatoes, cabbage, green beans, fruit butter, greens, radishes, cucumbers, zucchini, squash and tomatoes. Each company had prescheduled meetings with at least three different buyers. Many of the buyers scheduled additional meetings with companies once they saw the products. As a result of the Summit, the Statehouse Museum Shop (Columbus) developed three new business contacts at the event and began purchasing products made from specialty crops such as popcorn, homemade jams and fruit dips, and spicy nuts. Bon Appétit, an Ohio foodservice company, is considering a private label wine from Wyandotte Winery (Columbus). This wine will be served at special events and banquets catered by the foodservice company.
- The Ohio Department of Agriculture conducted interviews with school procurement personnel and background research to determine the level of local procurement currently being done in Ohio. Project staff documented these findings and made policy recommendations for the Ohio Food Policy Council at http://www.agri.ohio.gov/divs/FoodCouncil/FarmToSchool/docs/F2S_Final_Primer.pdf. Stakeholders for school procurement were also identified and placed on the websites of the Ohio Departments of Agriculture and Education. Ohio schools participating in the national Fruit and Vegetable program were contacted regarding local procurement possibilities. The report concluded that farmers can benefit from increased sales opportunities offered by school lunch programs. Once a relationship is established, schools offer steady and reliable demand for their product. Farm to school programs are also more likely to expand local food purchasing in the household, as students bring home lessons to their parents.

Oklahoma Department of Agriculture, Food, and Forestry

Amount Funded: 107,188.11 Number of Projects: 3

- The Oklahoma State Department of Agriculture, Food and Forestry developed and implemented an advertising campaign during Oklahoma's peak produce season to promote Oklahoma Grown products at farmers markets. This campaign centered on billboard and educational brochures. The educational brochure was developed in a manner that informed consumers about the benefits of eating a diet rich in fresh fruits and vegetables available at the Oklahoma Grown Farmers' Markets. Approximately 15,000 of these brochures have been distributed to Oklahoma County Extension Offices, Farmers Markets, the Oklahoma State Fair and the Tulsa State Fair. The billboard campaign allowed Oklahoma Grown Farmers' Markets to advertise on 14 billboards across the state of Oklahoma from May to October. The 14 Oklahoma Grown Farmers' Markets that received a billboard saw an average increase in sales of 23 percent which surpassed the goal of 15 percent.
- The Oklahoma State Department of Agriculture, Food and Forestry worked to increase in retail outlets for Oklahoma producers by assisting Oklahoma Grown Farmers' Markets with grant money. By offering grants, they were able to help managers continue to build and expand their markets through advertising, displays, and promotions. The markets that received the grants have seen a 24 percent increase in sales and a 37 percent increase in number of vendors. Specifically, the Owasso Farmers' Market created a website, 5,500 flyers in the local paper, posters with market information to be distributed at key local businesses, and two double faced signs showing market information. Consequently, Owasso increased its number of vendors from five in 2006 to 16 in 2007 and gross sales went from \$8,000.00 in 2006 to over \$11,000.00 in 2007. In 2005 there were 20 Oklahoma Grown Farmers' Markets and today there are 30 farmers markets selling '100 percent Oklahoma Grown' products.
- The Oklahoma State Department of Agriculture, Food and Forestry partnered with Oklahoma State University and downtown Oklahoma City to build an Oklahoma Grown urban farmers market. The market was open on Wednesdays and offered a large array of Oklahoma Grown specialty crop items. This market proved to be beneficial to both producers and consumers by offering a market in a location available to a large mass of people in the middle of the week. In this area, there are many issues dealing with access to fresh produce. With access to an Oklahoma Grown Farmers' Market, healthier alternatives are offered to people who live and work in Oklahoma City. This market is also helping to revive downtown Oklahoma City by drawing more consumers to the area and is helping to promote business with new urban revitalization projects. The positive relationships established with the businesses in downtown Oklahoma City were achieved and a model is now provided for other urban areas throughout the state.

Oregon Department of Agriculture

Amount Funded: 148,320.35 Number of Projects: 3

• The Oregon Department of Agriculture contributed to the development of standard operating procedures materials and training opportunities to educate producers about sources of microbial contamination in their product chain as well as about good agricultural practices (GAP) and good handling practices (GHP). Specifically, a GAP manual was printed and made available on the Internet (www.oregon.gov/ODA/ADMD/gap_ghp.shtml). This manual includes an overview and explanation of all items addressed during a GAP audit, a sample farm safety plan, and sample logs. Project staff printed and distributed over 1,000 copies of this manual at outreach meetings and workshops throughout Oregon. During these training sessions, project staff distributed GAP/GHP materials, presented practical information on GAP/GHP certification, and answered questions. Over 15 workshops were conducted within the first year of the grant. It is estimated that over 500 farmers and farm workers attended these workshops in order to gain a stronger understanding of food safety issues and increase knowledge and take positive steps toward preventative measures with regard to these issues through GAP/GHP certification.

- The Oregon Department of Agriculture worked with retailers and specialty crop producers to offer marketing and promotional materials that educate urban consumers about the agriculture industry and increase their appreciation of the production process of agricultural products produced in Oregon. A website (food-hub.org) that highlights and "tells the story" of the Oregon producer was developed in collaboration with Ecotrust. Consequently, Ecotrust conducted six field meetings and marketing workshops for small to medium sized Oregon specialty crop producers in order to demonstrate a test version of the software tool and receive feedback and discussion points on the site's usability. Approximately 25 people attended each of these meetings. Since its launch the website has registered over 550 members, of which the vast majority are specialty crop producers and buyers. In fact, during a single month the site had 207 registered members including 96 buyers and 120 sellers.
- The Oregon Department of Agriculture developed an accredited USDA National Organic Program (NOP) in order to increase its capacity to offer organic certification to specialty crop producers in Oregon. The project staff designed and implemented an extensive training program for NOP auditors. This helped to guarantee that these individuals understood specialty crop organic production and could fairly and competently interpret the requirements of the USDA NOP. In 2009, the Oregon Department of Agriculture was officially accredited to be a NOP certifier for production and handling and as of 2010 maintained seven organic inspectors. Interest in the organic certification program has increased with 30 specialty crop producers and handlers being certified in 2010. This interest is expected to grow as more people find out about these services.

Pennsylvania Department of Agriculture

Amount Funded: 128,893.21 Number of Projects: 5

- The Pennsylvania State Department of Agriculture partnered with the American Mushroom Institute to determine dosage and exposure levels of ultraviolet light necessary to increase the Vitamin D content in mushrooms. White and brown button mushrooms (sliced and whole) were treated for one second with ultraviolet light. White mushrooms produced slightly more Vitamin D than their brown counterparts. The results indicate that with increasing exposure to pulsed ultraviolet light, the Vitamin D content increased dramatically, but after four seconds of exposure the Vitamin D produced leveled off. The shelf life and quality attributes of the treated mushrooms were not adversely affected by this treatment. Researchers presented their findings to the mushroom industry at the Penn State Mushroom Industry Conference meeting in 2009 where over 200 attendees learned about the research as well as eight other meetings in which this research was described to an additional 210 interested parties.
- The Pennsylvania State Department of Agriculture developed and maintained an industry wide good agricultural practices (GAP) and good handling practices (GHP) cost-share program. The cost-share program was designed to provide \$400 to any business that successfully completed a GAP or GHP audit. Forty specialty crop producers participated in the first year of the program and 81 participated in year two for a total of 121 cost-share participants. Applications for the cost-share program were made available at trade events specific to specialty crop producers such as the Mid-Atlantic Fruit and Vegetable Growers annual meeting. Nearly 4,000 producers/growers received GAP cost-share program information through educational meetings. The program was successful in reaching producers and providing reimbursements that averaged 84 percent of costs in 2008 and 70 percent of costs in 2009.
- The Pennsylvania State Department of Agriculture partnered with Pennsylvania State University to support an Integrated Pest Management (IPM) demonstration project that showed local vegetable growers, specifically Amish and Mennonite farmers, the benefits of an IPM program. Approximately 95 growers gained knowledge of the project and the benefits from an IPM program at four grower's meetings and workshops. Project staff also held weekly on-farm personal field training sessions with an IPM/sustainable agriculture specialist and educational workshops, where eight growers learned pest identification, pest life cycles, and techniques of a biologically-based IPM approach. Growers were kept up-to-date on local pest trapping results that were performed on participating farms. These producers also learned about the detrimental effects of high-risk pesticides on beneficial organisms and how beneficial organisms can contribute to pest control. Growers that participated eliminated one to two pesticide applications per crop and eliminated all restricted-use pesticides. All eight of the participating growers are now regularly scouting for pests.

- The Pennsylvania State Department of Agriculture developed an auction price reporting system to provide timely information pertaining to the sale prices occurring at state produce auctions. This auction price reporting system consisted of two components including a web based system and a telephone hotline. These two resources provided produce prices for interested parties, which was important for produce sellers and buyers that needed to make decisions that affected their stance in the market. Auction managers submitted weekly sales numbers on the provided sales tracking and reporting sheet. The Department's information technology division tracked 177,000 hits to the market summary page between March, 2009 and January, 2010.
- The Pennsylvania State Department of Agriculture partnered with Pennsylvania State University to develop and implement the Mushroom Good Agricultural Practices (MGAP) Program in order to ensure that mushrooms continue to be a safe food product. Project staff prepared handbooks that outlined each of the MGAP standards, guidelines on how to put the standards into practice, and necessary paperwork required for documentation. In April 2009, three training sessions were held for growers and others involved in the industry outlining how to implement a MGAP program on a mushroom farm. Approximately 135 individuals attended these training sessions, which represented 76 farms and mushroom-related businesses. As a result, over 40 Pennsylvania farms have received an MGAP audit and successfully passed. Project staff also developed a database of growers and employees responsible for their farms' MGAP programs which has grown to over 180 contacts in Pennsylvania.

