

FY2011 Agriculture Appropriations Requests

**Project Title:** 1890 Colleges and Tuskegee (Extension)  
**Amount:** \$50,000,000 (Programmatic Funding)  
**Recipient:** South Carolina State University  
**Purpose:** This program provides funding to support extension activities at the 1890 Institutions in order to provide useful, research-based educational opportunities that respond to the changing needs of limited-resource clients.

**Description:** The 1890s Extension program benefits America by supporting outreach at the 1890 Institutions focused on: 1. Agricultural diversification and marketing strategies to reverse the decline of small minority-owned farms; 2. Risk management education that provides farmers and ranchers with tools to address risk related issues; 3. Increasing viability and competitiveness of farms through sustainable practices; 4. Improving nutrition, diet, and health of limited resource families with emphasis on reducing obesity; 5. After school enrichment programs to enhance youth skills in science, technology, and math; 6. Improving the economic viability of rural communities and 7. Protecting the environment and natural resource management.

**Project Title:** Agriculture Systems and Sustainability  
**Amount:** \$1,250,000  
**Recipient:** USDA-ARS, Coastal Plains Soil, Water, and Plant Research Center, Florence, SC  
**Purpose:** The goal of this project is to improve agriculture systems and sustainability through improved characterization, understanding, and manipulation of microbial communities in soil and water. Advances in this area will have positive impacts from production in the field, through processing, and to the consumer.

**Description:** Management of agricultural systems, environmental quality and sustainability can be enhanced through improved characterization, understanding, and manipulation of microbial communities in soil and water. The distribution, movement, activity, and survival of microbes in the environment are altered by changes in both environmental conditions and agricultural management practices. Management of many environmental issues such as water and soil quality requires the ability to identify, track, and alter characteristics and changes of microbial populations. Advances in this area will have positive impacts from production in the field, through processing, and to the consumer.

**Project Title:** City of Greenwood Rural Designation  
**Amount:** Language  
**Recipient:** Greenwood, SC  
**Purpose:** Request to have the City of Greenwood, South Carolina declared “rural” for the purpose of the Community Facilities program to allow

governmental and non-profit entities to borrow under this governmental loan program.

**Description:** Loans are currently made for constructing, enlarging, or improving essential community facilities in rural areas and towns of not more than 20,000 in population. The highest priority goes to projects located in a community with a population of 5,000 or less and to projects serving communities with median household incomes below the poverty line or 60% of the state non-metropolitan median household income. The City of Greenwood had a population of 22,071 at the 2000 Census, and has not added more than 500 persons in the last 10 years.

**Project Title:** Clemson University Veterinary Institute  
**Amount:** \$1,500,000  
**Recipient:** Clemson University, SC  
**Purpose:** The goal of this project is to establish centers for veterinary education in the State of South Carolina, which currently has no veterinary school.

**Description:** Food and animal agriculture contributes roughly \$1 billion in direct cash receipts to the South Carolina economy annually. Funding will serve as the seed money to develop the second of four centers within the Institute. These centers will expand the opportunities for South Carolina students to pursue careers in veterinary medicine, improve the veterinary care of agricultural and companion animals, safeguard the health of our animal industry and the public health of its citizens, and increase research that leads to new products that foster economic growth. The centers will also provide the platform for expanded opportunities and collaborative work with other universities, veterinary schools, and states. In addition to an estimated 25 new hires for each of the centers, the CUVI will produce 20 – 25 Doctors of Veterinary Medicine (DVM) and PhDs annually.

**Project Title:** Electronic Lighting for Horticulture Enhancement  
**Amount:** \$750,000  
**Recipient:** Sensor Electronic Technology, Columbia, SC  
**Purpose:** The goal of this pilot program with the USDA is to assess the potential of low energy, light emitting diode (LED) sources of color and UV to influence GH plant life and harvest that will become the food source of the future.

**Description:** Sensor Electronic Technology Inc. (SET) is a leader in the development and production of diode driven electronic Ultraviolet (UV) light sources. Recent research has shown that using artificial light of selective colors and in the deep UV wavelengths, can enhance plant growth; and in post harvest treatments, could boost yield, decrease spoilage, and greatly decrease or eliminate food borne diseases. Through the development of new electronic technologies, advances can be made in food growth.

**Project Title:** Operation Oak  
**Amount:** \$400,000  
**Recipient:** National Wild Turkey Federation

**Purpose:** Edgefield, SC  
The Operation Oak Program is seeking a continued federal partnership to supply high-quality oak and other mast producing hardwood species seedlings to meet the needs of timber production and wildlife management and to reverse the decline of hardwood regeneration.

**Description:** The loss of quality oak-dominated hardwood habitats is a serious problem for wildlife species dependent on this habitat type throughout the southeast, mid-Atlantic and Northwestern states. Oak habitats are being lost to development at a very rapid rate and lack of active forest management is negatively impacting habitat quality on a national scale. The National Wild Turkey Federation (NWTf) would like to establish “oak groves” around the southeastern U.S. by providing high quality oak seedlings to local NWTf Chapters, private landowners, and federal and state agencies. This program would provide regionally based native plant species to landowners while also offering a naturally selected high quality oak seedling that has demonstrated superior growth rates and earlier acorn production. In addition, the NWTf would educate landowners and provide plans to restore oak savanna habitats in the Northwestern United States. These oak savanna habitats have been identified as extremely critical and declining habitats for numerous state and federally listed plant and animal species.

**Project Title:** Peach Tree / Fruit Tree Genetics Research  
**Amount:** \$300,000  
**Recipient:** Clemson University, SC  
**Purpose:** The goal of this project is to identify genes that influence the progression of disease in fruit trees, and also identify those genes controlling quality and yield of fruits, so as to ensure a more sustainable fruit tree crop.

**Description:** Federal funding is requested to support the continued development of peach tree and other fruit tree genomics research at Clemson University – work that underpins the future of competitive specialty crop agriculture in South Carolina and the U.S. Clemson expects to sequence the entire peach genome in the very near future, and this genomics resource will revolutionize the way we approach fruit tree genetics and will provide the means to breed higher quality, more disease resistant trees in the future. Fresh and processed products derived from the Rosaceae plant family (almonds, apples, apricots, blackberries, peaches, pears, plums, sweet cherries, tart cherries, strawberries, raspberries, roses and other ornamentals) make vital contributions to human nutrition, health and well-being, and collectively constitute the economic backbone of many rural economies across the U.S. Currently the domestic production value of rosaceous crops is over \$8 billion and global per-capita production and consumption of these crops is expanding in both domestic and export markets. However, these industries face continual pest and disease pressures, which can result in loss of entire crops. Thus, genomics, genetics, and breeding are critical research priorities for this industry, and for the South Carolina peach industry in particular.

**Project Title:** Revitalizing the I-95 Corridor with Biotechnology

**Amount:** \$4,625,000

**Recipient:** South Carolina Research Authority, North Charleston, SC

**Purpose:** The goal of this project is to create meaningful change for the I-95 Corridor by applying innovative biotechnological discoveries in agriculture, aquaculture, and environmental cleanup in an effort to create jobs and stimulate economic development.

**Description:** The Corridor requires assistance and innovative plans to enable the growth of its own economy. Any existing efforts are ongoing toward this objective. This plan for holistic, meaningful change for the I-95 Corridor has been designed by applying innovative biotechnological discoveries in agriculture, aquaculture, and environmental cleanup in an effort to create jobs and stimulate economic development. This program will integrate ongoing research efforts in alternative transportation fuels by implementing developments in both agriculture and aquaculture. Biorefineries are planned for the area to advance energy progress in the state and create markets for the biomass generated by the agricultural and aquacultural developments. This project also seeks to restore environmentally-damaged lands to profitability through the use of bio-remediation technologies developed in the state.