Pest Management Strategic Plan
for the Mid-South Production Region

Ples Spradley, Elmo Collum, and Matt Shipp¹

RESEARCH PROBLEM

What are the current components of pest management in cotton grown in the mid-South production region (Arkansas, Louisiana, and Mississippi)? In other words: what are the major pests of cotton, the practices used to control these pests, the acres treated/managed for each pest, and the current limitations on pest management in cotton? Additionally, what are the priorities for the research, regulation, and educational activities aimed at pest management in cotton?

BACKGROUND INFORMATION

The Environmental Protection Agency is in the process of re-registering pesticides under the requirements of the Food Quality Protection Act (FQPA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The EPA is examining dietary, ecological, residential, and occupational risks posed by the “high risk” pesticides (organophosphates, carbamates, and B/2 carcinogens). EPA’s regulatory focus on these chemistries has created uncertainty as to their future availability. At some point the EPA may propose to modify or cancel some or all of these pesticides. The USDA, EPA, land-grant universities, and the cotton industry need to proactively identify regulatory, research, and educational needs for replacing or modifying the use of the pesticides of concern with cost-effective alternatives as FQPA is implemented.

PROJECT DESCRIPTION

A project to develop a Pest Management Strategic Plan (PMSP) for cotton growth in the mid-South was initiated in 2001. Extension specialists, university researchers, consultants, growers, commodity groups, Farm Bureau, state lead agencies, EPA, and

¹ Pesticide assessment specialist, Cooperative Extension Service, Little Rock; Pesticide Education Coordinator, Mississippi State University, Raymond, MS; and Extension Associate, Louisiana State University AgCenter, Baton Rouge, LA, respectively.
other stakeholders from Arkansas, Louisiana, and Mississippi were asked to aid in this endeavor. The project is being funded by a grant from the Southern Region Pest Management Center, currently located at the University of Florida.

The primary objectives of the PMSP are to identify the key pests of cotton grown in the mid-South, the current pest management practices, and why other currently registered pesticides and/or management practices are not being used (e.g., cost, efficacy, resistance, and quality and quantity impacts). In addition, the plan will prioritize the research, regulatory, and educational needs for cotton pest management into the foreseeable future.

RESEARCH / ACTIVITIES

One of the primary components of this project was the establishment of advisory committees in each of the three states. The committees are composed of extension specialists, university researchers, consultants, growers, commodity groups, Farm Bureau, state lead agencies, EPA, and other stakeholders in cotton production. All of the state committee members were also asked to serve on the multi-state advisory committee.

A draft PMSP document was prepared using data from previous pesticide use surveys of cotton producers, surveys of advisory committee members concerning current pest management practices in cotton, and various cotton publications produced by researchers and specialists. A meeting of the Arkansas Advisory Committee was held in Little Rock in March 2002 to critique and finalize the Arkansas PMSP.

After the completion of the Arkansas PMSP, a multi-state PMSP was drafted using information provided by the Louisiana and Mississippi advisory committees. The draft multi-state PMSP was provided to all of the advisory committee members in the three states in March 2003 for their review.

A meeting of the multi-state advisory committee was held in Vicksburg, MS, on 24-25 April 2003. The primary goals at the Vicksburg meeting were to finalize the multi-state PMSP and to develop pest-specific priorities for research, regulatory, and educational activities aimed at cotton pest management. The bulk of the multi-state meeting was spent on the development of the priority lists.

We are currently working with the multi-state advisory committee to finalize the PMSP and priority lists.

PRACTICAL APPLICATION

We expect the final document to be ready in the summer of 2003. Once completed, the PMSP will be disseminated to advisory committee members, the Southern Region Pest Management Center, and other identified stakeholders. It will also be placed on the USDA Pest Management Center website, http://www.pmcenters.org/CropProfiles/
ACKNOWLEDGMENTS

We wish to thank all of the members of the advisory committees from Arkansas, Louisiana, and Mississippi for their participation in this project. Special thanks is extended to Dr. Gus Lorenz, University of Arkansas Cooperative Extension Service; Dr. Blake Layton, Mississippi State University Extension Service; and Dr. Randy Luttrell, University of Arkansas, for their extension help with the PMSP and priority lists.