

Abstracts of Submitted USDA SCBG Projects (FFY 2007)

Developing Good Agriculture & Handling Practices

Due to recent outbreaks of food borne illness related to freshly harvested and processed fruits and vegetables, many retailers and wholesalers are requiring growers to develop a process that may reduce the chances of produce contamination by microbial organisms. The Virginia Department of Agriculture's Fruit and Vegetable Marketing Program will assist growers and producers in meeting the requirements of the Good Agriculture Practices / Good Handling Practices Program (GAP / GHP) via a three pronged effort to include educational meetings, development of a workbook and a cost sharing program to help disperse the expense of the certification.

Agriculture Cooling

This large scale operation will increase markets and profits for farmers throughout Southwest Virginia by cooling specialty crops to remove field heat, enhance freshness, and lengthen shelf life. The program is financially lucrative for farmers and attractive to regional grocery chains and institutional buyers.

The cooling operation will be located at the lead agency, Southwest Virginia Farmers Market adjacent to the intersection of Interstate 77 and U.S. Route 58 in Hillsville. Funds are requested to purchase equipment and supplies, including a hydro-cooler, a forced air cooler, ice machines, a tow motor, a refrigerated truck, processing tables, and packing supplies.

A pilot program was successfully conducted in 2007 using a leased hydro-cooler. The new equipment will allow cooling and estimated sales of \$1.5 million dollars for specialty crops including peaches, corn, broccoli, cauliflower, green beans and blueberries.

Interest has been demonstrated for additional purchasing by the Food City grocery chain and other potential buyers, including the military. The project has strong buyer interest and regional impact on producers' income.

A New Generation of Farmers Trained to Berry Crops

Farming is the number one industry in Virginia, yet the average age of the farmer is increasing yearly, and the urban/rural interface is expanding even faster. What can be done to re-invigorate economically competitive local agricultural vitality? - Create a paradigm shift and train a new generation of farmers utilizing young adults. - With 30 years of personal economic success and satisfaction by serving in several capacities of the berry industry (both locally and nationally) I am ready to focus on local specialty crop agriculture in keeping with Virginia's tremendous history and demographics.

Over the next several years, I will create viable berry crop sites/farms of about 10 acres across Virginia. These sites will harvest primarily during the summer months, by hands on, cooperatively managed youth. Addressing the need for available labor will involve an updated training program that modifies a few historic practices. Providing young workers agricultural training that is both time efficient and easily administered by busy owner/operators is essential and mutually beneficial. By shifting the agricultural paradigm back to a more "local" perspective involving our youth, the community will be served and re-invigorated economically.

Introduction of Horticultural Liner Production to VA Ag Producers

Virginia has been a national leader in the production of nursery stock for many years. Growth has continued in recent years in volume sold, expanded varieties available and overall value of sales. Virginia growers finish plants for wholesale and retail sale. A limited number are involved in starting these plants from seed, cuttings or the next step in commercial plant production – liners. These starter plants are purchased from growers in other areas of the country. The establishing of the Virginia Nursery and Landscape Association Beautiful Gardens™ plant introduction program and the phasing out of an increasing number of tobacco production acres in Virginia present us with the opportunity to demonstrate and train interested farmers in the procedures and financial possibilities of growing liners. An additional consideration of this project is the starting of plants from “tissue culture”. Plant material developed by the Beautiful Gardens™ program will put emphasis on the potential for tissue culture propagation. This will require specific facilities – greenhouses – and procedures for the successful growing of these plants from tissue culture material. There is interest among growers and there will be opportunities created by the Beautiful Gardens™ program. It is our intention to pursue these types of production.

Internet Education Program for Improving Pollination Efficiency of the Honey Bee

Honey bees are a vital part of Virginia agriculture. Many crops require insect pollination to maximize production and improve quality. The honey bee is an ideal pollinator with each beehive containing thousands of individuals working together to gather nectar and pollinate plants. Enhanced harvest resulting from honey bee pollination of crops increases farm revenues while minimizing consumer prices.

