Abstract

Florida A&M University (FAMU) has been carrying out activities in support of extension integrated pest management (IPM) for many years now. The program has worked with a multidisciplinary group of faculty, students, and Extension staff to research and create extension programs that are responsible for delivering IPM solutions to stakeholders and clientele. Since 2006, this cross-organizational facility has focused its capacity to help a diverse group of clientele and stakeholders with public programming and has been working under a variety of clientele. FAMU has been well identified as an integral component of the program in all the communities. The IPM team serves in the provision of all available resources ranging from collaboration and synergy and ultimately more effective use of available resources. The FAMU’s Extension IPM Program is strongly supported by the Extension/Research Administrators as well as our clientele and clientele. The project primarily focuses on IPM implementation for specialty crops (small fruits, vegetables, and nut crops). The project brings together a diverse group of multidisciplinary faculty and collaborators to address IPM implementation in various environments. The project will target industries and grower stakeholders. In addition, EXT team targets, (i) IPM outreach for pest diagnostic facilities, and (ii) IPM education for pest specialists and professionals (continuing education credit) for professional advancement and career building. Every year, essential IPM field days and workshops are being organized to support small-scale growers to improve their knowledge, skill sets and abilities to sustain food security and small-scale crop productivity in the Florida panhandle.

Introduction

The major goal of the FAMU’s IPM Program is to provide critical knowledge-based solutions which will enable the stakeholders and clientele to effectively protect and/or conserve plant, animal and human resources through the implementation of pertinent components of the National IPM Roadmap. The project targets several goals of the National IPM Roadmap including: (i) Production Agriculture, (ii) Natural Resources and Recreational Environments and (iii) Residential and Public Areas. It targets four CPPM (Crop Protection and Pest Management) areas: i) Plant Protection Tactics and Tools, ii) Diversified IPM Systems, iii) Enhancing Agricultural Biosecurity, and iv) IPM for Sustainable Communities. The project supports NIFA’s five-year strategic science Plan: Goal 1-Catalyze exemplary and relevant research, education, and extension programs, sub-goal 1.1: Advance our Nation’s ability to achieve global food security and fight hunger by supporting food security with comprehensive IPM approaches that are economically viable, environmentally sound, and will help to protect human health.

The following are the target audience:

- Small farms/specialty crop growers
- Extension specialists
- Pesticide applicators
- Background gardeners
- Community school partners
- Public
- Students
- Hobbyists
- Retirees

Program Description

The team has delivered cost-effective IPM strategies to stakeholders and clientele using in-person and remote links. The program has followed the specific delivery methods used by the FAMU’s IPM team:

- Organize seasonal field days and workshops
- Offer visits to IPM demonstration sites
- Present in the local, regional, and international meetings
- Publish extension and outreach materials in local news papers and other media outlets
- Offer digital guidance using FAMU’s server

Since 2010, the CBC IPM team has been instrumental in the development and implementation IPM in vegetables, small fruits and communities in the Florida panhandle. The team’s collaborative activities resulted in a substantial increase in the number of underrepresented and minority students receiving experiential IPM training. Another excellent outcome is that an increased number of underrepresented small-scale specialty crop growers who have benefited from the team’s extension activities. Small-scale growers were able to reduce pesticide usage by 20-35%.

Future Plans

- Provide identification tools and commodity-specific spreadsheets on serious pest insects and their biological control agents
- Provide knowledge of new and effective traps to growers
- Provide cost-effective pest management solutions to growers including the use of trap and refuge crops
- Assist growers in diversifying their specialty crops and conservation of biological control agents
- Increase growers’ knowledge, skills, and abilities in selecting pest resistance cultivars and modification of cultural practices
- Assist small-scale growers in making proper decisions to manage serious crop pests under current climate vulnerabilities

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