

Progress Report-2006

The following is a progress report summary of the WV SNP program activities.

Objectives:

1. Information Source for Federal/West Virginia Agencies

The West Virginia pesticide and alternative strategies program has met this objective by providing reliable information, linking to stakeholders and West Virginia researchers by maintaining contact with neighboring partner universities with pesticide and alternative programs, the agricultural industries, and the West Virginia and federal regulatory agencies.

2. Liaison

The West Virginia pesticide and alternative strategies program has met this objective by serving as a liaison among the Northeastern IPM Center, West Virginia University, and other key agencies in the state.

3. Communication to West Virginia Stakeholders

The West Virginia pesticide and alternative strategies program has met this objective by communicating pest management information to stakeholders via direct contact, mail, e-mail, newsletter, and website information.

4. Advisory Committee

The West Virginia pesticide and alternative strategies program met this objective by maintaining contacts with the West Virginia Advisory Committee members to keep them abreast of pest management issues and seek their advice and recommendations.

Results

1. Information Source for Federal/West Virginia Agencies Work Pertaining to Regulatory Agency Queries, Issues

The WV SNP has responded to the following regulatory requests required by the Northeastern IPM Center by forwarding the information to individuals with agricultural responsibilities who have direct contact with stakeholders.

- 1- Dimethoate Use Request needed by January 26, 2006
- 2- NE IPMC SNPs: First Notice Copper Fungicides Conference Call Wed Feb 1
- 3- Copper RED Comment Period Closes on March 27, 2006
- 4- IMPT: Carbofuran (Furadan) Information Request by March 24th!!!
- 5- Soil fumigant update
- 6- NEIPMCs: Quick Turnaround on Proposed Risk Mitigation Measures for Reregistration of Dimethoate
- 7- Pendimethalin/Broccoli Transplants PCR
- 8- Glyphosate/Sweetpotato request
- 7- NEIPMC: PCNB Seed Treatment for Barley, Peas, Rice, Soybeans
- 8- EPA is now in Phase III of the Copper Registration Eligibility (RED) Decision and is accepting comments from the public on the Risk Assessment
- 9- NEIPMCs: Final Copper Risk Assessment/Red Comment Closure Notification
- 10- NEIPMC SNPs: Dimethoate Risk Mitigation Proposed for Uses on Woody Ornamentals and Christmas Tree Nurseries
- 11- EPA Releases Revised Risk Assessments on Carbofuran, Seeks Further Comments on Benefits and Reducing Risks
- 12- Permethrin Requests for Information and Closure Call
- 13- EPA Request for Usage information for Malathion EC and WP formulations by April 27
- 14- USDA Request for Feedback on ULV Malathion Usage
- 15- EPA Request for Aldicarb Information
- 16- Mineral Oil, Information Request
- 17- MCPB on canning peas
- 18- Tables 1 and 2 for malathion proposed final rates
- 19- 90-day comment period on Pyrethrins, etc.
- 20- Copper RED; comment period - part 1 through 4.
- 21- IR-4 Pathology Priority issues
- 22- IR-4 Entomology Priority issues
- 23- IR-4 Weed Sci Priority issues
- 24- Malathion - Christmas Tree Plantations (Rates and REI).
- 25- EPA proposed change for Malathion use on Blueberries

Copies of responses received are attached.

Contact was made with the West Virginia Department of Agriculture, Pesticides Division to seek information on Section 18 emergency exemption update information. In addition, we have kept up to date on information dealing with strategy and pesticide registration to manage soybean rust in 2006. This information was related to West Virginia stakeholders via list serve.

A meeting with staff members of the West Virginia Department of Agriculture was held in May, 2006 to discuss registration of pesticides in West Virginia.

Pesticide information dealing with registration, cancellation and web site update were included in a monthly newsletter, "Look What's Out There in Integrated Pest Management."

2. Liaison

The West Virginia SNP continued to utilize the established links with federal, regional, West Virginia agencies and agricultural researchers, extension specialists, and other stakeholders to distribute pest management program information via e-mail, website, and a list serve.

Collaboration has been maintained with the West Virginia University IPM and IR-4 Programs. Cooperating research activities involve a study on the susceptibility of genetically modified alfalfa to insect and disease pests. Information from the IPM Coordinator was placed in the "Look What's Out There in Integrated Pest Management" newsletter.

Collaboration has also been maintained between the Pesticide Safety Education Program, and the West Virginia Department of Agriculture. In joint efforts with Craig Trippett, survey pathologist of the West Virginia Department of Agriculture, site visits were made to selected locations in the state to monitor for Soybean rust in 2006. Grant Bishop, Assistant Director, WV Department of Agriculture, provided updated information on registered pesticides in West Virginia for management of soybean rust. In a meeting held at Jackson's Mill, West Virginia on November 8 and 9, 2006, Extension agents, specialists, and University administrators were provided with handouts, brochures and posters on soybean rust and sudden oak death to involve them in plant diagnostic networking. Seventeen (17) Extension agents have been trained as First Detectors of the Northeastern Plant Diagnostic Network Program.

We continue to solicit and facilitate applications from qualified individuals or groups in West Virginia for funds available from the NE IPM Center. The project director has reviewed a Letter of Intent for a proposal dealing with sheep parasites and pasture management. The WV SNP liaison continues to 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 project director continues to pass funds from the Northeastern IPM Center to any programs or individuals of West Virginia University that have contracts with the Center. The project director continues to communicate with West Virginia University Office of Sponsored Programs to ensure that grants are consolidated and funds are transmitted to Principle Investigators who hold NE IPM Center IPM Partnership grants.