The introduction of new pest species has resulted in the loss of many beehives. The number of hives in Virginia available for pollination and honey production has decreased by nearly 65,000 over the past 20 years. Honey bee pollination is highly important to agriculture and the environment; however, less than 1 percent of beekeepers participate in commercial pollination of crops.

We will develop an interactive website for promoting the benefits of honey bee pollination. The site will provide a resource to beekeepers and farmers interested in commercial crop pollination. Information on the site will include management techniques for improving honey bee health and training materials to increase availability of honey bee pollination. In addition, the site will also be used to provide contact information to beekeepers desiring to expand honey bee related services.

Eastern Shore of Virginia Vegetable Pest Monitoring Program

The sustainability, stability and survival of production agriculture today requires careful budgeting, control of expenses, market development and the ability of producers to provide a quality, safe and reliable public food supply. Industry producers expect and rely on the ability of organizations such as the Virginia Department of Agriculture and Consumer Science, Virginia Cooperative Extension and our Land Grant Universities to provide production and research based educational information to assist with their production management. A major part of this process centers on the ability to monitor, predict and provide accurate, reliable and timely Pest Management information. This is especially true for the fresh market and process vegetable industry on the Eastern Shore of Virginia. This program will provide these producers information weekly, based on a program of insect, disease and weather monitoring gathered from equipment strategically located throughout Eastern Shore production areas. Technical and financial assistance will be provided through the staff at the Eastern Shore Agricultural Research Station at Painter, Virginia.

Reducing Costs and Increasing Farm Efficiency for Specialty Crop Producers through Irrigation Systems

The drought and the increasing fuel costs that were realized in 2007 have reinforced the need for an irrigation system that would be much more efficient and still maintain the ability to provide adequate water

resources. This project will upgrade the existing irrigation system at a retail and wholesale vegetable farm in Westmoreland County in order to better meet current environmental requirements, conserve water, reduce energy costs, increase productivity, reduce disease pressures, and reduce labor costs. Lois's Produce and Herbs will be the lead on a pilot program that will serve as a model for other similar farming operations to follow and modify to meet their own specific applications.

This project will assist in the design of such a system and provide the equipment and supplies necessary to get this project started. Operators will maintain close records of procedures and costs and will conduct a field day for local growers interested in making the switch from overhead to drip irrigation. The farm will work with the local extension office to develop, promote and accomplish the outreach element of this project upon completion of this grant.

Specialty Crop Research Cost-Share

In an effort to advance value-added, specialty crop production throughout the Commonwealth, the Virginia Department of Agriculture and Consumer Services (VDACS) will establish a competitive cost-share, matching funds program to support on-farm projects, which promote the commercial adoption of select specialty crops production systems in Virginia. VDACS will provide material support to selected projects which assist and enhance the competitiveness of specialty crops in Virginia.

The cost-share program will be established to complement the existing VDACS Specialty Agriculture Research Grants Program, which provides grant funding to Virginia's land-grant universities to develop and improve specialty crop production systems. The competitive cost-share program for farmers will be used to mitigate some of the financial risk of farmers adopting specialty crop production programs developed under the VDACS Specialty Agriculture Research Grants Program.

Greenhouse Tomato & Lettuce Production

This project will focus on the local production of tomatoes and lettuces in a greenhouse during seasons when outdoor production would be limited. This project will take place on the Northern Neck of Virginia on a small farm that has produced many varieties of fruits and vegetables during 15 years of direct marketing. Through the controlled environment of greenhouses, the producer intends on demonstrating the feasibility of product diversification and the extension of the production season. This project will not only encourage other area producers to adopt this production method, it will also provide consumer a larger window of opportunity to purchase fresh and local products. We hope to be able to extend the production season and increase profits by using an economical, environmental friendly heating system that would burn waste products from our farm and other local businesses. This project will encourage other small family farmers to specialize in similar value-added crops as the combination of increasing interest of eating locally and "going green" will support the success of these endeavors.