MID-ATLANTIC INFORMATION NETWORK FOR PESTICIDES AND ALTERNATIVE STRATEGIES - WV (WVinPAS)
State Network Projects Grant Proposal

Nontechnical Summary

Stakeholders in agriculture need to be kept abreast of current trends in pest management. It is important for their livelihood. Pest management strategies are in need of changing due to restrictions and replacement of long term used chemical pesticides. Stakeholders may also need to express comments dealing with maintenance of pesticides important for managing certain pests. Alternative methods are moving to the forefront. In West Virginia, crops requiring pest management are apples, peaches, small fruit, tomatoes, potatoes, sweet corn, and alfalfa and field corn used for feeding livestock. For instance, new chemistries with activity against the current insect problems on fruit tree are desperately needed. Disease resistance has developed with mainstay fungicides used on fruit (i.e., fire blight resistance is a continual threat). Currently, there are no effective alternatives and no alternatives to build a resistance management strategy.

The West Virginia State Network Project as a component of the Mid-Atlantic Information Network for Pesticides and Alternatives Strategies has provided reliable information dealing with IPM programming, including pesticide usage, linking to stakeholders and West Virginia researchers and maintaining contact with northeast partner universities with State Network Projects, the agricultural industries, and the West Virginia and federal regulatory agencies. The purpose of the Mid-Atlantic Information Network for Pesticides and Alternatives Strategies is to promote informed regulatory decisions on registered pesticides used on commodities grown in states of the Mid-Atlantic region. Emphasis is placed on decisions related to the Food Quality Protection Act (FQPA).

The WV State Network Project will continue to contribute to informed pesticide decision-making through maintenance of an advisory committee, coordination and communication with allied programs within the state and the region, and maintenance of linkages with federal partners and state clientele. Pesticide and pest management information is communicated throughout the state through meetings, direct contact, mail, e-mail, print, newsletter, and website information.

West Virginia Network Project- 2007

Project Description

a. Problem, Background and Justification

Stakeholders in agriculture need to be kept abreast of current trends in pest management. It is important for their livelihood. Pest management strategies are in need of changing due to restrictions and replacement of long term used chemical pesticides. Stakeholders may also need to express comments dealing with maintenance of pesticides important for managing certain pests. Alternative methods are moving to the forefront. In West Virginia, crops requiring pest management are apples, peaches, small fruit, tomatoes, potatoes, sweet corn, and alfalfa and field corn used for feeding livestock. More chemical pesticides are applied to apples in West Virginia than any other crop. Replacement of a pesticide is creating a surge of insect problems on apples. New chemistries with activity against the current insect problems are desperately needed. Disease resistance has developed with mainstay fungicides used on fruit. Fire blight resistance is a continual threat. There are no effective alternatives and no alternatives to build a resistance management strategy. Alternatives are needed in vegetables for control of nematodes and disease causing fungi. Varroa mite presents a threat to the bee industry in West Virginia. Multiflora rose is still an invasive problem in the state. Parasites are a major problem with sheep in pasture. This presents some of the pest management problems facing West Virginia stakeholders, who are in need of IPM implementation. The West Virginia State Network Project has provided reliable information dealing with IPM programming, including pesticide usage, linking to stakeholders and West Virginia researchers and maintaining contact with northeast partner universities with State Network Projects, the agricultural industries, and the West Virginia and federal regulatory agencies. Current information is provided by direct contact, mail, e-mail, newsletter, and website information. Developed crop profiles and the Mid-Atlantic apple pest management strategic plan continue to be useful information provided to Extension agents and consequently, stakeholders. The WV SNP with the Extension network in place serves as a primary information source to answer queries about pesticides and pest management methods in the grower community. Success of the WV SNP would be indicated by: 1) changes in pesticide usage and pest management with resultant maintenance and development of new pesticides important to a major agricultural industry in the state and region and 2) development of new alternatives that are a safeguard to human health and are environmentally sound. Growers will realize economic benefits with these changes.

b. Goals: The West Virginia (WV) SNP will implement all the goals set forth by the NE IPM Center as follows:

1. Provide a direct linkage and interact with stakeholders, the Northeastern (NE) IPM Center, and the federal government, encouraging science-based pest management that safeguards human health and the environment and promoting economic benefits.
2. Be a primary source of information regarding usage of IPM tactics and pesticides to further the implementation of Integrated Pest Management.
3. Serve as a liaison among the NE IPM Center, WV University, WV Department of Agriculture, and other state and federal agencies.

c. Objectives and Anticipated Impacts

Objective 1.