Puerto Rico Department of Agriculture

Amount Funded: 106,053.13 Number of Projects: 1

• The Puerto Rico Department of Agriculture implemented a two prong marketing campaign that focused efforts on the promotion of a "buy local" multi-product and an export promotion that increased international exposure to Puerto Rican specialty crop products at trade shows. Locally, the project staff concentrated on the development of promotional items such as printed brochures, booth stand materials, banners, and labels in order to support Puerto Rico grown produce. Twenty firms were also supported through their attendance at 15 local and international trade shows and expositions. Over the course of this project, the participating firms experienced an increase in sales as high as 25 percent.

Rhode Island Division of Agriculture

Amount Funded: 101,417.97 Number of Projects: 8

- The Rhode Island Division of Agriculture partnered with the Rhode Island Farm Bureau to develop and implement a buy local radio advertising campaign in order to increase demand for locally grown specialty crops purchased at roadside stands, farmers markets, and nurseries. Three local radio stations that maintain a listening area of over 200,000 people aired over 100 advertisements during a two year period. Many customers surveyed at Rhode Island farmers markets stated that they found out about the farmers markets through radio advertisements. Farmers also reported an increase in public awareness due to an increase of 10 percent in the sales of their specialty crop products.
- The Rhode Island Division of Agriculture partnered with the Rhode Island Nursery and Landscape Association (RINLA) to upgrade and expand its website in order to increase public use and awareness of specialty crops grown in Rhode Island. In an effort to improve the efficiency and aesthetic value of the website, the project staff redesigned many of the existing web pages, which included the home page, member locator, and resource links. Project staff also expanded elements of the website to increase the functionality of the website through the creation of individual sites for Rhode Island nursery crop growers as well as a real-time linkage to a stock locator. General feedback from the public and members has been positive. In fact, over the course of this project the website traffic increased from 6,000 visits to over 12,000 visits per month.

- The Rhode Island Division of Agriculture partnered with The Rhode Island Center for Agriculture Promotion & Education (RICAPE) to develop a series of professional development programs for specialty crop farmers that are interested, or engaged, in agri-tourism and/or alternative enterprises, and to conduct two marketing initiatives to promote Rhode Island farms. Consequently, the project staff conducted two fruit and vegetable farmer training workshops that focused on a range of topics including the general principles and current trends in agricultural tourism, marketing planning tourism development, hospitality training, education programs, alternative energy and waste systems. These training sessions lasted two hours and were attended by 50 fruit and vegetable growers. In fact, 40 participants requested on-farm visits to assist them in providing an agri-tourism experience. Project staff also increased the functionality and ease of navigation of the RICAPE website in order to improve visitors' access to specialty crop information. As a result, 20 Rhode Island farms expanded their agri-tourism activities and amenities available for visitors.
- The Rhode Island Division of Agriculture partnered with Kids First to continue the development of the statewide farm-to-school program in order to increase the amount of locally grown, fresh produce offered in schools. Project staff organized and conducted meetings between farmers and school food service directors in order to facilitate the development of farm-to-school purchasing relationships. Through these efforts, each of the 35 Rhode Island school districts purchased at least one locally grown product. In fact, recent data indicated that six Rhode Island school served 544 cases of apples, 500 dozens of corn, 117 cases of tomatoes, 500 pounds of potatoes, and 1,550 pounds of butternut squash over a two month period. Rhode Island farmers also indicated that there was an approximately 10 percent increase in the sales of specialty crops as compared to the previous year in which the program was not in effect.
- The Rhode Island Division of Agriculture partnered with Brown University to enhance the comprehensiveness, accessibility and accuracy of the "Farm Fresh Rhode Island" specialty crop farm database. This website generates over 40,000 unique visitors each summer month. The online database serves as a public resource that promotes the purchase of locally grown foods in Rhode Island. The website generated dozens of new business-to-business purchasing relationships with local farms, provided key information for journalists, and provided hundreds of Rhode Islanders the tools to buy fresh foods directly from farms. Over the course of this project, 100 farmers signed up for new accounts, 200 farms updated their information, and a total of 25 specialty crop delivery routes were added to the website.
- The Rhode Island Division of Agriculture implemented the expansion of a buy local initiative through the administration of produce preparation demonstrations at Rhode Island farmers markets, good agricultural practices (GAP) certification of local farms, and the marketing of Rhode Island and New England produce. Project staff conducted 20 cooking demonstrations at farmers markets throughout the state in order to expand its "Rhode Island Grown Take Some Home" buy local initiative. These presentations coordinated with specialty crop growers and local celebrity chefs. Onsite GAP and other inspection trainings were held at 18 farms in order to enhance local specialty crop producers' ability to market Rhode Island grown produce and nursery crops. The Rhode Island Agricultural Guide publication was revised and updated to ensure that the information correctly reflected the specialty crop operations in the state. The project staff ultimately distributed over 20,000 copies of this guide to the public. Likewise, the participation in the Harvest New England conference facilitated production seminars for over 200 specialty crop farmers.
- The Rhode Island Division of Agriculture partnered with the University of Rhode Island to install field trials of new squash varieties marketable to the ethnically diverse clientele of urban farmers markets. Field trials were installed with six types of winter squash grown under a perimeter trap crop (PTC) procedure. Squash varieties were selected on the basis of disease resistance, fruit size, and cultural diversity. Baby Blue Hubbards were planted around the perimeter of the field to attract cucumber beetles and minimize pesticide applications. Project staff hosted two meetings for local vegetable growers that highlighted the six squash varieties and the PTC technique. Seventy-eight local producers attended these meetings so that they could learn about the benefits of the presented information. Through these two meetings, project staff developed connections with 29 Rhode Island growers.
- The Rhode Island Division of Agriculture partnered with Trails End Farm to investigate the feasibility of using a modified greenhouse as an apiary house to over-winter and propagate bee colonies in New England. Demonstrations were done to illustrate that keeping colonies in a controlled environment produces strong colonies with lots of brood and young bees. Results of this project were made available to all apiary owners and a workshop held with local and regional apiary owners. This information was also disseminated to over 150 interested parties at the Bristol Beekeepers Association and at a presentation to the Portsmouth Garden Club.

South Carolina Department of Agriculture

Amount Funded: 110,424.99 Number of Projects: 1

• The South Carolina Department of Agriculture supported specialty crop producers and groups through the purchase of marketing materials, facilitation of in-store promotional events, and farmers' markets specialty crop promotional materials. Project staff updated and distributed South Carolina Certified Branding and Marketing signage and promotional materials to interested parties. These items included over 150 signs for roadside markets, price cards, stickers, hanging signs, and banners. The Department collaborated with several grocery chains including the Independent Grocers Alliance (IGA) and Wal-Mart to utilize South Carolina Certified Branding and Marketing promotional materials. Wal-Mart arranged to use these promotional materials displaying South Carolina Certified items at 50 stores while IGA displayed them at 35 stores. In order to begin this branding and marketing campaign, the project staff organized and facilitated "Market Day." More than 300 people attended this event, and were able to take advantage of the educational information concerning the quality, opportunity, diversity and availability of Certified South Carolina products. The project staff also planned and facilitated spring plant and flower shows to provide a comprehensive advertising and promotional program with more than 135,000 people attending the shows over four days.

South Dakota Department of Agriculture

Amount Funded: 100,850.02 Number of Projects: 3

- The South Dakota Department of Agriculture facilitated and coordinated several events at the South Dakota State Fair to provide specialty crop producers more exposure to consumers, help increase sales, and increase networking opportunities with other producers and purchasers. The project staff produced 30 second television vignettes for seven of the specialty crop producers, which aired the week before the State Fair. These advertisements encouraged consumers to visit the specialty crop producers at the State Fair. The project staff coordinated with local specialty crop companies to facilitate the events at the State Fair. Specifically, there were 19 companies that participated in the 2007 State Fair and 13 in the 2008 State Fair. Project staff also coordinated a wine tasting that featured over 40 varieties of wine from 11 different wineries in order to increase public awareness of the South Dakota wine industry. Over 5,000 State Fair attendees participated in the wine tasting. The South Dakota Chef Association also conducted three chef demonstrations at the State Fair, which featured locally grown specialty foods to over 1,000 State Fair visitors.
- The South Dakota Department of Agriculture partnered with the South Dakota Specialty Producers' Association to provide a series of workshops to help new and prospective growers understand the resource and time commitment necessary for successful wine grape production. A total of 138 wine grape producers attended and actively participated in these educational workshops and seminars. Specifically, the project staff facilitated four grape pruning workshops for wine grape producers. These individuals also held a seminar, which provided courses on topics that included vineyard basics and advanced management, other fruit that can be grown for wine in South Dakota, and marketing to wineries. The participants of this seminar also had the opportunity to learn about enology topics such as acidity and pH, and harvest maturity effects.
- The South Dakota Department of Agriculture partnered with Rahm Farms to determine the effectiveness of targeting water application directly to grape vines by means of micro sprinklers in order to avoid frost and cold damage to grape vine buds. The project staff installed frost-control sprinklers for three different grape types, which included Frontenac, Frontenac Gris, and Marquette. Over the course of two years, the project personnel determined that the frost control sprinklers were water-efficient and have the ability to cover and protect vines in ice in temperatures down to -3.33 degrees Celsius. However, it was also determined that frost-control sprinklers may not be necessary in most Midwest growing situations due to the mild spring and fall seasons. Ultimately, this information was distributed to 16 South Dakota vineyards and wineries as well as the South Dakota Cooperative Extension Service in order to ensure that all specialty crop producers could access the results of this research.

