

The National Coalition on Integrated Pest Management

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The management of weeds, insects, and diseases represents major variable costs in agriculture. Integrated pest management (IPM), a system that combines all pest control tactics, has proved to be a profitable and effective approach to pest control. IPM programs have an outstanding track record throughout the world in reducing pesticide use, ensuring a safe food supply, and aiding the goals of water and wildlife conservation. At present, many growers use IPM. However, participation is far from universal. The opportunities for expanding IPM programs can be realized only through increased emphasis on IPM implementation.

The National Coalition on Integrated Pest Management (NCIPM) is a part-

nership of the agricultural community, the food industry, environmental organizations, and government. It was formed to support and promote the implementation of IPM in the United States as a biologically and environmentally sound approach to pest control. The coalition was formed in response to the public's concerns regarding safe food, clean water, and conservation of wildlife. The coalition represents growers, farmer organizations, commodity groups, agricultural consultants, food processors, food marketing organizations, pest control consultants, lawn care specialists, and environmental groups who desire to work closely with federal and state agencies to advance the implementation of IPM. The long-term goal of NCIPM is to maintain or improve the safety of food and water for present and future generations through strongly supporting IPM programs.

Some of the participants in the coalition are the Texas Pest Management Association, the American Farm Bureau, the National Wheat Growers Association, the National Pest Control Operators Association, the National Lawn Care Association, the National Alliance of Independent Crop Consultants, General Mills, Del Monte, Ocean Spray, Gerber, Campbell, the Grocery Manufacturers Association, the Food Marketing Institute, the Natural Resources Defense Council, and the National Wildlife Institute. Ad hoc advisors include the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA), Texas A&M University, Purdue University, and Clemson University. NCIPM seeks to improve dialogue and coordination among U.S. government agencies concerned with IPM by developing a working partnership with the USDA, the Cooperative Extension

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Service (CES), the state agricultural experiment stations, and the EPA. NCIPM is striving to make food producers, agricultural industries, food processors, the retail sales industry, policymakers, and consumers aware of the benefits of IPM. NCIPM recognizes the critical need to increase funding for expanding IPM educational programs carried out by CES and to use these programs as a vehicle to increase IPM implementation. Finally, NCIPM wishes to become a full partner in the planning process to identify national priorities for agriculture and urban IPM programs. NCIPM is an activist organization that advocates increased funding to develop and deliver IPM in the United States.

IPM Response to Public Concerns

Recent concerns involving pesticide residues in food and groundwater have substantially heightened public awareness regarding the safety of the food we eat and the water we drink. Public policymakers responsible for protecting human and environmental health wish to make cogent decisions regarding U.S. food and water supplies. IPM has been shown to significantly reduce pesticide use and thus provides a reasonable response to both public and regulatory concerns.

There are numerous outstanding examples of ongoing IPM programs. IPM educational programs have had a substantial impact in reducing pesticide use while maintaining or increasing profits. These programs provide a clear signal of the potential for IPM to deliver on its promise to reduce the unnecessary use of agricultural chemicals. Outstanding examples of pesticide reduction can be cited from individual state IPM programs. Several fruit and vegetable IPM programs have been conducted in partnership with producers and food processors. Fruit and vegetable producers rely heavily on pesticides to meet the strict cosmetic standards set by consumers, government, retailers, and commodity marketing orders. Despite these constraints, a program adopted by Gerber Foods, Inc., and Campbell Foods, Inc., for processing carrots in the lower Rio Grande valley of Texas reduced insecticide use by 66% (from six applications to two) without loss in yield or quality. Within 1 yr, the Texas IPM program reduced the amount of insecticides used on fresh-market cabbage by 44%. There are numerous examples from states throughout the country of similar IPM successes.

Another result of IPM has been a significant increase in the number of private agricultural consultants in the United States in the last 15 yr. The National Alliance of Crop Consultants represents several thousand private consultants. Private consultants have worked with CES on many IPM pro-

grams in the technology transfer process. Private consultant firms will continue to increase in the future and be prime users of IPM technology on behalf of the farmers they serve.

NCIPM Activities

NCIPM has been busy the past few years in achieving its goals. The workshop on IPM held in 1991 in Washington, DC, by the Institute of Food Technologists (IFT) was inspired in part by NCIPM. The IFT brought together two representatives from each of 34 scientific societies to examine the status of IPM programs and make recommendations. All of the workshops addressed a series of 20 or so questions concerning the status of IPM programs, program limitations, and needs for the future. Their report, outlining the importance of IPM, was presented to the United States Congress.

NCIPM has met with the deputy U.S. secretary of agriculture and stressed that the implementation of IPM programs could be an effective way to deal with groundwater contamination and concerns regarding endangered species and food safety. NCIPM has also pointed out that the best management strategies in the world are not going to be worth much unless they are adopted by farmers as profitable alternatives to present practices.

A number of meetings have been held with the EPA assistant administrator for pesticides and toxic substances and her staff. We suggested ways to incorporate IPM considerations into the regulatory decision-making process. We offered to work with EPA's benefits section to develop some sort of format in which pesticides under review could be considered for their value in IPM programs and perhaps retained in that capacity. EPA has been supportive of NCIPM's goals. EPA's deputy assistant administrator for pesticides and toxic substances recently stated that "IPM is the wave of the future."