To adeptly answer EPA and USDA queries about pesticides and other pest management methods in the grower community.

The WV SNP website listing direct links to West Virginia Extension professionals will be maintained at: http://www.wvu.edu/~agexten/ipm/contacts.htm making this site known to other agencies.

Anticipated Impact 1.

Comments from stakeholders regarding the need for maintenance of important pesticides could result in an economic benefit.

Pest populations would be encountered due to lack of an important pesticide and replacement with higher cost, less efficient pesticides would have an economical impact.

The development of alternatives, as more environmentally friendly, less risk pesticides, would have an impact by safeguarding human health and the environment.

Objective 2.

Maintain an active advisory committee. Conduct an IPM workshop.

Anticipated Impact 2.

Comments from members of the Advisory Committee provide direction for implementation of IPM in West Virginia.

Comments from members of the Advisory Committee in response to queries from EPA and USDA contribute to sound decision making with regard to pesticide usage, resulting in economic benefits and safeguarding human health and the environment.

Comments from members of the Advisory Committee result in needed publications for educating the grower community and implementing IPM.

Workshop participants carry out IPM implementation.

Objective 3.

To update, on a monthly basis, a website with helpful, current information and links.

Anticipated Impact 3.

Information gathered from the website will provide stakeholders with knowledge of pest management tools to implement IPM that are economically beneficial.

Information gathered from the website will provide stakeholders with information to respond to EPA and USDA with regard to regulatory issues, pesticide usage and tactics needed for IPM implementation.

Information gathered from the website will provide stakeholders with alternatives to pest management that are safe to human health and are environmentally sound.

Objective 4.

To distribute and document NE IPM Center-related information, such as release of RFA's, meeting dates, and regional IPM publications of importance in a timely fashion to all appropriate contacts. To collaborate with researchers in the northeast to carry out IPM implementation in West Virginia.

Anticipated Impact 4.

University and extension personnel will develop new research and outreach programs for IPM implementation in West Virginia and the region.

Alternatives to pesticides will be developed that present an approach to pest management that safeguards human health and are environmentally sound.

Objective 5.

Attend an annual meeting facilitated by the Northeastern IPM Center.

Anticipated Impact 5.

Information obtained from the annual meeting by interaction and discussion among Northeastern SNPs Liaisons, NE IPM Center, EPA and USDA personnel will provide guidance and improvement for future programming dealing with communication among members of state and federal agencies and stakeholders of needed information regarding pesticide usage, pest management strategies and IPM implementation.

Objective 6.

To help process, when necessary, subcontracts between the Northeastern IPM Center and other entities of the SNP leader's institution to minimize total indirect costs.

Anticipated Impact 6.

Improving the transfer of funds from the Northeastern IPM Center to other programs or individuals of West Virginia will facilitate future IPM implementation.

Approach and Procedure 1.

The WV SNP liaison will: 1) forward requests for information to the appropriate discipline specialist, individual with agricultural responsibility (Extension Agent), or commodity grower, noting the date for when the Information is needed, 2) copy the

appropriate individuals (as indicated on the query), and 3) record and document all responses in year-end reports to the IPM Center.

Approach and Procedure 2.

An Advisory Committee has been maintained, functioning via direct mail contact, e-mail or FAX. These Advisory Committee members have contributed by: functioning at pest management workshops, answering surveys, developing crop profiles and pest management strategic plans, serving on regional IPM committees, responding to queries from EPA and USDA, and presenting IPM priorities that were forwarded to the IPM Center. Committee members have provided valuable comments dealing with several IPM issues, some of which have been reported in the separate progress report.

The Advisory Committee will meet annually to prioritize the need for IPM extension and education, research and development, and examining the need for updating IPM documents such as crop profiles, Pest Management Strategic Plans, or guidelines.

