A New Approach to Pest Management Planning

The Situation
Production agriculture continues to be a major economic contributor to the state of Idaho. Idaho ranks first in the nation for potato production, contributing 29% to the overall national production. Idaho’s malting barley production is ranked second, nationally. Other crops produced in Idaho, ranking in the top ten nationally are, lentils, dry edible peas, mint and onions. All of these crops are dependent on Integrated Pest Management (IPM) strategies, which include the use of pesticides, to maintain production and quality standards of the industry.

Pesticides are regulated by the United States Environmental Protection Agency (EPA). Since the implementation of the Federal Food Quality Protection Act (FQPA) there has been more emphasis on reducing dependency on organophosphate insecticides. The EPA has been reviewing all pesticides and conducting subsequent risk assessments on the registered uses. The EPA will determine the reregistration eligibility status of each pesticide for currently labeled crops. The regulators may make risk assessment decisions based upon default usage data based on allowable labeled uses versus actual pest management practices. Therefore, the USDA Office of Pest Management Policy (OPMP) is facilitating the development of Pest Management Strategic Plans (PMSP) to help the industry identify and develop strategic approaches to critical pest management issues and needs. The plans strive to maintain profitable production by identifying and providing growers with cost-effective pest management tools.

Our Response
Six PMSPs workshops were conducted in the Pacific Northwest from 2002 to 2004. The workshops were conducted for potatoes, pulse crops (peas, lentils, garbanzo beans), mint, small grains, alfalfa and clover seed, and onions. Growers, commodity associations, University Research and Extension personnel, crop consultants, regulators and food processors from several states in the Pacific Northwest convened to write and develop a regional strategic plan for each of these commodities. The pulse crops plan was developed with the Canadian pulse industry and has an international focus. The USDA/CSREES provided the funding for the workshops and the University of Idaho Pest Management Center, Oregon State University and Washington State University coordinated and facilitated the workshops and the development of the strategic plans.

The Pest Management Strategic Plans were developed by taking a pest by pest approach, working through the production season of the crop. At each crop stage, current management practices, both pesticide and non-pesticide, were identified. New pest management practices, still being developed, were also identified and incorporated into the plans. Critical issues were prioritized, by crop stage, in the areas of research, education and regulation. Overall pest management critical needs for the commodity were prioritized in those same categories. The plans also contain activity tables demonstrating when pest management activities occur throughout the calendar year. These data are utilized by EPA to make more realistic risk assessments, rather than relying on default data. Pest
management efficacy tables were developed to include efficacy ratings on both pesticide and biological and cultural practices utilized as pest management tools.

The completed PMSPs have provided the commodities with a pro-active pest management plan based on sound science, current information, professional knowledge and practical experience.

Program Outcomes
The PMSPs have been successful ways of bringing together stakeholders and Research and Extension personnel to assess and identify critical needs for pest management. The future for successful pest management in production agriculture relies on these multi-state and multi-disciplinary Research and Extension projects. The PMSPs are utilized when preparing USDA grant packages to provide the necessary stakeholder input necessary for USDA funding programs. The plans have helped to provide research priorities for the IR-4 Food Use Program, at the national Food Use Workshop. The following information summarizes the outcomes for each commodity specific plan:

Potato (ID,AK,OR,WA)
- Potato Growers of Idaho have completed and are utilizing an IPM Standards Checklist.
- National Potato Council has utilized the plan while responding to EPA on pesticide registration questions.
- A multi-state proposal utilizing green manures for pest control was submitted to USDA in 2004.
- Research for wireworm control was funded by the USDA IPM Center.

Pulse Crops (ID,MT,OR,WY,MN,ND,SD,Canada)
- Three new pesticides have been labeled as a result of the planning priorities.
- One new pesticide is on the EPA workplan.
- 2,4-DB has received a high priority for IR-4 residue trials; waiting for EPA reregistration decision.

Mint (ID,CA,MT,OR,WA)
Command, Spartan and Acramatite pesticides were approved by EPA, as a result of the planning priorities.

Small Grains (ID,MT,OR,UT,WA)
- Work has begun with EPA and IR-4 to create a “small grains sub-group within the “grains” crop grouping. This will expedite new pesticide registrations.
- Zinc phosphate has received a full registration from EPA.
- Warrior insecticide registration petition has been submitted to EPA.
- Dimilin insecticide petition is currently being prepared for submission to EPA.

Onion (ID,CO,OR,UT,WA)
- Neck rot was identified as a research priority and funding for expanded efficacy trials is being pursued.
- Efficacy trials for thrips control, to control Iris Yellow Spot Virus (IYSV), were prioritized by the national IR-4 program. This disease was the top research priority of the PMSP.
- Several pesticides were prioritized for study, by IR-4 as a result of the PMSP.
- A multi-state proposal was submitted to USDA for thrips and IYSV research.

Alfalfa Clover Seed (ID,CA,MT,NV,OR,UT,WA,WY)
Growers have identified critical field activities and potential worker exposure problems with EPA during pesticide reregistration.

For More Information
Ronda E. Hirnyck, Pesticide Program Coordinator
District II Extension
University of Idaho—Boise Center
800 Park Blvd, Suite 200
Boise, ID 83712
208-364-4046
Fax: 208-364-4035
Email: rhirnyck@uidaho.edu

23-04rhirnyck-pest.doc
10/04