

## Part I. Preface

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### **The Third National IPM Symposium Workshop: Broadening Support for 21st Century IPM**

The Third National Integrated Pest Management Symposium/Workshop was especially timely and important, in light of the Clinton Administration's National IPM Initiative to promote IPM for economic and environmental reasons and to develop the research and extension tools to expand its adoption to 75 percent of U.S. crop acreage by the year 2000. This document provides the proceedings of that workshop, which took place in Washington, D.C. , Feb. 27–Mar. 1, 1996. Attended by more than 600 participants from around the country, the Symposium/Workshop was co-sponsored by two USDA agencies, the Cooperative State Research, Education, and Extension Service (CSREES) and the Economic Research Service (ERS), along with the Extension and Experiment Station Committees on Organization and Policy (ECOP/ ESCOP) and their IPM subcommittees. Each of these sponsors has a long history of supporting IPM programming in accordance with its primary functions: CSREES sponsors research and extension education efforts, working with both ECOP and ESCOP, while the Economic Research Service conducts economic research and provides policy analysis.

The partnership formed for the Third National IPM Symposium/Workshop reflected a commitment on the part of the National IPM Program team to better integrate social, environmental, and health scientists into IPM program design and evaluation. The Symposium Planning Committee worked together in a year-long effort to design an IPM conference focused on two primary themes:

- 1) "Putting Customers First" in the design and delivery of IPM programs, and
- 2) "Assessing IPM Program Impacts" by integrating from the start assessment activities that document impacts on farm profitability, the environment, and public health resulting from IPM adoption.

These two dominant themes provided the unifying focus for the numerous presentations and research contributions that followed over the course of the 3-1/2 day workshop. The conference sponsors agreed that for the administration's strategic goal of IPM adoption on 75 percent of the Nation's cropland by the year 2000 to become a reality, the programs developed through cooperative research and extended through educational efforts would have to address the needs of USDA customers. The conference sponsors also agreed that the customer base of the Department of Agriculture, along with its Federal and State partners, is broad and diverse. The IPM customer base includes those who care about the profitability of the agricultural sector and low consumer food prices. This base also includes customers who are committed to environmental stewardship and to minimizing any adverse impacts of agriculture and the use of agricultural chemicals on public health. Thus, the concerns of customers for agricultural profitability are tempered by commitment to environmental quality and public health. IPM programs need to be tailored to incorporate these multiple concerns in the diverse ways they arise in a given location.

All the involved agencies and cosponsors worked closely in the design and execution of this Symposium/Workshop. ERS took the lead in developing the economic-assessment portion of the conference, which included both plenary and panel presentations and selected paper sessions, and in compiling and editing the proceedings. CSREES, ESCOP, and ECOP took major responsibility for fleshing out the sessions directed at putting customers first, organizing a preconference on team building, facilitating commodity workshops, organizing a series of panel discussions on IPM program issues, and managing the IPM poster sessions.

The Symposium/Workshop stressed as one of its two major themes, "Putting Customers First." Here, a broad variety of commodity-producer

spokespersons discussed the priorities they saw for IPM research and extension. One strong producer theme was that research and extension programs must be adapted to local conditions to meet producer needs. Thus, producers need to participate with state-university researchers, USDA/ARS, and Extension educators to ensure that customer goals, preferences, values and resources are addressed by the program. To be effective, program implementation must assist customers in overcoming any constraints or barriers to adoption or program success, and through systematic assessment (built into program design) customers must be convinced of program performance.

In addition to producers, customers include a variety of often overlapping interests, including environmentalists, consumer groups, and the public-health community. "Putting Customers First" requires developing or strengthening skills involved in building diverse teams for program design and implementation. As is evident in these Proceedings, the wide diversity of participants provides the strength of new insights and skills. In addition, the commodity-group perspectives as well as the numerous research abstracts reveal the richness of technical agricultural expertise that can be applied to the task of creating ever-more-profitable and environmentally sustainable agriculture.

As numerous Symposium/Workshop speakers expressed, societal concerns about the impacts of agricultural production practices, particularly the use of synthetic chemicals, on the environment (i.e., water quality, wildlife, and habitat), occupational safety, and food safety are real and will continue. IPM programs, when oriented toward the twin objectives of enhanced profitability and better environmental and public-health performance, provide the possibilities for win-win strategies for agriculture, for society, and for rural and urban interests. The IPM community's challenge is to educate an increasingly urban Congress of the potentially broad set of benefits associated with effective IPM program strategies that incorporate environmental and public-health objectives by giving them evidence of what works.

The critical importance of documenting impacts motivated the second theme of the

Symposium/Workshop, "Assessing IPM Program Impacts." Incorporating economic, environmental, and public-health assessment into IPM research and extension activities provides customers with information about what works and documents economic and environmental impacts of concern to both producers and consumers. Responding to recommendations made by a panel of social, biological, and environmental scientists convened by CSREES and ERS at Big Sky, Montana, in July 1995, ERS commissioned a set of white papers from a group of specialists skilled in assessment methods, which focused on specific recommendations as to how IPM programs might be evaluated with regard to impacts on economic performance, environmental-impact amelioration, and lower risk to public health. By building economic, environmental, and/or public-health objectives into research and extension programs, IPM practitioners are able to appeal to a broad spectrum of customers, identify strategies that work to meet the objectives identified, and modify or adjust IPM programs to achieve multiple project goals.

The focus on assessment is, in part, motivated by public demand for government accountability. The Government Performance and Results Act (GPRA) of 1993 is one of the most recent legislative attempts to link the expenditures of public funds to actual program results. Integrated pest management programs sponsored by the U.S. Department of Agriculture and all of its Federal and State land-grant partners can best answer these challenges if they are designed from the start to meet broad-based customer needs and if they are structured and operated to learn what does and does not work through systematic economic, environmental, and (where warranted) public-health assessment activities.

The organization of the Proceedings approximates the order of presentations at the Symposium/Workshop. All speakers were provided the opportunity to furnish written materials for inclusion here; however, not all speakers chose to do so. The volume is organized as follows. Part II, "Putting Customers First," provides statements of priority needs in the realm of IPM research and extension activities, identified by IPM customers at the first plenary session. Representatives of major

producer groups were joined by a representative of the environmental community, USDA Deputy Secretary Rominger, and representatives of the land-grant universities as well as crop consultants in stating their priorities for IPM research and extension programs. Part III, "Assessing IPM Program Impacts," includes five papers commissioned by ERS focusing on assessment methods, particularly economic, environmental, and public-health assessment, as well as a review of barriers to adoption of IPM and methods of overcoming barriers through policy incentives. Summaries of the selected paper sessions organized by ERS dealing with assessment-related topics are found in this section. Part IV, "Analytical and Data Needs for Pest-Management Programs," and Part V, "Policies for Promoting Biological and Reduced-Risk Alternatives," present summaries of workshops held during the conference. Part VI, "Working with Customers to Identify IPM Research and Implementation Priorities," includes a report of the preconference workshop on team building and a summary of results of commodity workshops charged with identifying IPM program priorities. Part VII, "Focus on the Future," contains the

comments made in the last plenary session of the Symposium/Workshop. Abstracts of the posters presented at the Symposium/Workshop are found in the Appendix.

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