The revised advisory committee list will include Dale Yoder, strawberry grower, Charles Willams Grose, Ron Higson, John Nibert, Steve Miller, and Kevin Mullooly, alfalfa, corn, fruit, and potato growers; Extension agents, the Director of the organic farm project, James Kotcon, representing environmental groups, the West Virginia IPM Coordinator, Rakesh Chandran; staff of the West Virginia Department of Agriculture Pesticide Section, Grant Bishop and Peggy Powell; the West Virginia Pesticide Safety Education Program Coordinator Liaison and Extension Specialist, Plant Pathology and Entomology, John F. Baniecki; Extension Specialist for Weeds and IR-4, Rakesh Chandran; the Extension Specialist for Fruit Plant Pathology, Alan Biggs; the Extension Specialist for Fruit Entomology, Henry Hogmire, Yong Lak-Park, Entomologist, William Bryan, Agronomist, Bill Grafton, Wildlife Specialist, Tom Basden, Nutrient Management Specialist, Tom McCutcheon, Extension Agent, Dave Workman, Extension Agent, Rodney Wallbrown, Extension Agent, William Shockey, Extension Agent, Craig Yohn, Extension Agent, Kari Mazzaferro, Extension Agent, John Murray, Extension Agent, Wayne Bennett, Extension Agent, Jennifer O. Williams, Director, Extension, Agriculture, Forestry and Resource Development, Sue Spiroff, President, WV Pest Control Operators' Association, and Betty Forbes, Registered Dietitian, Licensed Dietitian. A representative from West Virginia State University (1890 institution) will be asked to be a member of the Advisory Committee.

Each segment of the pesticide user community approaches pest management from a different viewpoint. The advisory committee has been a valuable medium for voicing these viewpoints. We have witnessed this from the comments made by members of the advisory committee.

Members of the Advisory Committee will coordinate an IPM workshop presenting current and future IPM tactics.

Approach and Procedure 3.
The following web site will be maintained and updated:
http://www.wvu.edu/~agexten/ipm/pestprog/WVINPAS/index.htm ….The site:

1. Addresses regional priorities established by the NE IPM Center.
2. Is compatible with regional and national IPM Center sites.
3. Includes contact information for WV SNP
4. Includes a project description for WV SNP.
5. Includes links to annual progress reports for WV SNP.
6. Complies with Section 508 of the Rehabilitation Act Amendments to the Workforce Investment Act of 1998.
7. Includes links to the NE IPM Center and other appropriate entities.
8. Prominently displays, near the heading, the phrase, "The West Virginia component of the Northeastern IPM Center." The words "Northeastern IPM Center" are hyperlinked to the Center web site.
9. Includes the statement: "This site is supported, in part, with funding from the Northeastern IPM Center."
10. Includes the date of the most recent update.
11. Conforms to all format and content standards to be developed by the NE IPM Center.

IPM activities, pesticide regulatory update information, funding opportunities, university research findings, and research activities of faculty associated with the West Virginia University Organic Farm, providing information on alternative strategies for pest management, are to be included in an existing monthly newsletter, "Look What's Out There in IPM". Pesticide information will be posted to the monthly "Look What's Out There in IPM" Newsletter linked to the West Virginia Pest Management Web site. Announcement of such information and the URL will be sent electronically to a mailing list. Growers and Extension agents will be contacted to add their names to a mailing list. Key members of commodity groups will be added to the e-mail list for notification of new postings of the Newsletter.

Commodity meetings and pesticide-user meetings will be posted on the website. Information from these meetings dealing with current pest management technologies will be included in the Newsletter. For added website information, collaboration will be maintained with the WV University IPM program, the WV SARE program, the WV University Organic Farm Research project, the WV Pesticide Safety Education Program, and the WV IR- 4 Project. In addition, periodical contacts will be held with the West Virginia Department of Agriculture to obtain information dealing with pesticide registrations and regulatory activities in the state.

The website will also contain separately or in the Newsletter, examples, such as, SNP contact information, a roster of the advisory committee, IPM priorities (identified by the advisory committee), a list of regulatory queries and responses, crop profile information, pest management strategic plans, pest updates/outbreaks, progress

reports and developments in IPM. A list of WV professional contacts is posted on the website.

Approach and Procedure 4.

Plans are for a collaborative research effort with plant pathology members of Cornell University to collect information dealing with the spread and incidence of the fungus *Phoma*, causing alfalfa brown root rot.

Announcements of RFA's and meeting dates will be included in the Newsletter posted on the WV SNP website. The newsletter mailing list will be updated annually to ensure that this information is reaching the appropriate individuals and agencies. Specific individuals will be contacted when funds become available offering our assistance in the preparation of grant proposals.

Information from the Northeastern IPM Center newsletter and Center-related publications will be posted on the WV SNP website and distributed to university specialists, extension agents, and individuals with agricultural responsibilities. Examples of publications posted are: the Northeastern IPM Center newsletter, the Agricultural Pocket Pesticide Calibration Guide, Greenscaping: The Easy Way to a Greener, Healthier Yard, The Brown Marmorated Stink Bug, Northeastern IPM Center Grants at a Glance, and Pesticides in the Nation's Streams and Ground Water, 1992-2001—A Summary.

