

Area of Emphasis: Demonstration of Pheromone Traps in Fresh Market Vegetable Production County Plan of Action

Please describe your university's extension IPM activities and outcomes associated with this area of emphasis. Please limit each field to 150 words or less.

Describe the extension educational opportunities associated with this area of emphasis, including any difficulties that will need to be overcome in order to achieve success.

In the Daviess County area, commercial vegetable production provides an important source of income for growers in the Daviess County area. As in past seasons, quality produce with sound production practices must be met for future success and growth of the vegetable industry.

Vegetable producers in this area will be growing 100 acres of cabbage. One of the cabbage growers is a new vegetable producer. In addition, other new vegetable growers will be producing fresh market peppers and sweet corn for farmers' markets and roadside stands.

The use of pheromone traps and scouting are important tools in managing insect pests economically and in an environmentally friendly manner. Currently, we have the opportunity to work with demonstration growers in the vegetable crops program made possible through Ag Development Funds. Included in the demonstration program is a group of youth involved in a FFA project. They will sell produce, including sweet corn and peppers, at the farmers' market.

Describe planned activities, target audiences, and extension educational messages associated with this area of emphasis.

The program will educate growers on how to monitor and scout for key insect pests in cabbage, peppers, and sweet corn. Pheromone traps will be used to monitor for Diamond back moth and beet armyworm in two locations in cabbage. The traps will also be used to monitor for European corn borer and beet armyworm in three different locations with peppers. In three locations with sweet corn production, pheromone traps for European corn borer and corn earworm will be used.

A field day will be planned covering the use of pheromone traps and scouting for insect pests in cabbage. This field day will help to inform future growers of cabbage about insect pest management.

Through the growing season the growers keep track of insecticide applications. The number of applications made will be compared to a program which assumes weekly insecticide application. The number of insects in the traps will be recorded weekly.

The FFA youth involved in this program will use the records they keep to enter FFA supervised agriculture experience programs.. These records will also help to show what the youth learned and the costs and returns.

Describe the roles and involvement of individuals and/or programs at your university (including the Extension IPM Program, if applicable) and key cooperating organizations.

Extension Associate for Vegetable Crops, Nathan Howard, County Extension Agents for Horticulture, Annette Heisdorffer and Jeff Porter, and University of Kentucky Extension Specialist, Ric Bessin will be involved in the project. We will work together to develop a field day covering the use of pheromone traps and scouting for insect pests. Funds of \$XXX.00 are being requested from the Kentucky IPM Program to conduct the project.

Describe how your university hopes to change pest management behavior through stakeholder participation in these activities.

From previous IPM programs in Daviess County, growers have started to adopt IPM practices. Progress in the past has been made with regard to reducing total pesticide usage and production costs in vegetable production systems. Scouting and other pest monitoring activities, and maintaining the high quality standards needed for fresh market sales also increased due to past IPM programs conducted. Also, from experience, growers share information learned on their farms with others. Continuing to implement field demonstrations is an important step in transferring IPM practices and technology to the grower.

Describe the planned impact of your university's efforts in terms of the three overall IPM roadmap goals: Increasing the cost benefit ratio of IPM, decreasing the human health risk associated with pest management activities, and decreasing the environmental risk associated with pest management activities. Please describe how these impacts will be measured.

Goals of the Project for Planned Impact

1. Educate growers about key insect pests and how to scout for them in cabbage, peppers, and sweet corn.
2. Educate growers on how to use a pheromone trap to help make scouting for insect pests more effective, thus making insect pest management more effective and more economical.
3. Encourage growers to use traps as part of their IPM practices in the production of cabbage, sweet corn, and peppers.

Budget for the project:

Demonstration of Pheromone Traps in Fresh Market Vegetable Production

Leaders: Dr. Annette Meyer Heisdorffer, Nathan Howard, Jeff Porter, Dr. Ric Bessin, and Dr. Brent Rowell
County: Daviess and Henderson
Date Submitted: May 7, 2007
Funds Requested:

Pheromone lures and materials for 14 traps \$ XXX.00

Supplies (such as posts for traps, traps, signs) \$ XXX.00

\$ XXX.00

For the period: Fiscal Year 2007