Tennessee Department of Agriculture

Amount Funded: 111,629.63 Number of Projects: 4

- The Tennessee State Department of Agriculture developed a statewide buy local brand, entitled Tennessee Farm Fresh, to promote conventional, natural, and organic products. Approximately 100 producers participated in the Tennessee Farm Fresh program. Farmers were encouraged to become actively involved in the promotion through press releases as well as through field days and other producer meetings. The project staff also utilized the Tennessee Farm Fresh website and brochure to list participating producers. These producers also participated in a series of workshops that focused on customer service, product display, tips for direct marketing, experienced advice from direct marketers, regulatory considerations for direct marketers, liability, pricing, marketing ideas, and success stories.
- The Tennessee State Department of Agriculture developed and distributed a resource guide, the "Tennessee Farm Fresh Directory", to provide consumers a map and list of outlets across Tennessee where locally grown/produced products can be purchased as well as an interactive website directory of producers/members that included maps and directions to member farm markets and farmers markets. This directory, a guide for consumers to find and purchase specialty crops from Tennessee producers, was distributed to about 25,000 consumers. Four new features were added to the website in order to serve the needs of producers and consumers, which included: a "Producer of the Month" story, recipes, a frame scrolling pictures of actual Tennessee Farm Fresh members, and a link for consumers to sign-up for seasonal newsletters. Through the addition of these new and interactive components, more than 19,700 people visited the Tennessee Farm Fresh website and stayed an average of two minutes and fifty-five seconds.
- The Tennessee State Department of Agriculture developed a promotional program that included kick-off presentations to appropriate venues to implement the buy local program. The project staff determined the advertising efforts through input gathered from local producers and the Tennessee Farm Fresh Steering Committee. Throughout the advertising campaign, project staff utilized mediums, which included radio, television, mobile billboards, newsprint, and magazines. Special emphasis was given to television advertisements because the project staff found it to be the most influential promotional vehicle for the Tennessee Farm Fresh program. It is estimated that over 3.2 million people were exposed to the Tennessee Farm Fresh program through this advertisement campaign. In fact, farmers accredited their sales increase of \$5,000 directly to the efforts made by the Tennessee Farm Fresh program.
- The Tennessee State Department of Agriculture partnered with the University of Tennessee Center for Profitable Agriculture to conduct statewide workshops aimed at promoting the value-added concepts of a strong buy local promotion program. A total of eight workshops were held at four different locations in Tennessee that discussed a variety of topics to help specialty crop producers. These topics included customer service, product displaying, direct marketing, regulatory considerations, liability, pricing, marketing ideas, and success stories. Over 300 producers and interested individuals participated in these workshops. The majority of the participants considered the workshops to be effective; in fact, over half of the participants (64 percent) indicated they had gained new skills in order to increase the success of their business.

Texas Department of Agriculture

Amount Funded: 156,488.66 Number of Projects: 8

• The Texas Department of Agriculture helped producers showcase their products through the creation of promotional materials and marketing tools that informed retail consumers of the benefits and availability of Texas produce and plants. Project staff assisted specialty crop producers in the development of 40 in-store demonstrations at local grocery stores and food markets across Texas to demonstrate the quality and availability of Texas produce. Through these demonstrations, consumers sampled blueberries, peaches, herbs, onions, cantaloupe, mushrooms, squash, tomatoes and watermelon. Recipe cards were also developed and distributed at these events as well as at promotions for Texas wine and food. These recipe cards reached more than 20,000 consumers. Some retailers reported that this project resulted in an increase in sales of up to 44 percent.

- The Texas Department of Agriculture partnered with Texas watermelon producers to develop in-store demonstrations and other promotions designed to increase public awareness and sales of watermelons during the major harvest periods. Project staff coordinated a watermelon sampling at the State Fair of Texas and the Texas Restaurant Association Tradeshow. Celebrity chefs also prepared delicious meals with Texas watermelon and provided new ideas for using watermelon in meal preparation. The watermelon retail promotions resulted in an increase of sales up to 42 percent during the promotion as well as during the following two weeks.
- The Texas Department of Agriculture helped increase public awareness of farmers markets and helped increase sales by developing brochures, advertisement campaigns and banners. Project staff developed advertisements for newspapers in three major cities (Houston, Austin, and San Antonio) as well as banners for certified farmers markets. Through the implementation of this promotion, project staff helped consumers find the freshest produce in more than 50 farmers markets, which contributed to the sales of over 100 specialty crop farmers. Consequently, some markets reported an increase of up to 42 percent sales over the previous year. Pick-your-own farms recorded up to a 10 percent increase in sales and attendance at farmers markets increased an average of 29 percent as a direct result of this advertising project.
- The Texas Department of Agriculture promoted Texas plants and produce at promotional events across the state simultaneously through the development and utilization of pull-up display screens. A total of 26 agricultural pull-up screens were developed and distributed to regional staff. There was special emphasis placed on produce and horticultural crops; however, these media items promoted a variety of agriculture. These pull-up screens were used at more than 100 consumer and industry events statewide and visible to more than 1 million Texans. This improved exposure to these specialty crops resulted in an increase in the number of visits to the GO TEXAN and Pick Texas websites, which was boosted 10 percent over the previous year.
- The Texas Department of Agriculture contracted with a chef to cook Texas produce at the Texas Restaurant Association Foodservice Show, Produce Marketing Association Fresh Summit, and Texas State Fair in order to gain new Texas specialty crop buyers. The chef promoted specialty crops such as cabbage, peppers, peaches, onions, spinach, grapefruit, potatoes, and watermelon. Samples of prepared dishes were distributed to 500 visitors at the Texas Restaurant Association Foodservice Show, to 50 industry professionals during an agriculture industry tour, and to more than 2,000 visitors at the Texas State Fair.
- TThe Texas Department of Agriculture participated in the Produce Marketing Association Fresh Summit. TDA also provided assistance for Texas specialty crop producers so that they could attend the event. Specifically, project staff provided booth space for the Texas State Florist Association producers' exhibit. This opportunity offered Texas floral growers a venue to showcase their products to out-of-state buyers' at a nationally recognized event. Project staff also organized chef demonstrations, which promoted cabbage, onions, and grapefruit. The addition of a chef preparing samples with Texas produce increased the number of visitors to the Texas Town booth by 30 percent.
- The Texas Department of Agriculture partnered with the Texas Nursery and Landscape Association to design and develop a horticulture landscape guide with information on Texas-grown plants, nursery locations and certified nurserymen. Project staff developed the GO TEXAN Landscape Guide in order to assist consumers and landscapers in the implementation of the "seven easy steps to a beautiful landscape." The Texas Department of Agriculture also developed a series of three different brochures that showcased Texas horticulture, including the Texas Superstar Brochure, GO TEXAN Herbs: The Very Zest of Texas, and Texas Earth Kind™ Rose brochure. These brochures were distributed to over 50,000 consumers and industry partners.
- The Texas Department of Agriculture developed recipe cards used by school food service staff, restaurants, retail buyers, and consumers in order to increase consumer awareness of Texas produce. There were a total of 20 recipes developed that used Texas produce. These recipes were printed on individual recipe cards and in booklets. Once completed, the recipes were distributed to more than 50,000 consumers, chefs, and retailers across Texas and the United States. Requests for the recipe cards using Texas produce increased 100 percent from the previous year.

Utah Department of Agriculture and Food

Amount Funded: 103,135.47 Number of Projects: 10

- The Utah Department of Agriculture and Food partnered with the Utah Botanical Center and the Utah Crop Improvement Association to develop a guide on how native plants can be used in urban landscapes. The guide discussed the increase of seed availability, development of efficient propagation techniques, and transfer of new technologies to green industry stakeholders. Project staff conducted statewide plant population surveys and mapping in order to identify plant species that exhibit potentially superior aesthetic characteristics. Consequently, nine native plants were identified and mapped. During this time, project staff developed a variety of investigative plant propagation techniques to see how best to help these plants grow and flourish, and established a common garden and landscape demonstration plot. Nursery professional were also surveyed, and 52 percent reported that they were not familiar with the methods required to care for native plants in a home landscape. The improved information provided by the guide about plant-water relationships, proper plant placement, design concepts, and how to establish and maintain a native plant landscape will enable the maturation and development of each of these plants in Utah.
- The Utah Department of Agriculture and Food partnered with the Castleland RC&D Council and the Utah State University County Extension to create a model for a fruit crop industry in Emery County, Utah by evaluating which late blooming, early harvest fruit varieties to market at community celebrations. Different varieties of early fruit producing crops were planted on a small scale to take advantage of an early market opportunity. Project staff also planted late flowering cherries that survive late frosts. Ultimately, numerous trees were planted (12 cherry trees, 12 peach trees, 15 grape vines, two plum trees, and three pear trees) in order to illustrate the cultivation of fruit trees.
- The Utah Department of Agriculture and Food partnered with the Utah State University Extension to organize and advertise a new farmers market in Price, Utah to the local communities. The advertising campaign started with the purchase of radio airtime and newspaper ads throughout the market season. Promotional signs were also purchased and placed at strategic locations in the community. The advertising campaign was very successful and resulted in many weeks in which the produce sold out. In fact, an estimate for gross sales for the first season was \$8,000 to \$9,000, with an average of 150 customers visiting the market each week. With such a positive response from the community, producers are excited to have additional market events become a permanent fixture in the community.
- The Utah Department of Agriculture and Food partnered with Utah State University to test herbicides recently registered for use on onions to achieve increased levels of weed control. Field trials were conducted on onion fields to test the effectiveness of various herbicide treatment programs. The trial results demonstrated the necessity of using both soilactive herbicides and post-emergence herbicides together in order to maximize weed control and onion yields. The data also illustrated that some combinations cause significant onion injury and result in reduced onion yields. Trial results suggest that utilizing Nortron, in post-emergence herbicide mixtures could maintain effective weed control while reducing onion injury, and that the resulting yield increase would easily offset the added cost of the herbicide. Through presentations given at annual meetings and field tours in 2008 and 2009, project staff provided these research results to onion producers.
- The Utah Department of Agriculture and Food partnered with the Improvement of Perennial Plants for Food and Bioenergy, Inc. to establish a nut tree rootstock and variety trial evaluation to provide the basis for recommendations for improving the growth and output of locally adapted trees. Project staff planted a total of 7,593 trees in eight different field test locations in Northern Utah (34 species and 233 different varieties and accessions). Some of the improvements discovered included an improvement in the flavor, edible pits, and higher resistance to lime-induced iron chlorosis of apricot trees; the ability of walnut trees to produce within two or three years; and increased tolerance to cold and increased diversity of hazelnut trees. Through the maintenance and promotion of these fruit producing perennial trees and shrubs, Utah and other parts of the Intermountain West will be able to grow larger quantities of nutritious food.

- The Utah Department of Agriculture and Food partnered with Payson Fruit Growers to ensure products are safe, nutritious, and protected, by organizing training seminars for Utah tart cherry growers. Two training seminars took place in Utah and provided instruction to fruit industry employees. Specifically, the American Institute of Baking presented a two day training seminar that concentrated on providing instruction on Hazard Analysis and Critical Control Point, Food Safety, as well as other areas. The Technical Services Director of Oceana Foods in Michigan also provided a week-long specialized training and inspection for local fruit processors including McMullins Orchards and both Payson Fruit Growers processing plants. Consequently, Payson Fruit Growers noticed an increased level of awareness and understanding of the importance of these and other policies and procedures.
- The Utah Department of Agriculture and Food partnered with Utah State Horticulture Association to improve the accuracy and accessibility to weather station data for providing crop water use estimates (evapotranspiration, ET), to assist commercial orchard managers in gaining experience with soil moisture monitoring systems, and to evaluate regulated deficit irrigation practices for tart cherry production. Project staff upgraded existing orchard weather stations and communication devices in order to facilitate automatic updates. Soil moisture measurement equipment was also deployed in the orchard blocks of cooperating growers. One participating orchard manager reported that using the webbased ET estimates and the soil moisture monitoring equipment saved 12 days of irrigation. Water savings on this single farm amounted to 0.25 acre feet of water per acre of orchard. This reduced the water use by 145 acre feet, which accounted for an additional cost-savings of \$2,400 in water expenditures.
- The Utah Department of Agriculture and Food partnered with the Utah State Horticulture Association and Utah State University to monitor the effectiveness of utilizing mating disruption and insecticides to lower Codling Moth populations, and to develop useful trap thresholds and predictive relationship for fruit injury. The project also explored ways to attract the Cherry Fruit Fly to traps and insecticide-bait droplets. Four types of codling moth lures were evaluated in 12 apple orchards. Thirteen compounds as well as the essence of western cherry fruit fly adults were added to yellow sticky traps and were evaluated for their appeal. Ammonium carbonate and ammonium hydroxide attracted Western Cherry Fruit Fly adults 10 times more than the non-baited traps. Brewer's yeast also enhanced attraction of the fruit flies over non-baited traps. Improvements to codling moth and cherry fruit fly monitoring technologies will be made based on results from these and other research trials.
- The Utah Department of Agriculture and Food partnered with Utah State Horticultural Research Committee and Utah State University to provide a survey of Erwinia amylovora (Ea) bacterial isolates in Utah apple orchards that utilized Kasumin (kasugamycin) for control of fire blight in apples and research prevention of powdery mildew in apples and cherries as well as Coryneum blight on stone. Project staff collected over 450 samples in which resistant isolates were found at all commercial sites sampled with 32 isolates identified as resistant to streptomycin at 100 ppm, 18 at 200 ppm, 14 at 400 ppm, and none at 1000 ppm. Percentages of Ea isolates in the bacterial population that were found resistant to streptomycin was 72 percent at 30 ppm and 47 percent at 200 ppm and higher. None of the isolates were resistant to kasugamycin at 100 ppm. Four apple cultivars were inoculated at flowering to account for floral fire blight strike percentages, for Mycoshield at 100 ppm floral strike percentage was the highest at 14.5 percent, and Agrimycin was the lowest at 100 ppm with strike at five percent. Results of the Erwinia amylovora survey were presented at the 11th International Fire Blight Meetings and at the annual meeting of the Utah State Horticulture Association. General recommendations, based on the survey findings of resistance to streptomycin, are for the public and commercial growers in Utah County to avoid using streptomycin antibiotic compounds to control fire blight as it has proven to be insufficient to control fire blight.
- The Utah Department of Agriculture and Food partnered with Utah State University to investigate the variability, genetic stability, diversity, and drought tolerance of the Eriogonum corymbosum shrub to make initial cultivar selections. The different selections of the shrub were planted in a common garden and the ranges in characteristics were evaluated under uniform conditions. Seeds were collected from pollinated flowers, then each selection's offspring was evaluated to determine the degree each type of seed, outcrossed versus non-outcrossed, that represented parental morphological traits. In addition, all species were irrigated at different frequencies over the season. Impact of drought was measured in terms of internal water potential, stomatal conductance (photosynthesis), above ground growth, and plant mortality. The field experiment was established in 2007 with four selections and with Cornus sericea planted as the non-drought tolerant control. Several selections proved to be very sensitive to any kind of water. Interestingly, these selections all had yellow flowers, which suggest that those types simply may not lend themselves to nursery production.

Vermont Agency of Agriculture

Amount Funded: 101,397.90 Number of Projects: 7

• The Vermont Agency of Agriculture improved two websites to increase specialty crop producers' access to prospective buyers. These efforts focused on the development of a broad platform for farmers to post their information through investing in improvements to the state's agriculture site (www.vermontagriculture.com). Improvements consisted of an updated homepage, a consistently updated highlight of the farm season for specialty crops, and local activities with links to relevant databases. Project staff also supported the development and improvement of online local business-to-business support through the Vermont Fresh Network (www.vermontfresh.net). The new components served the purpose of identifying the organization's members. Consequently, the Vermont Agency of Agriculture website experienced an increase of visitors between fall 2006 (20,000 visits) and fall 2009 (98,000 visit) as a result of the improvements.

- The Vermont Agency of Agriculture partnered with the New England Apple Association and the Vermont Apple Marketing Board to increase regional and national cooperation by bringing Vermont apple growers to national and international events and cooperating on marketing outreach. Specifically, project staff increased use of digital media to promote New England apples and provided content for online promotions through the improvement of the New England Apple Association website. Project staff also developed two videos that featured Vermont orchards to promote apples online. Representatives from the Vermont apple industry also had the opportunity to make several trips on behalf of Vermont apples. The events included the Fruit Logistica International Trade Fair for Fruit and Vegetable Marketing, the Annual New England Vegetable and Fruit Conference, the Food Export Marketing Forum, and SIAL Montreal trade show.
- The Vermont Agency of Agriculture worked with the Vermont Berry and Vegetable Industry to provide training programs in production, crop management, pest control, marketing, good agricultural practices and other practices. Particularly, project staff organized the annual Vermont Vegetable and Berry Growers' Association meeting, which included six educational workshops for 110 local growers. These workshops included topics such as innovative vegetable and berry farms, Farm Bill projects on Vermont vegetable farms, insect habitats on Vermont vegetable farms, a soil nematode of Vermont vegetable farms, results of strawberry variety trials from 2003-2008 in Maine, and growing Sudax for strawberry mulch. Project staff also conducted seven on-farm workshops for 110 growers that emphasized greenhouse tomatoes, vegetable soil fertility management, and beginning farmer skills. Approximately 96 percent of the surveyed workshop participants indicated that attending the workshop had increased their awareness of a new practice, product, or service. Also, 78 percent indicated that they would alter their current agricultural practices during the next season as a result of attending the workshop.
- The Vermont Agency of Agriculture designed and distributed two seasonal publications of the Vermont Harvest, which promoted specialty crop products available during the fall and winter seasons. The Vermont Harvest was primarily distributed as an insert in the Burlington Free Press, Seven Days, and Rutland Herald newspapers, which are delivered to approximately 160,000 households. The two issues of this magazine featured cranberries, Christmas trees, maple syrup, apples, wine and spirits, pumpkins, and honey; however, it was designed to benefit all Vermont specialty crop producers. Through this endeavor, the magazine focused efforts to increase the public's awareness of the accessibility of Vermont specialty crops; particularly during the fall and winter seasons.
- The Vermont Agency of Agriculture partnered with the Vermont Department of Health and the Vermont Food Education Every Day (VT-FEED) consortium to promote increased consumption of fruits and vegetables through the development of a best practices guide for incorporating local food into the classroom. Vermont educators produced specialty crop curriculum units in conjunction with VT-FEED that are appropriate for students in Kindergarten through 8th grade. These units were posted to the Internet in a downloadable and reproducible format as an effort to increase their accessibility to teachers throughout the state. Representation of specialty crops ranged from broad lesson plans (Comida Mexicana; From Seed to Plate) to a focus on single products (It's All About Squash; Not Just a Jack-O-Lantern). The curriculum units promoted all specialty crops and were designed to benefit approximately 1,142 Vermont produce growers.

- The Vermont Agency of Agriculture worked with winemakers and related fruit growers to provide the grape and wine industry the necessary marketing materials as well as educational and technical assistance in order to establish the Vermont Grape and Wine Council. The Vermont Grape and Wine Council's mission is to enhance Vermont's wine industry and educate new and existing growers and winemakers. This council currently consists of 21 representatives that include grape growers and wine producers, as well as representatives from the University of Vermont Extension Office, the Agencies of Agriculture, Economic Development, and Tourism and Marketing, and the Hospitality Council of Vermont Chamber of Commerce. This initial work also laid the foundation for grower and producer participation in specialty events, partnerships with other value added food makers, printed marketing materials, and educational presentations.
- The Vermont Agency of Agriculture partnered with the Harvest New England Association, Inc. to provide New England specialty crop producers with the opportunity to obtain new marketing skills through the planning and facilitation of the Harvest New England 2009 biannual conference. Project staff planned and designed an agenda that increased marketing skills for specialty crop producers and marketed the event to interested growers through electronic and paper media. The topics at this conference included online marketing, agritourism, food safety issues, farmers' market management and electronic benefit transfer (EBT) systems, on-farm tours, farm management, and new trends in farm and food marketing. The conference attracted over 750 participants and 100 vendors from all six New England states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont).

Virginia Department of Agriculture and Consumer Services

Amount Funded: 111,797.84 Number of Projects: 11

- The Virginia Department of Agriculture and Consumer Services partnered with the Office of Plant and Pest Services to provide equipment for diagnostic services used in the identification of Africanized honey bees and other pests and diseases in beehives. Diagnostic equipment was purchased for each of the offices of the Virginia Department of Agriculture Office of Plant Industry Services (OPIS). To facilitate beekeeper training a demonstration apiary was established at Randolph Farm in Ettrick, Virginia. The Ettrick facility offers classroom resources and a demonstration area with 10 established honey bee hives. State agricultural inspectors also received training in honey bee pest and disease diagnosis through the U.S. Department of Agriculture Bee Research Laboratory. Additionally, beekeeper training and honey bee disease identification workshops were conducted at various locations in cooperation with the Virginia Cooperative Extension. These one-day workshops included macro- and microscopic diagnosis of honey bee diseases and pests. There were approximately 20 to 25 attendees at each of the 48 meetings.
- The Virginia Department of Agriculture and Consumer Services partnered the Virginia Nursery and Landscape Association, Virginia Tech Institute for Advanced Learning and Research and the Master Gardeners to design and produce promotional materials that were used at selected independent retail garden centers. The Project staff designed, produced, and disseminated banners, posters, brochures, plant tags, plant pot stickers, exhibits, and plant signs. The logo and brochures were provided to garden writers, participating garden centers, special events, short courses, trade shows, arboretums and botanical gardens, garden clubs, and television presentations. Twenty independent retail garden centers in Virginia were selected to receive the promotional materials around the state.
- The Virginia Department of Agriculture and Consumer Services developed a website guide that instructs producers on the applications available to customize a website for the sale of specialty crops on the Internet. Project staff researched and located economical or free sources of software suitable for small specialty crop growers to build their own websites. A menu driven website guide was then written in order to address the small specialty crop growers' need for an economical source to market their produce. This guide was transferred from the website to a compact disc format in order to distribute it to specialty crop producers. Over the course of this website's life there were over 200 website visits for the construction guide. Fifty compact discs were also supplied to the Virginia Department of Agriculture and Consumer Services to distribute.

- The Virginia Department of Agriculture and Consumer Services partnered with Owen Farm and the Virginia Cooperative Extension to plant a demonstration plot of different varieties of pumpkin seeds in order to identify the best pumpkin variety based on production and marketing value for southern Virginia. The results of this year study indicated that pretreated seeds performed better than untreated seeds. The project staff also found that high-yield pie pumpkins included Neon's, Lil' Ironsides, and Hybrid Pams; while the high-yield Jack-o'-Lanterns included Aladdin's and Howdens. In fact, this study also indicated that the Atlantic Giants were the optimum large pumpkin, which produced sizes exceeding an average of 75 pounds or more than Big Max. The information was distributed to local businesses and visitor centers through a brochure. Project staff also held a meeting to provide the results from the pumpkin plots and discuss the viability of increasing the marketability of pumpkins in Pittsylvania County. Thirty-five local farmers attended this event to learn about the best pumpkin seed varieties for the area.
- The Virginia Department of Agriculture and Consumer Services collected data to characterize and identify key issues affecting the performance of farmers' markets from the perspective of farmers' market managers and to analyze the structure, scope, and organization of farmers' markets in order to estimate their economic impact on the Commonwealth of Virginia. The characterization of farmers' markets in Virginia was done through an on-line survey of farmers' market managers. Thirty-five managers representing 58 markets in Virginia completed the survey accounting for approximately 44 percent of the farmers' markets in the state. Through the information and data collected from surveys, publications and extension programming will help farmers' markets to have a source of information about their operations, structure, organization and economic impact. Three extension publications—one on starting a farmers' market and two characterizing farmers' markets in Virginia are forthcoming as a result of the project activities.
- The Virginia Department of Agriculture and Consumer Services partnered with Sandridge and Sons Honey to expand a small honey and pollination operation to provide a viable pollination alternative in the Mid-Atlantic region. Supplies were purchased to establish and transport beehives in order to offer pollination services to a variety of local and regional specialty crop producers. These services were communicated through the use of the Internet, extension agents, farm coops, farmers markets, Farm Bureau, and other farming publications. The hives were also established in order to facilitate the pollination of specialty crops. Of the 50 hives installed at the beginning of the grant, 35 hives were rented for eight weeks to pollinate cantaloupe fields in Middlesex County. Hives were also rented and placed for pollination in James City County and Hanover County.
- The Virginia Department of Agriculture and Consumer Services partnered with Amy's Garden and the Virginia Cooperative Extension to demonstrate the viability of organic small fruit production in Virginia and provide a working model of diversification to other regional growers. Specifically, an organic demonstration garden was established that included blueberries, raspberries, and blackberries. Project staff continued with the project by incorporating experimental methods to ascertain the most efficient and economical organic plants and farming methods. Project staff also presented a lecture to approximately 100 growers at the Virginia Small Family Farm Conference on successful small-scale farming, which focused on plant diversity as a key success story.
- The Virginia Department of Agriculture and Consumer Services partnered with Joe's Trees to educate children about the growth and care of Christmas trees through the utilization of school tours as well as Ag in the Classroom lesson plans. Initially, project staff mailed 185 farm tour invitations, which provided a brief overview of the tour itinerary to surrounding schools. Joe's Trees also worked with Ag in the Classroom and the Virginia Standards of Learning to develop correlated lesson plans in enhance the usefulness of the school tours for teachers. Children were taught about the eight to 10 year growth cycle of Christmas trees, which included four phases (the pinecone, seedling, plant nurturing, and harvest). All educators that participated in these activities returned during subsequent years.
- The Virginia Department of Agriculture and Consumer Services partnered with the Southwest Virginia Farmers' Market to provide a facility and qualified personnel to implement a demonstration program that tested the feasibility and economic vitality of a fruit and vegetable cooler to add value to agricultural crops in rural Virginia. Through this process, a hydrocoler was rented to enhance the freshness of locally grown fruits and vegetables. This process of rapidly cooling fruit and vegetables removes field heat, significantly enhances freshness, and results in a longer shelf life. The rented machine enabled project staff to cool 420 bushels of corn in a 45 minute period. In fact, 14,612 crates of corn at a market value of \$131,508 were cooled in 2007. During the entire season, 20,931 boxes of broccoli at a market value of \$230,241 were shipped to interested buyers. Consequently, project staff determined that there is a need in the Southwest area of Virginia to purchase a hydro-cooler.

- The Virginia Department of Agriculture and Consumer Services partnered with the Irish Potato Board to replace Virginia Potato Disease Advisory sensors to ensure the advisory will function long-term so that potato growers can increase profitability through the reduction of pesticide applications. Specifically, project staff purchased new sensor and supporting technology for six locations throughout Virginia. Consequently, thirteen weekly advisories were disseminated in 2008 and 2009 to 100 percent of the Eastern Shore commercial potato producers. In 2008 six fungicide applications on average were spared through the implementation of the Virginia Potato Disease Advisory. Reduced fungicide applications on average were spared through the implementation of the Virginia Potato Disease Advisory. Reduced fungicide applications constituted a savings of \$180,000 in unnecessary inputs for Eastern Shore potato Disease Advisory. Reduced fungicide applications constituted a savings of \$180,000 in unnecessary inputs for Eastern Shore potato producers. No severe outbreaks of potato diseases were reported during either year.
- The Virginia Department of Agriculture and Consumer Services partnered with Appalachian Sustainable Development to increase market opportunities and income for farmers transitioning from tobacco and other conventional crops to organic fruits and vegetables. Workshops and demonstrations on the construction and use of hoop houses for early spring and/or late fall production were held in Southwest Virginia. Approximately 15 specialty crop growers now use hoop house as a result of these educational events. Project staff also focused efforts to expand the markets for organic produce, which included marketing to buyers such as Healthy Families, Family Farms, and East Coast Fresh Cuts as well as the emerging market of local college and university dining services. In addition, the number of local farmers raising organic produce increased by about 30, which included producers that were involved in both Appalachian Harvest and direct market farmers.

Washington State Department of Agriculture

Amount Funded: 182,442.81 **Number of Projects:** 6

- The Washington State Department of Agriculture partnered with the Washington State Apple Commission to promote a "healthy choices" program for children that encouraged the increased consumption of apples through the creation of a "kids section" on the "Best Apple" website. Specifically, project staff redesigned and updated the website to include downloadable apple-related information, games and projects to enhance classroom activities, a healthy choices brochure, and an apple poster for the classroom. In order to increase awareness about this new effort, these materials and information in English and Spanish was also sent to schools. The commission distributed over 90,000 brochures, which included a letter outlining the program and the intent of the poster and brochure. Through these efforts, the average number of visits to the kids section grew by 52 percent from the previous year.
- The Washington State Department of Agriculture partnered with the Washington Wine Industry Foundation to provide wine growers with an industry best practices knowledge base in order to increase the sustainability of this industry. Specifically, project staff encouraged the use of Vinewise, which is an online interactive learning tool created to help wine grape growers and vintners determine the sustainability of their business and viticultural practices. A general and specific orientation about the project was held at the annual meeting of the Washington Association of Wine Grape Growers and titled 'How to: Sustain Your Vineyard'. Project staff also individually contacted growers to gauge the awareness and interest of Vinewise. An effort to increase grower/producer understanding of the utilization of Vinewise was also implemented through the issuance of alerts and updates to growers as well as informational presentations concerning the impetus of Vinewise. Over 50 percent of the 300 producers that participated in this project completed a Vinewise self-assessment that documented current practices. Fifteen percent of these producers developed action plans that resulted from the self-assessment and producer awareness of the self-assessment increased by 115 percent.
- The Washington State Department of Agriculture partnered with The Washington Asparagus Commission conducted a "food safety as it relates to marketing" survey to find out what the commercial purchasers of Washington asparagus see as important issues ahead for the industry and to provide a report to the Washington Asparagus Industry on how to respond to packaging changes. The survey was distributed throughout United States and Canada and resulted in many recommendations of for this specialty crop industry including the need to prioritize food safety. These recommendations are intended to be reviewed for placement into standard operating procedures for both the growers and the handlers. The Washington asparagus growers' product was also showcased to state, national and international audiences of buyers at the Produce Marketing Association (PMA) Show. Through participating in the Produce Marketing Association Show, project staff increased the number of buyer contacts by 25 percent (69 new entities).

- The Washington State Department of Agriculture partnered with the Washington State Fruit Commission to examine the growth of cherry competition from Eastern European countries such as Ukraine, Turkey, and Poland in order to potentially increase the market share for Washington cherry growers. The commission gathered information concerning pre- and post-harvest practices, government policies, and infrastructure development that affect cherry production and exports. The results of this research were compiled into a report that illustrated that both Poland and Ukraine are not yet capable of distributing their product to foreign markets; however, it also confirmed that Turkey is the major competitor for the European market due to its ability to ship cherries to European consumers and sell this product at a lower price. This report was distributed to Washington cherry growers as well as the California Cherry Advisory Board in order to implement strategic planning as a whole industry. Project staff also initiated a market retail promotion with a European country to expose Eastern Europeans to Washington State premium sweet cherries. In fact, the Commission teamed with a retailer in Belgium to run a two-day in-store demonstration in 25 outlets. During that two-day promotion, 6,830 cartons were sold.
- The Washington State Department of Agriculture partnered with the Washington State Potato Commission and Washington State University to research and review supply-chain challenges and transportation synergies associated with the delivery of fresh potatoes to western Russia. A report was developed from compiled and evaluated information concerning the inventory of all feasible transportation alternatives from central Washington State to St. Petersburg, Russia. This information was collected from a variety of sources to compare and contrast potato transportation alternatives. In order to help determine the most efficient product pathway for fresh potato delivery, project staff held three discussions that consisted of a review of the current Washington State fresh potato trade, expert review of the protocols for Russian import trade, logistics, and available trade insurance programs. The meeting participants provided feedback and suggestions for the best shipping options to western Russia. Consequently, this report and subsequent discussions provided a generalized review of time and cost to deliver the product from Washington State to St. Petersburg, Russia.
- The Washington State Department of Agriculture partnered with the Washington State Red Raspberry Commission to support the partnership with other specialty crop interested stakeholders in the exploration and development of pruning and tying technology that benefits raspberry growers. A Specialty Crop Research Team workshop brought together approximately 120 people. This workshop included regional producers and processors of specialty crops, public and private sector researchers, equipment and technology providers, state and federal research institutional leaders and policy makers. During this meeting, participants established regional working groups and developed a regionally-focused strategic plan to guide public. The Washington Red Raspberry Commission also held an Innovation Tour, which focused on the economics of innovation and the needs of the small fruit industry. More than 24 growers, researchers, and industry representatives attended this event.

West Virginia Department of Agriculture

Amount Funded: 100,286.87 Number of Projects: 10

- The West Virginia Department of Agriculture developed two farmers markets in Gilmer County in order to encourage local specialty crop production and consumption. Specifically, project staff focused efforts to grow markets at the Harts' Veterans' and Community Center and the Gilmer County Farmers Market. Specialty crop producers were identified who expressed an interest in market participation. The project staff designed and printed market banners as well as advertisements for local newspapers. The establishment of these two markets was particularly advantageous because it enabled residents of the facilities to utilize the Senior Farmers Market Coupon Program by providing an acceptance location that did not previously exist.
- The West Virginia Department of Agriculture worked with a producer-led board of directors to develop a West Virginia Farmers Market Association, which serves the needs of existing and start-up farmers markets and specialty crop growers by facilitating collaboration and providing support and technical assistance. Initially, the association reviewed existing West Virginia Direct Marketing Association by-laws and materials in preparation for drafting the West Virginia Farmers' Market Association by-laws. Project staff also held core group meetings in order to determine interim officers, board, and membership structures for organization. There was also a concerted effort to develop membership materials, a logo, and a listing of farmer and market contacts in an effort to help the association grow. The West Virginia Farmers Market Association ultimately serves as a resource of new markets and opportunities for the specialty crop industry.

- The West Virginia Department of Agriculture held a competitive grant program for markets and grower clubs to design a promotional and advertising campaign that would inform consumers of the variety and quality of specialty crops available at farmers markets. These grants supported nine different markets throughout West Virginia including Spencer Farmers Market, Berkeley Springs Farmers Market, Summersville Tailgate Market, Fayette County Farmers Market, Jefferson County Development Authority, Brooke County Northern Panhandle Farm Markets, Morgantown Farmers Market Growers Association, Monroe Farm Market, and Beckley Uptown Farmers Market. Projects within this mini-grant program included the development of market websites, distribution of advertising materials, as well as print and video advertisements. In fact, as a result of the Monroe Farm Market media campaign, the market experienced a 140 percent increase in revenue (\$5,600 in 2006 to more the \$40,000 in 2008). Project staff also noticed that the overall number of farmers markets in West Virginia increased from 23 in 2006 to 28 in 2008, which was a 60.5 percent increase.
- The West Virginia Department of Agriculture partnered with the West Virginia University Horticulture Team and the West Virginia University Extension to provide information on the preparation of nutritious meals that utilize West Virginia specialty crops. Project staff developed and distributed 11 recipe cards as well as a supplemental factsheet to 24 West Virginia farmers markets that maintain approximately 300 specialty crop producers. Recipe cards included instructions on how to prepare cabbage and grape salad, blueberry buckle, mustard coleslaw, buttercup squash casserole, peach crisp, and pasta with fresh tomatoes deluxe. Cooking demonstrations were also conducted at each of the markets in order to educate patrons concerning the preparation of locally grown specialty crops. A tracking of sales data from the Mercer County market that utilized this resource reflected a 3.2 percent increase over the previous year. One year after the campaign, the market sales again trended upward with another 7.2 percent increase over the 2006 baseline figures.
- The West Virginia Department of Agriculture partnered with the Upshur/Buckhannon Farmers Market and West Virginia University Extension Service to provide technical assistance, educational workshops, and promotional materials on the use of high tunnel growing and to develop a community garden to promote the production of specialty crops. A community garden was developed that included production and meal preparation functions. In addition to the community service component, the project also researched high tunnel production versus traditional methods. The value of produce from the community garden was \$850.00 and was distributed to approximately 80 people in the community. As a result of the markets efforts, there was an increased productivity of 30 percent from utilizing the high tunnel technology. There was a 32 percent increase in sales at the market due to the signage and promotional efforts.
- The West Virginia Department of Agriculture partnered with Collaborative for the 21st Century Appalachia to design an interactive website that serves as an e-commerce forum for West Virginia specialty crop growers to market their products to gourmet shoppers and restaurants. The e-market website was launched at the 2007 State Fair of West Virginia during a press conference. At the conclusion of the press conference, 55 farmers registered on the website within the first 24 hours of it being posted to the Internet. After 11 months there were approximately 6,000 unique visits to the site with over 19,000 page views that averaged 20 minutes for on-page view time. Over the course of a year over 1,100 farmers and 11 restaurants registered to participate in this web-based application.
- The West Virginia Department of Agriculture partnered with West Virginia Nutrition Network to promote a USDA-developed social marketing campaign by utilizing print ads, promotional posters and flyers, radio and television, and billboards to promote the consumption of West Virginia produce to working mothers, school-age children and seniors. Project staff designed, printed, and distributed over 21,000 cards that highlighted snacks that utilized a variety of specialty crops. The recipe cards were distributed at farmers markets throughout the state and at educational forums such as the Mountain State Art & Craft Fair and the State Fair of West Virginia. Posters were also created with a similar message, which were distributed to more than 70 farmers markets in the state and 100 farmers that participate in the Senior Farmers Market Coupon Program and the Women, Infants, and Children (WIC) Program.
- The West Virginia Department of Agriculture partnered with West Farm to research the feasibility and benefits of growing heirloom tomatoes in high tunnel systems and crop fields. Specifically, project staff sought to investigate the most economical and most popular household and foodservice varieties in southeastern West Virginia. Project staff found that the field produced 1,848.5 lbs of heirloom tomatoes while high tunnel production yielded 1,731 lbs, which made production yields comparable particularly during different periods in the growing season. Fifty-four people from 10 counties attended a field day to observe and receive the findings as well as participate in educational workshops. The heirloom tomatoes grown in high tunnels for this project were evaluated by two panels (chef/food service providers and consumers) at this farm field day. The West Virginia University Extension program also conducted an evaluation of the budget necessary to maintain an heirloom tomato enterprise. This study's results were ultimately presented to 140 people at a statewide Small Farms Conference.

- The West Virginia Department of Agriculture partnered with Williams River Farm and the West Virginia University Extension Service to conduct a study that demonstrated the most effective deer control methods to protect specialty crop production throughout the State. There was particular emphasis on the economical methods associated with the placing of a fencing system so that containment costs were not passed onto the consumer in the form of higher crop prices. A fence was designed and built around an existing crop production area (primarily strawberries) to serve as a model of deer containment. Construction of a nine foot high deer exclusion fence took place, using eight feet of woven-wire topped with three strands of electric fence at four inch spacing to enable the profitable commercial production of strawberries and other specialty crops in a high deer pressure area. Ultimately, adoption of the system among other specialty crop producers will mean a reduction in crop losses, increased production efficiencies and potential for increased income.
- The West Virginia Department of Agriculture partnered with the West Virginia Beekeepers to provide a cost-share incentive program to encourage existing beekeepers to replace their honeybees with new varieties of climate-sturdy and disease-resistant honeybees and supplemental honeybee feed to ensure that honey production levels will stabilize. This particular cost-share focused on the integration of new honeybees in West Virginia through purchasing package bees and cane sugar to be used as bee-feed. Applicants were to purchase sugar at the best price in their area, return the receipt and then be paid 50 percent of cost minus any sales tax. This was particularly popular with a total of 325 bee packages received and delivered to interested individuals. The new colonies have managed well in West Virginia's environment with 95 percent still living and all participants having treated colonies for Varroa mites.

Wisconsin Department of Agriculture, Trade and Consumer Protection

Amount Funded: 120,305.36 **Number of Projects:** 9

- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Ginseng Board of Wisconsin to revise a promotional marketing video in both English and Mandarin in order to target United States and Chinese consumers, distributors, wholesalers, and retailers. The project staff finalized this promotional marketing DVD, which highlighted the quality of Wisconsin ginseng, as well as the care taken to grow Wisconsin ginseng. Upon completion of the DVD, project staff distributed 500 copies of the DVD throughout the United States and Asia and posted it to the Internet in order to garner awareness for this product. It was also shown during tradeshows in both Japan and China.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Apple Growers Association to develop an "Autumn Harvest" trail that helped guide consumers and tourists to apple-related destinations in Wisconsin. The project staff also developed a partnership with the Wisconsin Agricultural Tourism Association and the Wisconsin Fresh Market Vegetable Growers Association to diversify the food and culture trail. Ultimately, the Autumn Harvest Trail Southern Gateways segment was launched during the fall with 18 trail destinations. This effort increased consumer traffic at agricultural related tourism destinations and activities, with 1,246 adult consumers indicating that they visited one of these apple-related destinations for the first time. The project staff also promoted this trail with an innovative set of web pages that attracted over 2,400 visits in which over 1,300 were unique viewers.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Cranberry Board to produce an educational video concerning Wisconsin's cranberry industry, print media concerning cranberries and weed management, and to enhance the displays in the exhibit hall at the Wisconsin Cranberry Discovery Center. Specifically, project staff developed an educational video, "Wisconsin Cranberries Growing Strong", that concerned the State's cranberry industry and targeted members of the general public, tour groups, and attendees at public events. The video was distributed to approximately 500 producers, processors, and educators throughout Wisconsin. Over the course of this project thousands of visitors watched the video at the Cranberry Discovery Center or on the WI Cranberry Growers Association website. A cranberry brochure was also developed and distributed in order to educate the public regarding cranberries and the cranberry industry. Its main focus was the utilization of 20 recipes that incorporate cranberry preparation techniques and quick food ideas. Project staff distributed more than 15,000 Cranberry recipe brochures.

- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Christmas Tree Producers Association to develop a promotional brochure on the environmental benefits of real trees, promote Christmas trees, distribute educational and promotional materials, as well as educate growers on a variety of marketing mechanisms and how to communicate the environmental message to the media and the public. Project staff developed a children's activity booklet, an educational display unit, educational posters, an environmental benefits brochure, and an educational curriculum concerning the environmental benefits of real Christmas trees. Over 1,000 activity books were distributed to children and 100 poster sets and curriculum resources to parents and teachers since their completion. This school curriculum was created and marketed to elementary schools in the state and given to teachers directly. Project staff also held two different workshops that were utilized to circulate information concerning effective strategies to reach Generation Y as well as various mechanisms to disseminate positive stories to the media about real Christmas trees.
- TThe Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Commercial Flower Growers Association to determine the most popular cut flowers that grow well in Wisconsin and to develop a website for dissemination of this information. Project staff conducted field trials to determine the most popular cut flowers (annuals and perennials) that grow well in Wisconsin. Two student interns were hired to implement the planned programs and developed the new cut flower program at the Agriculture Research Station as well as the bedding plant trials. The popularity of numerous species of plants for cut flowers was determined by holding two field days open to the public in which over 1,456 people attended. The results of these trials were also posted to a website developed to disseminate information concerning the popularity of cut flowers that grow well in Wisconsin. Over the course of the grant period over 2,300 individuals visited this website.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Commercial Flower Growers Association to develop and distribute six issues of a newsletter that help greenhouse enterprises become competitive in the marketplace. Project staff developed and disseminated seven newsletters that addressed pertinent information to keep flower growers and sellers competitive in current times to more than 500 growers throughout Wisconsin. The articles covered such topics as the different types of fuels to heat greenhouses, the profitability of growing Poinsettias in Wisconsin, using plant growth regulators, ways to cut greenhouse energy costs, etc. Recipients of the newsletter indicated that the information provided was both timely and pertinent to the needs of their business. In fact, eight individual growers that received this information positively affirmed that newsletter's recommended design upgrades to their sales websites benefitted their enterprises.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Potato and Vegetable Growers Association to build a potato and vegetable storage facility in which researchers conducted investigations concerning various storage methods to extend vegetable shelf-life. Eight independent potato researchers received funding to perform projects through the University of Wisconsin Madison that included improving the quality of the seed; increasing the quality and consistency of potatoes grown, stored, marketed and processed; reducing losses of stored potatoes; elongating the storage season; and increasing the energy efficiency in storage facilities. Some of this research improved the consistency of physiological age of planted seed, improved storage management to lengthen the storage season, as well as quantified the efficiencies in storage facilities in order to compare with existing storage facilities to measure possible energy savings. The results of these investigations were presented at three different meetings (the Wisconsin Potato Grower Education Conference, the Processing Crops Conference of the Midwest Food Processors Association, and the Annual Meeting of the Wisconsin Muck Crop Growers) with a total of over 550 participants.
- The Wisconsin Department of Agriculture, Trade and Consumer Protection partnered with the Wisconsin Nursery Growers to conduct educational programs for nursery professionals and horticulture students in order to improve their knowledge of business and marketing. The Wisconsin Nursery Association produced five educational events over the course of a three year period, which included three winter workshops and two nursery summer field days. Over 220 green industry professionals, students, as well as university and extension representatives, attended the three winter workshops. Educational seminars at these workshops included topics concerning pest and plant growth regulations, herbicide information, and other information pertinent to the green industry. The two nursery summer field days were attended by a total of 751 industry professionals with a total of 186 (87 in 2008 and 99 in 2009) exhibitors displaying their products and services.