NCIPM has testified before the House Appropriations Committee on behalf of IPM programs. We asked for an expansion in the role CES currently plays in the implementation of IPM programs and pointed out that CES IPM programs have been level-funded for the last 7 yr despite the growing need for management systems on the farm that can address potential environmental problems.

A number of meetings have been held with the assistant U.S. secretary for science and education and with the federal executives of CES. NCIPM stressed the need for IPM programs to help farmers deal with environmental constraints and our concern that USDA's commitment toward IPM has been weakened by shifting priorities and lack of funding, coordination, and direction. We also stressed biologically intensive IPM,

which emphasizes the use of resistant cultivars, cultural manipulation, and biological control. These tactics will increase in importance if the current decrease in availability of pesticides continues. The USDA is presently in the process of developing their IPM policy draft.

NCIPM met with EPA's Pesticide Benefits Section regarding benefits analyses and possible changes to incorporate IPM considerations. NCIPM argued that EPA should examine pesticides and risk reduction on a commodity-by-commodity basis rather than chemical-by-chemical. This is the cropwide risk reduction approach recommended by the National Academy of Sciences. It fits smoothly with the integrated approach to crop pest management taken by IPM researchers. Another suggestion was that EPA invite product users to participate during special review negotiations. Currently only the pesticide manufacturers and USDA are involved. EPA is considering these suggestions.

NCIPM has met with the Food and Drug Administration (FDA) to discuss FDA's defect action levels, which set tolerances for contaminants in food. IPM growers who are using beneficial insects in their fields have to spray with pesticides to kill the beneficials before harvesting so that they can meet defect action levels. FDA recognizes the irony and has begun to change regulations concerning the use of beneficials in stored grain.

NCIPM attended a White House meeting to discuss the impact of reregistration requirements on the continued availability of appropriate minor-use pesticides. The loss of pesticides with selective activity because of lack of industry support is especially troubling to IPM programs on fruits and vegetables. The special assistant to the president for agriculture has continued to discuss this matter with NCIPM. NCIPM has met with officers of the Office of Management and Budget (OMB) to seek help from various federal agencies that have an interest in IPM in soliciting increased funding for IPM implementation. OMB brought together key staffers and legislators from various committees to tour IPM farms in the Maryland area. NCIPM also met with the National Academy of Sciences (NAS) to discuss alternative agriculture. NAS strongly supports IPM and recognizes the need for increased IPM implementation.

NCIPM has developed a plan that contains our recommendations for the various agencies in regard to IPM implementation. The goal of EPA is to establish a sound national strategy for integrated crop management that sets priorities all federal agencies can follow. This action was at the recommendation and urging of NCIPM. This plan continues to move forward, with the various commodity working groups coordinating a plan of

action.

NCIPM met recently with the USDA to discuss funding for IPM. The president's 1991 budget both contained and increased the funding for IPM for the first time in 13 yr. Several USDA staffers gave NCIPM the credit for raising the level of awareness about the value of IPM programs. The Farm Bill now includes a definition of IPM. NCIPM also was contacted by the Cooperative State Research Service (CSRS) regarding their increased efforts to develop pest management strategies. The refocusing of CSRS on pest management strategies is a welcomed development, especially in light of pesticide reregistration and its devastating impact on minor use crops. NCIPM also discussed the possibility of establishing an independent foundation for IPM education. The foundation would accept funds from private foundations and companies interested in promoting IPM awareness.

A constraint to IPM adoption is related to the ignorance of the general public regarding IPM. Producers and processors of agricultural commodities appreciate the role IPM can play in

reducing or eliminating pesticide use. However, the U.S. consumer has little or no understanding of IPM. Developing a strong public information campaign is one approach to educating the public on the benefits of IPM. Most of the general public does not relate to the complexities of agriculture much less IPM systems. The best approach to educating the public could be through the establishment of urban IPM programs. Pesticides and fertilizers used in the urban environment may contribute to serious environmental contamination. Pesticide use in this setting also may result in direct human exposure to pesticides. Urban citizens can relate readily to pests that attack the structures in which they live and the landscapes that surround them. A national initiative in urban IPM would provide a broad-based public focus. The best way to educate urban consumers is to involve them in IPM programs for the urban environment. These programs should address the structural and landscape pest problems and educate the general public about the advantages of an IPM approach. Urban IPM programs can be used as a vehicle for educating

the public on the value of IPM in the urban environment as well as in agricultural systems.

University-trained IPM specialists are necessary to expand IPM. Currently, several million hectares of crops are receiving IPM under the advice of private agricultural consultants. Universities must recruit top-quality students and provide them with broad-based, practical training in IPM to meet future increasing demands for private consultants, CES specialists, and research scientists.

Maintaining a safe and abundant food and water supply is the responsibility of agricultural producers, the agricultural chemical industry, commodity handlers, food processors, retail grocers, and consumers. Federal and state governments must support expanded implementation of IPM. The private consultant must join with the CES and the producer to move forward with broader implementation of IPM systems. NCIPM is working on many fronts to achieve the goal of IPM implementation by fostering communication and cooperation among these groups and by being an advocate for IPM in government.