

Northeastern IPM Center Partnership Grants Program

Project Report for Crop Profiles and PMSP's

A. Grant Data

Grant #: 2708-USDA-UD-2103

Title: Mid-Atlantic Information Network for Pesticides and Alternative Strategies - DE

Type: Crop Profile and PMSP

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States involved: DE and MD

Funding Year: 2004 – 6/2005

Funding amount: \$27,933

B. Nontechnical Summary.

Soybean Crop Profile

A Crop Profile was written on Delaware soybean. The Profile discussed the insect, disease, and weed pests of soybean. Biology and life history, damage, monitoring techniques, and decision making were also discussed. Chemical and non-chemical control measures were listed for each pest. Extension specialist from the University of Delaware contributed sections to the Crop Profile. The Project Director, King, compiled the Profile.

Pickle PMSP

A Pest Management Strategic Plan for pickles in Delaware and Eastern Shore Maryland was written with input from the agricultural industry during a day-long workshop. The Plan discussed the insect, disease, and weed pests of pickles. Chemical and non-chemical control measures were listed. Chemical control products were identified according to their category: organophosphate pesticide, carbamate pesticide, B2 carcinogen pesticide and other pesticides. A production timeline was prepared and worker exposure was discussed. Representative costs for pickle production were also given in the document. Efficacy tables for each pest/product were written. The impact of loss of critical control measure was discussed. Education, regulatory, and research needs were identified and prioritized by industry attendees at the workshop.

C. Objectives.

Objective: Write one Crop Profile on a Delaware commodity at risk.
The Crop Profile on Delaware Soybean was submitted to the NE IPM Center.

Objective: Write one PMSP on a Delaware commodity at risk.
The Pickle Pest Management Strategic Plan for Delaware and Eastern Shore

Maryland was submitted to the NE IPM Center.

D. Approach.

Soybean Crop Profile

The DE Pesticide Information Network Advisory Committee discussed the following commodities as possible candidates for a Crop Profile: carrots; cucumbers and pickles; greens; strawberries; cantaloupe and pumpkin; soybeans; and dry beans. The Committee compared these commodity for (1) risk for losing pest control chemicals due to FQPA and (2) presence in children's diet. Based on this discussion, the Committee decided that the 2004-2005 Crop Profile would be written on soybeans. Extension Specialists for insects, diseases, and weeds contributed sections to the Soybean Crop Profile. King compiled the information and wrote introductory material.

Pickle PMSP

The DE Pesticide Information Network Advisory Committee discussed the following commodities as possible candidates for a Pest Management Strategic Plan: green peppers, carrots, cucumbers and pickles, greens, strawberries, watermelon, cantaloupe and pumpkin, soybeans, and dry beans. Extension Specialists Whalen, Mulrooney, and VanGessel decided to pursue pickles due to their value to Delaware agriculture. Pickles are a major commodity in Delaware with several extension specialists and associates devoted to research on production and harvesting. Insect pests, such as the cucumber beetle, eat holes in the leaves and carry diseases, such as bacterial wilt. Aphids distort the leaves and transmit viral agents. Other plant pathogens, such as scab and leaf spots are problems.

King invited the Maryland Pesticide Information Network to join Delaware in writing the pickle PMSP. King made arrangements for a pickle workshop to be held in Harrington, DE on January 5, 2005. King, Whalen, Mulrooney, and VanGessel wrote a draft pickle PMSP which King routed to Maryland for input and revision. Pickle growers, consultants, and processors in the region were invited to the workshop, as well as staff of federal and state regulatory agencies and extension offices from both states.

E. Results.

Soybean Crop Profile

King transmitted the Profile to the NE IPM Center for publication on the web on 6/21/05. King was asked to supply additional information on production practices. The final Soybean Crop Profile was submitted to the NE IPM Center on 8/5/05.

Pickle PMSP

King incorporated revisions from the workshop and routed the final draft to workshop participants. King submitted the final copy to the NE IPM Center on 6/21/05.