

A. Grant Data

Title: New Jersey Crop Surveys, Profiles: Cucumber, Pumpkin, Blueberry and PMSPs: Honeybees, Blueberry

Type: Crop Profiles, PMSPs

Lead investigator:

Dr. George Hamilton
Rutgers Cooperative Extension
93 Lipman Drive
New Brunswick, NJ 08901
732-932-9801
732-932-9751
hamilton@aesop.rutgers.edu

Collaborators: Joseph Ingerson-Mahar, Kris Holmstrom and Dean Polk (Rutgers University), Paul Raybold (NJ Department of Agriculture)

State(s) involved: New Jersey
Funding Year(s): 6/2005 to 6/2006
Funding amount: \$18,000

B. Nontechnical Summary.

This project was funded to assist the New Jersey Department of Environmental Protection Pesticide Control Program (PCP) with their collection, compilation and analysis of their survey of pest management practices utilized by New Jersey farmers. This is an ongoing program that began in 1985. In addition, the project was funded to develop two crop profiles (pumpkins and cucumbers) and review and revise if necessary a previously developed crop profile for blueberries. Finally, this project was funded to develop pest management strategies plans for blueberries and honey bees using previously developed crop profiles as starting point. To date, the assistance to PCP has been completed and the results are available at <http://www.nj.gov/dep/enforcement/pcp/pem-survey.htm>. In addition we are maintaining a database of the information and are making it available to researchers. These data are also being used in the development of new crop profiles and pest management strategy plans and revisions of previously developed profiles and plans. The crop profiles and pest management strategy plans proposed by this project are nearing completion and will be available later in the fall of 2006. The information found in these profiles and plans will be used to identify gaps in our management strategies for various insect pests, weeds and plant diseases and justify new research to fill these gaps.

C. Objectives

Objective 1: Surveys – The NJinPAS facilitates the collection and analysis of data pertaining to the use and usage of specific pest management tactics in New Jersey, including pesticides.

This objective has been achieved. NJinPAS assisted the New Jersey Department of Environmental Protection's Pesticide Control Program (PCP) with the development and analysis of pesticide use data collected from New Jersey farmers in 2004. The data collected was for usage on all crop sprayed in 2003 and is being used to develop crop profiles and pest management strategy plans. NJinPAS has also been working with PCP on the development of a 2006 survey and has published a recent journal article on the patterns seen in this 20 year program.

Objective 2: Crop Profiles - Crop profiles for two new (cucumber and pumpkin) and one previously published commodity (blueberry) in New Jersey are being researched and written.

This objective is ongoing. Each profile is in a different stage of development.: the pumpkins profile is nearing completion and will be technically reviewed shortly, the profile for pumpkins is still being developed; the previously written profile for blueberries has been reviewed and is being modified.

Objective 3: Pest Management Strategic Plans - Transition strategies to new pest management systems for certain commodities in the mid-Atlantic region may be needed as pesticides registered for use may no longer be available. Pest management strategic plans (PMSP) for honey bees and blueberries are being developed to meet this need.

This objective is ongoing. The PMSP for blueberries will be completed following the revision of the crop profile mentioned under objective 2. The PMSP for honey bees will be completed this fall.

D. Approach.

Objective 1 - Surveys - Rutgers Cooperative Extension assists the New Jersey Department of Environmental Protection (NJDEP) in the compilation of crop production information, including pesticide use information, from New Jersey agricultural producers and commercial pesticide applicators. This cooperative program has been conducted every three years since 1985; 2003 data is pending release by the NJDEP. The information is used directly in the creation of crop profiles and PMSPs. This data and/or corresponding analysis is published on NJinPAS web page for Pesticide Use Surveys at www.pestmanagement.rutgers.edu/NJinPAS/pesticidesurveys.htm.

Objective 2 - Crop Profiles - Crop profiles for cucumber and pumpkin are being researched and written using data provided in objective 1 (Surveys). Additionally, the previously published crop profile for blueberry is being reviewed and revised. These profiles are being developed/revised using the national crop profile guidelines; see http://nepmc.org/rese_profinstr.cfm for information to be collected and discussed will address major insect pests, weeds and plant pathogens of importance to New Jersey.

Objective 3 - Pest Management Strategic Plans - Two Pest Management Strategic Plans are being developed with New Jersey specialists from Rutgers Cooperative Extension, Rutgers University and the New Jersey Department of Agriculture and the farming community.

PMSP for Honey Bees for New Jersey - The New Jersey Information Network for Pesticide and Alternative Strategies Advisory Committee designated honey bees for the development of a Pest Management Strategic Plan for New Jersey. Given an extensive crop profile had been completed for honey bees in New Jersey during a previous funding cycle. This profile is being used as the starting point for the PMSP.

PMSP for Blueberry for New Jersey- This PMSP will review control measures for major pests, anticipate changes in pesticide registrations and discuss possible alternatives for at-risk pesticides. Growers and processors will identify critical priorities in research, extension, and regulation. The newly revised blueberry crop profile for New Jersey (see objective 2) will be used as the starting point for this PMSP.

E. Results.

Objective 1 – This objective has been met. The results of this objective can be viewed at <http://www.nj.gov/dep/enforcement/pcp/pem-survey.htm> and <http://www.pestmanagement.rutgers.edu/NJinPAS/pesticidesurveys.htm>. NJinPAS also maintains a complete database for the 2003 survey. When needed, data for individual crops is summarized using the database and provided to those developing New Jersey specific crop profiles and PMSP's.

Objective 2 – This objective is ongoing. A near final draft of the pumpkin crop profile is attached. Once completed (mid-September) it will be sent out for technical review with a completion date by the end of November. The cucumber crop profile is still being developed and will be completed later this fall. The draft blueberry crop profile is available at <http://www.pestmanagement.rutgers.edu/NJinPAS/CropProfiles.htm>. A revised profile is expected by the end of October.

Objective 3 - The PMSP for blueberries will be completed following the revision of the crop profile mentioned under objective 2. The PMSP for honey bees is currently being written. Once completed it will be reviewed by leading beekeepers in the state and representatives from the New Jersey Department of Agriculture. Both are expected to be completed later this fall.