COOPERATIVE EXTENSION SERVICE

UNIVERSITY OF KENTUCKY • COLLEGE OF AGRICULTURE

NAPIAP in Kentucky

by

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The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), passed in 1947, required that all pesticides distributed or sold in interstate commerce had to be registered and labeled federally. Responsibility for registration was first under the direction of the USDA, but once the Environmental Protection Agency was established in 1970, it took over registration activities. In 1972 the scope of FIFRA was expanded, and the risks of all registered pesticides had to be reassessed, allowing reregistering only if the risk of a pesticide was not unreasonable when compared to the benefits of its use.

The National Agricultural Pesticide Impact Assessment Program (NAPIAP) was formed by the Secretary of Agriculture on October 19, 1976. NAPIAP is a cooperative unit, providing management and coordination of USDA and state activities. Nine USDA agencies have input into NAPIAP. These agencies interact with four regional coordinators, who oversee 53 state liaison representatives (SLRs), one from each state and territory. State Agricultural Experiment Stations, Cooperative Extension Services, and Departments of Agriculture can be involved in various programs.

NAPIAP is designed to provide the most accurate and objective data available for defining and evaluating the benefits of selected pesticides having uses in agriculture, forestry, or both. Productivity, quality, and use of soil and water resources can all come into play. By documenting the impacts related to registered pesticides used in U.S. agriculture, the EPA is better able to reregister, reduce usage, or cancel the registration of existing pesticides. NAPIAP funds pesticide studies with special emphasis on areas of water contamination, application technology, pesticide use in conservation tillage, benefit analysis, drift, disposal, human exposure to pesticides, pesticide use surveys, resistance, and environmental effects.

NAPIAP enlists the help of agencies in all states, including Kentucky, to assess and quantify the benefits of pesticides important to the state's agriculture, and to define what impact those pesticides will have on consumers, should the pesticides no longer be available for use by farmers and other applicators.

It is essential for Kentucky's state agencies to express

state and local concerns on pesticide issues and research needs. Funding is available to conduct research or surveys on uses of pesticides pertinent to our state and the nation. Every state is also responsible for pesticide training, education, and applicator certification, as well as public awareness within the state, through presentations and participation in meetings.

Projects being completed in Kentucky at this time include:

- "Kentucky Pesticide User Practices and Alternatives," a three-year pesticide use survey targeting Extension agents, specialists, and researchers covering usage due to insects, weeds, and diseases on Kentucky's five major commodities: alfalfa, corn, soybeans, tobacco, and winter wheat. The Division of Pesticides, in the Kentucky Department of Agriculture, increases the scope with an annual survey of pesticide dealers.
- Training in several categories with workshops offered throughout the year, covering subjects such as personal protective equipment, record keeping, groundwater protection, and/or food safety.
- Development of Extension publications relating to pesticide issues and Integrated Pest Management (IPM), such as:

Core Manual: Applying Pesticides Correctly: A Guide for Private and Commercial Applicators

Understanding Pesticide Labels and Labeling, ID-100 Kentucky's Endangered and Threatened Species, ID-103

Pesticide Residues in Grains, Vegetables, Fruits and Nuts, IP-9

Protecting Kentucky's Groundwater -- A Grower's Guide, IP-13

Vendors of Beneficial Organisms in North America, ENT-

Vendors of Microbial and Botanical Insecticides and Insect Monitoring Devices, ENT-54

Applicator Training Manual for Ornamental and Turf Pest Control, PAT 1-3

Kentucky's Pesticide Applicator Training and Certifica- tion Program, PAT-2

Sprayer Nozzles: Selection and Calibration, PAT-3

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Kentucky Pesticide User Practices and Alternatives

1990: Special Report 91-1 1991: Special Report 92-2

• Research funded by NAPIAP in Kentucky:

Assessments of specific pesticides such as methyl bromide

Compatibility of turfgrass insecticides with beneficial predators

Characterization and development of an acetylcholines terase assay for the detection of Organophosphate insecticide resistance in horn flies

Pesticide User Practices and Alternatives -- A survey of pesticides used, combined with the most common pest/crop combinations, for the top five crops grown in Kentucky.

In the future, NAPIAP will continue to need Kentucky's help in assessing safer pesticide alternatives to presently used pesticides. When registering and reregistering pesticides, the EPA needs to know, for example, differences in phytotoxicity, compatibility between pesticides, economic comparability, and nontarget species effects. It is also becoming increasingly important to determine which minor use pesticides (used on minor crops) are the most beneficial and to keep those registered, as well as encouraging the development of new and better pesticides. The Interregional Project Number 4 (IR-4), established in 1963, works closely with NAPIAP in an effort to clear pest control agents and animal drugs for minor uses. IR-4 funding helps to provide extensive field and laboratory data necessary to support registration of minor use pesticides. Finally, through the use of surveys, determining and dealing with public perceptions of chemicals is an important present and future goal.

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