Distribution of Information

We served as a liaison among the Northeastern IPM Center, West Virginia University, and other key agencies in state. Information such as release of RFAs (e.g., Methyl Bromide Transitions (MBT) Program Integrated Research, Education, and Extension Competitive Grants Program, Biotechnology Risk Assessment Research Grants Program, CSREES the New Technologies for Ag Extension Program, EPA-proposals to help implement the Food Quality Protection Act (FQPA) and to support efforts by the agricultural community to "transition" away from high-risk pesticides to lower risk pesticides and sustainable practices in food production, EPA-critical pest management needs of U.S. minor and specialty crop growers, EPA- support community-based partnerships to reduce toxic risks in local communities program, the Northeastern Integrated Pest Management (IPM) Center availability of funding through the Northeastern Regional IPM Competitive Grants Program, CSREES availability of funding through its Plant Biosecurity program, the Northeastern Integrated Pest Management (IPM) Center availability of funding through its IPM Partnership Grants Program, FY 2007 Request for Applications (RFA) for the Integrated Organic Program (IOP), and the New RFA: Vegetable/Strawberry IPM Educator Exchange Program) was provided to Extension agents, Extension Specialists, advisory committee members, and West Virginia University faculty. An Agricultural Pocket Pesticide Calibration Guide and a Pest Alert fact sheet on the Brown Marmorated Sting Bug, produced by the Maryland Department of Agriculture, supported by the NE-IPM Center, were distributed to individuals with agricultural responsibilities in 55 counties of the state. Other information dealing with publications was included in the WV SNP newsletter and posted on the website. These were, a brand new EPA booklet "GreenScaping: The Easy Way to a Greener, Healthier Yard" and A fact sheet on "Pesticides in the Nation's Streams and Ground Water, 1992-2001."

Collaboration with Members of the NE IPM Center

Cooperation across state lines and sharing of resources were discussed with members of the NE IPM Center at the Annual meeting. Outcomes from the annual meeting, held at Mystic, Connecticut, were shared with Extension agents, specialists, and stakeholders. Support was given to Dr. Amy Brown, a Maryland SNP member for a proposal to create a database for training material and resources, which could be shared across state lines (See Minutes of Meeting and Letter of Support).

Coordination of program activities is maintained with the MAinPAS partners (NE SNPs) (New Jersey, Maryland, Pennsylvania, Delaware, and New York). A listserv has been utilized to facilitate communication across state lines. The New Jersey Network Project Director set up the listserv as "MAinPAS Partners" in March 2002. Members are

using this listserv to transmit meeting minutes; announce and coordinate pesticide surveys, crop profiles, and pest management strategic plans (PMSP's); as well as announce the release of state newsletters such as West Virginia's "Look What's Out There in Integrated Pest Management." Also, we continued to provide information on Section 18 and 24C for West Virginia to be included in the home page for MAinPAS at: <http://www.pestmanagement.rutgers.edu/NJinPAS/PesticideRegistration/MAINPASHome.htm>.

Information on pest management practices were made available to federal/ West Virginia agencies in a timely manner in response to current and future issues dealing with IPM tactics, including pesticides. The URL for the West Virginia monthly newsletter was sent to Liz Thomas of the Northeastern IPM-center to be included in the center's newsletter "On Target."

3. Communication to West Virginia Stakeholders Website, Newsletter, and other Stakeholder Outreach

The West Virginia SNP web site has been maintained to facilitate communication links with stakeholders and comply with the NE IPM Center.

The site: <http://www.wvu.edu/~agexten/ipm/pestprog/WVINPAS/index.htm>

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. Comply 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" will be 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.

Pest management workshop information (i.e., agenda, registration, credits, and contacts) was posted and made available via e-mail to county agents, specialists and interested stakeholders. Pesticide information, WV-crop profile information and IPM program activities have been included in the newsletter "Look What's Out There in Integrated Pest Management", which is linked to the West Virginia Pest Management Web site. Announcement of this information and the URL were sent electronically to a mailing list of stakeholders. Growers and Extension agents were contacted to add their names to the mailing list using the "add name feature on the

web site.” Key members of state-wide commodity groups were added to the e-mail list for notification of new postings of our newsletter. Notice of new posting of the WV- newsletter “LWOT” was sent to Liz Thomas of the Northeastern IPM-center to be included in the center’s newsletter “On Target.”

http://Northeasternipm.org/news_ontarget.cfm

A web site listing direct links to West Virginia Extension professionals has been maintained and made known to other agencies.

<http://www.wvu.edu/~agexten/ipm/contacts.htm>

4. Advisory Committee

The current West Virginia advisory committee consists of 32 Members, which include: the West Virginia IPM Coordinator, Rakesh Chandran; staff of the West Virginia Department of Agriculture Pesticide Section, Grant Bishop and Peggy Powell; President of the West Virginia Pest Control Operators Association, Sue Spiroff; President of the West Virginia Nurseryman Association, Brian Beckett; West Virginia University Horticulture specialist, John Jett; WVU Entomologists, Linda Butler and James Amrine; the West Virginia Pesticide Safety Education Program Coordinator Liaison, John F. Baniecki; the Extension Specialist for Plant Pathology, Alan Biggs; the Extension Specialist for Entomology, