



# **IDOA receives specialty crop grant funds**

October 29 2018 4:29 PM

SPRINGFIELD – The Illinois Department of Agriculture will receive \$691,000 through the latest federal Specialty Crop Block Grant Program. The funds, part of the 2014 Farm Bill, will be divided among 12 projects that are intended to expand the availability of fresh, locally-grown produce.

“There is tremendous interest in strengthening our state’s specialty crop industry,” said Agriculture Director Raymond Poe. “Not only has the Department witnessed a year-to-year increase in the number of applicants, but also collectively speaking, applicants sought almost four times the amount of money allocated to the state of Illinois for this program. All of these proposals aim to bolster the specialty crop industry and increase our state’s agricultural footprint.”

Specialty crops are defined as fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops, including floriculture. Illinois is the largest producer of pumpkins and horseradish in the nation, and Illinois ranks among the top 10 states in acreage of cantaloupes, green peas, lima beans, and sweet corn.

Illinois is also home to a flourishing grape and wine market, with 1,197 acres of farmland dedicated to growing grapes on 421 farms. According to the most recent Census of Agriculture, sales of all specialty crops in Illinois, including nursery and greenhouse sales, totaled almost \$470 million. That same census noted that more than 106,000 acres of Illinois farmland are devoted to growing specialty crops on more than 3,200 farms.

This year the seven-member expert review team remarked on the increased number of research projects requesting funding. While research could hold the key to future advances in our industry, it also provides a unique opportunity to further careers in agriculture.

A list of the grant recipients and a brief description of their projects follows:

1) Partner with **D.K. Lee at the University of Illinois** – *Project Title: Development of Butterfly Milkweed Varieties with Low Seed Dormancy and High Seed Yield*. The University of Illinois will address consumer/producer's challenges of establishing pollinator habitats with limited seed supply by developing a local Illinois butterfly milkweed variety, which will have low seed dormancy for easy establishment and high seed yield for economic benefits for seed producers and disseminating results to local farmers/seed producers through specialty crop conferences and field days. The success of the project will be measured by developing of new varieties and variety adoption by local seed producers and consumers for pollinator habitat establishment acres. (\$66,476.00)

2) Partner with **Linda Williams at the University of Illinois** – *Project Title: Pest Degree-Day Tools for Specialty Crop Producers*. The University of Illinois' Prairie Research Institute will create pest degree-day tools – such as crop specific calculators, maps, and graphs – that focus on specialty crops to help producers detect pest presence, predict pest development, and make improved pest management decisions. The new tools will include historical and forecast degree-day information, along with pest development information in formats that are mobile friendly. The success of the project will be determined by monitoring the use of the new tools on the website and in the media. (\$40,563.00)

3) Partner with the **Wertheim Enterprises** – *Project Title: Expanding Small-scale Hops in Farming in Illinois*. Partnering with N&F Farms, our goal is to expand hops farming in the state of Illinois. Currently there are only 30 acres in Illinois that are in hops production, per the 2017 HGA report released in January 2018. Although Illinois has primarily been a corn and bean production state, it was a large producer of hops until the mid-1920s, when prohibition essentially killed the industry. We are looking to provide the background, opportunity, and feasibility of hops farming for other small-scale farmers to learn from and to large scale farmers learning to diversify. This will be accomplished by expanding the current hops test plot to showcase the varieties best suited for Illinois soils and opening the farm for spring installation tours, fall harvest demonstrations, invitational seminars, conference presentations and partnering with other hops farms and the Illinois Hops Assoc. (\$22,714.00)

4) Partner with **Shannon Sutton at Western Illinois University** – *Project Title: Variety Selection and Integrated Pest Management for Production in High-Value Crops in High-Tunnels in Illinois*. Western Illinois University will conduct research and deliver educational programs on variety selection and best management practices for tomato and pepper production in high tunnels for Illinois growers. High tunnels are steadily gaining popularity for enhanced crop production throughout Illinois. Most high tunnel growers focus on production of high value crops such as tomatoes and bell peppers to quickly recoup the cost of erecting a high-tunnel. Growers have many options in

choosing varieties to grow, but uncertainty remains in which varieties perform best for high tunnel production in Illinois. Proper variety choice is critical to the financial success of a farming operation. Currently, data is lacking on what varieties of tomatoes and bell peppers maximize return on investment for Illinois high tunnel growers. This research will determine which tomato and bell pepper varieties are best suited for high tunnel production in Illinois. (\$45,990.00)

5) Partner with **Nathan Johanning of the University of Illinois** – *Project Title: Evaluation of Cover Crops and No-till Production Practices for Fresh Market Tomatoes and Peppers*. The University of Illinois will investigate the use of cover crops and no-till production for fresh market tomatoes and peppers compared with traditional production systems through field research and on-farm grower trials. They will use this research to determine best management practices to share with growers through field days, webinars, and grower production meetings. (\$93,755.00)