Approach and Procedure 5.

The WV SNP will attend an annual meeting facilitated by the Northeastern IPM Center that focuses on issues of importance to SNPs and coordinating agencies. Cooperation across state lines, for example, participation in pest management strategic plans, supporting projects, and sharing of resources will be discussed.

Approach and Procedure 6.

The WV SNP liaison will participate in all subcontracts between the Northeastern IPM Center and other entities of West Virginia University in order to minimize total indirect costs for the Center. The WV SNP liaison will communicate with West Virginia University Office of Sponsored Programs to ensure that funds from the Northeastern IPM Center are passed to Principle Investigators who hold Northeastern IPM Center IPM Partnership grants.

Probable Project Duration: 12 months

Evaluation Plans:

Objective 1.

Requests from EPA and USDA's Office of Pest Management Policy are responded to, based on the specific deadline from the agency. A copy is made to the appropriate individuals (as indicated on the query). Responses are recorded and all responses are documented in year-end reports to the NE IPM Center.

Record Notifications to agricultural stakeholders in the state of 1) EPA decisions of pesticide usage 2) studies that have been conducted by university researchers in the state that involves future IPM implementation with a pesticide alternative to managing a pest.

Objective 2.

An Advisory Committee is active, meets annually, sets research priorities, and provides guidance for IPM implementation in West Virginia.

Comments are recorded from the Advisory Committee that contribute to EPA decision making with regard to use of pesticides in West Virginia.

IPM publications are posted on the WV SNP website and sent to Extension Agents to distribute to stakeholders.

A survey will be given to the IPM workshop participants to evaluate the benefits of the program presentations.

Objective 3.

The WV SNP website is maintained monthly. The Newsletter is posted on a monthly basis. The number of persons who access the website are recorded electronically.

Objective 4.

RFA's and meeting dates are posted on the WV SNP website. Individuals are contacted that funds are available. Assistance is offered in the preparation of grant proposals. The Newsletter mailing list is updated annually.

Information from the Northeastern IPM Center newsletter and Center-related publications are posted on the WV SNP website and distributed to university specialists, extension agents, and individuals with agricultural responsibilities

Objective 5.

An annual meeting facilitated by the Northeastern IPM Center is attended. Program issues are discussed and addressed to improve project efforts in the state and region.

Objective 6.

The WV SNP assists in the processing of subcontracts by passing funds from the NE IPM Center to a program or individual of West Virginia University that has a contract with the NE IPM Center.

Evaluation Plans: The Advisory Committee provides guidance by setting priorities and making recommendations for the overall project. Success will be determined by transmission of information to stakeholders, response to federal partners for information requests, production of the monthly newsletter, and submission of a final report.

Time Line:

January, 07	Plan for incorporating subject matter into the monthly newsletter Look What's Out There "LWOT"
January, 07	Plan for IPM Workshop in Spring, 2007
February, 07	Contact members of the Advisory Committee for their comments and input in planning the Spring IPM Workshop.
March, 07	Workshop on pesticides and alternatives with an IPM approach Evaluation of the Workshop
May, 07	Receive comments on current and future pest management issues from the Advisory Committee members
July, 07	Review web pages for revisions
September, 07	Request recommendations and suggestions from Advisory Committee
TBA, 2007	Participate in the NE IPM Center Annual Meeting
December, 07	Write WV SNP annual report

Cooperation and Institutional Units Involved

West Virginia University Cooperative Extension Service
(Project Director and Extension Specialists and Extension Agents serving on the Advisory Committee and providing pest management information and information from the stakeholders for the Project)

WVU Division of Plant and Soil Science, Entomology, Plant Pathology, Agronomy
(Researchers serving on the Advisory Committee and providing pest management information for the Project)

WVU Division of Animal and Veterinary Science, Human Foods and Nutrition
(Nutritionist serving on the Advisory Committee and providing information dealing with food and nutrition)

WVU Division of Forestry and Wildlife Management
(Extension Specialist serving on the Advisory Committee
and providing environmental information)

West Virginia Department of Agriculture
(Serving on the Advisory Committee and providing state regulatory information)

Key Personnel

John F. Baniecki, Project Director, Professor, Plant Pathology/Entomology Specialist, West Virginia University. Other collaborators include: Alan Biggs-plant pathology, Henry Hogmire-entomology, Rakesh Chandran-weeds, Jim Kotcon-nematology, Willam Bryan-agronomy, West Virginia University, Also, additional state Extension agricultural agents will participate in the program activities.