FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES - STATE PLAN SPECIALTY CROP BLOCK GRANT PROGRAM

(AKA: GOOD AGRICULTURAL PRACTICES (GAPS) TRAINING PROGRAM)

PIs
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CoPI
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Objectives

Goals of this grant can be broken down into three main objectives:

1) Develop and deliver food safety educational materials and training;

2) Focused on providing training and materials statewide to producers, field workers, packers and repackers of fresh fruits and vegetables; and

3) Develop a food safety program focusing on those fruits and vegetables associated with the highest risk of foodborne illness and at the greatest level of production in Florida: tomatoes, leafy greens, melons and berries.
Chronology: Tomato Related Events

1998  FDA Guide to Minimize the Microbial Food Safety Hazards of Fresh Fruits & Vegetables

1998 - 2006

Outbreaks of foodborne illnesses from tomatoes and other produce items

2003  Florida begins serious efforts to develop GAPs

2004  FDA Produce Safety Action Plan

2004  Letters to CA lettuce industry and FL tomato industry requesting attention to food safety hazards
Chronology: Tomato Related Events

2004 - 2007
Formulated Tomato Good Agricultural Practices (T-GAPs) for growers and greenhouses and Tomato Best Management Practices (T-BMPs) for packinghouses and post-harvest

2006 - 2007
Voluntarily adopted by industry

2007
Statute passed by FL Legislature for FDACS authority to establish mandatory government regulation of food safety of tomatoes
Objective 1

- Several other projects were key to the successful completion of this grant.
- The first of which was the standardization of the teaching curriculum as determined by the training team of Schneider, Sargent, Goodrich-Schneider, and Danyluk, and based on the draft and final rules from Florida Tomato Committee documents.
- Had to fit management to workers
The Workshops

• Basic Agenda
  – Microbiology for Growers
  – An Overview of GAPs Issues
  – Worker Health and Hygiene
  – The Importance of Record Keeping
  – Postharvest Handling and Sanitation
  – Audit Perspectives: Lack of a Standardized Audit,
  – Educational Materials and Resources
  – Industry Perspective
### Where We Trained

<table>
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Where We Trained

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Who We Trained

• At the 26 workshop events we trained 1027 attendees (approx. 700 persons; with some individuals attending two or more workshops)
• Of the 700 unique individuals, approximately 40 were Florida Extension agents
• The majority of the attendees were management personnel, who in turn trained their upper management employees and who will in turn train the packinghouse and farm workers
• If you estimate the number of employees who will be trained by those person we’ve trained, you could multiply the attendee number by 10 or more
What We Distributed

• Tailgate Flipchart (in English, Spanish and Creole)
• Food Safety Begins on the Farm: A Growers Self Assessment of Food Safety Risk Manual
• Fruits, Vegetables, and Food Safety: Health and Hygiene on the Farm DVD (in English and Spanish)
• Worker Health and Hygiene Program for the Produce Industry DVD (in English, Spanish and Creole)
• Food Safety Posters (in English and Spanish)
• Educational Factsheets
• Audit Documents
What We Distributed

• One of the most impressive metrics of the success of this grant is that with over 1,000 persons trained, this program delivered training at a cost of only $200-210 per person. Even more impressive is that approximately 60-70% of the training costs were materials given directly back to the farmers and processors.

• Close to 15,000 pieces of educational material were distributed
Hurdles

• At first, many growers and packers saw us as the problem, not the solution
• Teaching venues spread out over a wide area
• Limited amount of information could be given in a short training program
• Very different skill levels, difficult to tailor program to fit needs of diverse audience
Outcomes

- Reached the bulk of the Florida tomato industry
- Pre and post testing showed an average 6% gained in knowledge from approximately 500 responses
- Extension agents, who have been trained through this grant, are scheduling their own workshops
Lessons Learned

• Keep the trainings short and to the point.
• Our farmers and packers fared better with real world examples and hands-on training.
• Extension team led by Bob Hochmuth and Linda Landrum developed the “create-your-own” GAPs manual programs that were run in the final year of the grant.
• The rotation of speakers and the use of outside speakers (e.g., other farmers, buyers, auditors) was particularly effective.
Future

• Training still required
• Online training a must
• UF Small Farms Academy adding food safety to their offerings
• Provide materials for agents so training can be at the county level
• More targeted training
Partnerships

• Several partners contributed to the success of this project. Our two main academic partners were Cornell University (Dr. Robert Gravani; Elisabeth Bihn) and Penn State University (PSU) (Dr. Luke LaBorde) were instrumental in the creation and preparation of training materials.

• Our industry partners were many. We were supported by the Florida Tomato Committee (Reggie Brown) and the rest of the Florida Tomato Industry
ACKNOWLEDGEMENT

Funding Provided by the FDACS

Researchers and Trainers
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Extension Agents
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Crystal Snodgrass, Bob Hochmuth,
Linda Landrum, Mark Ritenour
David Sui, Edward Skvarch,
Aparna Gazula