6) Partner with **Hao Feng at the University of Illinois** – *Project Title: Social Computing for Enhancing Food Safety and Quality of Fresh Produce in Illinois Farmers' Markets*. The University of Illinois at Urbana-Champaign will develop a new social computing method to analyze consumers' postings on social media regarding their experiences visiting/shopping at local farmers' markets (FMs). Comments and reviews about FM specialty crops from Yelp and Twitter will be analyzed using state-of-the-art information technologies including text mining, machine learning, and network analysis. The findings will be used to enhance the food safety and quality of locally grown produce in Illinois FMs through prompting communication between farmers and consumers, as well as through educational and outreach activities. (\$59,529.00)

7) Partner with **Dr. Ruplal Choudhry at Southern Illinois University** – *Project Title: Improving Food Safety and Shelf-life of Strawberries Using a Mobile UV Cooling Technology*. Southern Illinois University will help strawberry growers of Illinois to comply with the Produce Safety rules of the food safety modernization act by improving food safety, quality and shelf life of fresh strawberries by developing a sanitizing technology and safe handling practices employing a mobile UV cooler. The results will be disseminated to strawberry growers through in-campus workshops and field visits with hands-on trainings to growers. In addition, presentations will be made at the Specialty Crops Conference and Gateway Small Fruits conferences. Fact sheets will be published on SIU and Illinois Extension websites and social media for safe use of mobile UV cooler by strawberry growers. (\$107,197.00)

8) Partner with **Mette Soendergaard from Western Illinois University** – *Project Title: Grafting to Increase Yield, Fruit Quality and Antioxidant Capacity of Heirloom Tomatoes in Hydroponic Culture*. Western Illinois University will conduct research to determine the effect of grafting on yield, fruit and antioxidant capacity of heirloom

tomatoes grown hydroponically. The Illinois market for hydroponic production is growing, as there is a large consumer demand for fresh and local tomatoes year-round. Similarly, heirloom tomatoes have gained popularity in recent years, due to a consumer demand for authentic food experiences, and the health benefits associated with these. Especially foods with a high content of antioxidants is receiving increased attention, due to the well-established relationship between these compounds and a reduced risk of cancer and cardiovascular disease. However, heirloom tomato varieties often show low productivity and profitability due to disease susceptibility. (\$31,883.45)

9) Partner with **Taidghin O'Brien at The Land Connection** – *Project Title: Building an Online Resource Portal to Increase Sales and Consumer Knowledge of Illinois Specialty Crops*. The Land Connection (TLC) will address the continued need for greater knowledge about, and access to, Illinois specialty crops in order to increase the competitiveness and boost sales of specialty crops. In doing so, TLC will reduce the work for farmers by providing free access to deliverables they can use to better market their products, and appeal to, and educate, consumers. The project goals are (1) to increase consumer knowledge of the seasonal availability, nutritional value, and proper preparation, storage, and use of Illinois specialty crops, (2) to increase sales of Illinois specialty crops, thereby providing stability to farmers and increasing the overall strength of the Illinois specialty crop industry, and (3) to increase consumer and producer access to, knowledge of, and engagement with online resources about Illinois specialty crops.

To accomplish these objectives, we will first develop 15 specialty crop nutrition, preparation, storage, and use cards to be distributed for free at the Champaign Farmers Market and TLC website. Second, we will develop and write a weekly blog series as a companion to the specialty crop cards, providing more in-depth knowledge about each featured Illinois specialty crop. Finally, we will build and launch a specialty crop online resource portal to act as a centralized digital library of free information, research, and programming deliverables from The Land Connection and other organizations. (\$32,465.36)

10) Partner with **Jennifer Miller at Liberty Prairie Foundation** – *Project Title: Demonstration of Apprentice Farmer Program Viability and Working Model of Farm Diversification through Organic Permaculture*. The Liberty Prairie Foundation will pilot an apprenticeship farmer training approach to evolve an existing model for beginning farmer education. This pilot project also provides farm diversification that enhances the competitiveness of these specialty permaculture crops through increased market awareness, greater ecological sustainability through the conservation and improvement of soil health and creates a more diverse and resilient specialty crop system on the Prairie Crossing Farm. The success of this program will be measured by the education and distribution of permaculture crops to at least 150 consumers, two acres in conservation tillage, and ultimately, building the knowledge of two to four

beginning farmers about the science-based tools used to plan and manage a permaculture system on a working farm.” (\$33,012.00)

11) Partner with **Bronwyn Aly at University of Illinois** – *Project Title: Utilizing High Tunnels to Maximize Winter Vegetable Production*. The University of Illinois will utilize a high tunnel at the Dixon Springs Agricultural Center, Simpson, Illinois, to determine optimum production system parameters to maximize yield and quality during the winter production of carrots, lettuce, spinach, and kale. Replicated research trials will be conducted over two growing seasons to determine optimal planting dates and production practices to maximize yield. Results will be shared with stakeholders during on-site grower field days, newsletter articles, and state and regional conferences. (\$80,888.00)

12) Partner with **Illinois Specialty Growers Association** – *Project Title: Educational Support, Outreach and Marketing for Illinois Specialty Crops*. The Illinois Specialty Growers Association (ISGA) will offer educational opportunities for specialty crop farmers at four regional programs and at the annual Illinois Specialty Crop, Agritourism, and Organic Conference. This project will provide specialty crop growers the opportunity to become informed on production and marketing topics pertaining to their industry, including keeping up-to-date on some of the newest methods and techniques to ensure top grower performance. (\$59,150.00)