• The Wisconsin Department of Agriculture, Trade and Consumer Protection enhanced the SavorWisconsin.com website, which is a marketing tool for local producers, to promote Wisconsin agricultural products to consumers and wholesale food buyers. Project staff implemented an updated and expanded listing, which resulted in a 60 percent increase in Wisconsin farmers' market listings on the website. A more robust list of key search words was also created to enhance specialty crop and producer search capabilities. Additionally, the project staff developed articles that focused on key specialty crop industries featured on the homepage between the months of October 2007 and September 2008. Key specialty crop industries and focus areas included: apples, cranberries, squash, sweet corn, maple syrup, fresh market vegetables, strawberries, berries, cherries, and carrots. Over the course of this project, visitation to the website increased by 54 percent from November 2007 to September 2008.

Wyoming Department of Agriculture

Amount Funded: 100,695.09 **Number of Projects:** 11

- The Wyoming Department of Agriculture partnered with the University of Wyoming to conduct variety trials of fruits and vegetables in order to ascertain their vigor, cold, and drought tolerance as well as study native plants for suitability of domestic cultivation. Project staff evaluated varieties of tomatoes, peppers, eggplants, zucchini, beets, cabbage, carrots, radishes, dates, and lettuce in 2008 and 2009. The data collected for both years included yields and nutritional content of each cultivar and an analysis of produce for total phenols, total flavonoids, and oxygen radical absorbance capacity (ORAC, a measure of antioxidants) was completed in December 2009 and October 2010 at the University of Nebraska Lincoln Small Molecule Analysis Lab. A trial report (http://wyagric.state.wy.us/images/stories/news/specialtycrop/scg-vegetabletrials.pdf) was forwarded to 74 Wyoming producers and Agricultural professionals who attended the Small Farm Conference or Farmers Market Conference in 2010.
- The Wyoming Department of Agriculture awarded 13 grants to small farmer growers to develop methods for season extension and increased crop productivity. These grants were important because due to Wyoming's short season and high altitudes, many growers have a limited production cycle restricting their ability to market products during prime farmer market season. One grant was to the Robinson Family Farm and Ranch that constructed a high tunnel providing fresh local vegetables for 40 community supported agriculture (CSA) members, the Jackson Hole Grocers Farm to Market Program, and the Thayne and Jackson Farmers Markets which averages 54 frost free days. Vegetables were also supplied to local school districts to support their healthy snack program. The farm also participated in an agricultural education program for six kindergarten classes.
- The Wyoming Department of Agriculture worked with Master Gardeners, Wyoming Cooperative Extension, and Wyoming Business Council to support the education of specialty crop farmers concerning soil fertility maximization at the Kinsey Soil Conference. Specifically, project staff focused its efforts on providing speakers during this conference. In March 2008, a soil conference was held in Torrington, Wyoming with approximately 110 people attending. Sessions included soil fertility and micro nutrient balancing. The seminar was a condensed version of a five-day introductory course based on the Albrecht model of soil fertility balancing. The objectives of the conference were to introduce participants to soil testing and soil fertility using the Albrecht model. The evaluations of the course were very high and rated the speaker as the best in this field.
- The Wyoming Department of Agriculture worked with the Farmers Market Association to develop a Wyoming Farmers Market Manual that addresses rules, regulations, and food safety issues to provide the instructional basis for the Wyoming Farmers Market Certification course. Project staff awarded a contract to an individual to develop a manual and offer a course to managers. A manual was completed and reviewed by numerous entities in order to receive feedback from a variety of sources. The contractor also offered a daylong farmers market certification seminar for 10 market managers in Casper, Wyoming in September 2009. All the market managers that attended this course passed the exam for certification. A subsequent seminar was held at the March 2010 Farmers Market Conference in which an additional 24 managers were trained to be certified market managers. The manual and seminars were posted to the Wyoming Farmers Market Association's website (www.wyomingfarmersmarkets.org) for interested parties to learn how to start or run a farmers market.

- The Wyoming Department of Agriculture partnered with Sheridan College to provide adolescents from the local school system an opportunity to learn about the nutritional value of fresh produce, marketing, and basic business skills. Specifically, the project staff developed a community garden in order to facilitate educational, hands-on activities for children between the ages of 2 to 15. High tunnels were also added to enhance the production capacity of the garden and provide an additional production method for the participants to observe. Activities in the garden included planting, harvesting, sampling, and wedding. Children and families learned about specialty crop production through activities that included constructing fruit and vegetable mobiles, greenhouse planting, plant identification, and water conservation. Over 90 children and adolescents participated during each year of this community garden and its educational activities.
- The Wyoming Department of Agriculture supported the facilitation of a regional seed genetics educational workshop to help develop local farmer knowledge of seed saving and specialty crops. This workshop was coordinated with the 2009 Wyoming Farmers Market Conference in order to target local specialty crop producers. Specifically, project staff targeted farmers in Wyoming who had expressed an interest in increasing their knowledge of seed production and selection. Approximately 20 people attended this event with an additional 65 interested conference participants provided binders of the presentation. Project staff also worked with the Organic Seed Alliance to compile an Organic Seed Production manual for Wyoming specialty crop producers. Information in this manual included organic seed saving, farm variety trails, the principles and practices of bean seed, beet seed, carrot seed, radish seed, lettuce seed and spinach seed production, seed harvesting and handling, seed crop records, trail evaluations, variety trail planning and weather risks as well as ethical development and stewardship of seeds. The Organic Seed Production and Saving Guides were provided to all 23 county extension offices for reference material and for master gardeners. It can also be located at www.seedalliance.org/Publications.
- The Wyoming Department of Agriculture supported the facilitation of an annual farmers' market conference in Wyoming that focused on increasing the number of markets and the level of expertise of market managers and vendors through the provision of food safety education and support for the network of farmers markets within the State. Each year the conference offered specialty crop producers an opportunity to network with other producers and farmers' market managers in order to share ideas. Topics of presentations included market safety, season extension, companion planting, and farmers' market certification. In fact, a high tunnel workshop followed the 2009 conference in which 35 participants learned to assemble high tunnels. Over the course of a two year period (2008 and 2009), over 125 people participated in the Wyoming Farmers' Market Conference.
- The Wyoming Department of Agriculture worked with local restaurants and hotels to offer consumers and retail buyers ideas for cooking with Wyoming specialty produce at farmers' markets. Specifically, chef demonstrations were facilitated at selected farmers' markets across Wyoming (Casper, 7; Sheridan, 4; Gillette, 1; Cody, 3; Saratoga, 1; and Douglas, 1) to expose people to new ideas for preparing produce found at farmers' markets. Interested visitors were able to take recipes to prepare at home. Project staff also developed recipe cards and other promotional materials to continue the promotion of specialty crop usage for farmers' market consumers. In fact, six recipes were selected in order to print to approximately 10,000 cards. These cards were then sent to Farmers Markets around Wyoming to distribute to vendors and consumers. Additionally the project staff printed and distributed over 2,000 sets of Canners Corner to the 23 County Extension offices for circulation among the general public.
- The Wyoming Department of Agriculture partnered with the University of Wyoming and the Wyoming Grape and Wine Association (WGWA) to enhance marketing and educational materials regarding the production of grapes and to conduct tours of Wyoming grape orchards. Specifically, project staff updated the WGWA website, which is meant to direct interested growers to production and marketing information and serves as a source of information for new members and growers. Project staff also held several meetings, which included the annual spring pruning clinic. Topics during these events included introductory resources, lectures, and hands-on clinics to educate growers and members about a variety of production techniques. Members also visited a variety of local vineyards in order to meet and discuss upcoming events, production techniques, as well as to network. Over 110 people attended the meetings facilitated by the WGWA.

- The Wyoming Department of Agriculture developed a database of nursery stock producers to facilitate the formation of the Wyoming Nursery Stock Association and host a Nursery Association conference. Concurrently, the Colorado Nursery and Greenhouse Association (CNGA) was exploring the idea of expanding its association into Wyoming. Project staff facilitated several exploratory meetings that included 20 Wyoming from eight greenhouse and nursery companies. These individuals voted to pursue a Wyoming Chapter of the CNGA. Consequently, the CNGA and the Wyoming Growers and Groundskeepers (WGGA) agreed to partner and support each other's programs thereby facilitating the sharing of resources. In response, the WGGA expanded its 2009 conference program to include topics that were relevant to specialty crop producers. The CNGA presently lists seven members from Wyoming and the WGGA lists 19 members as nursery/tree/sod. In fact, it the WGGA provided educational opportunities to some of the 100 plus nurseries and greenhouse companies.
- The Wyoming Department of Agriculture partnered with Wyoming Consumer Health Services to develop a curriculum and materials in order to facilitate a "train-the-trainer" session concerning food safety issues associated with the preparation and sale of fresh produce at farmers' markets for the cottage industry. This session was specifically oriented toward instructors of seminars that provide information to farmers' market managers and vendors. Project staff also updated and distributed the Farmers' Market Food Safety Training booklet. Eleven Farmers Market Food Safety Seminars were offered to provide information to farmers' market managers and vendors concerning up-to-date food safety issues and policy. These training sessions were attended by 85 farmers' market managers and vendors. In addition, over 160 Farmers' Market Food Safety Training booklets were distributed to vendors and other interested in selling food at farmers' markets.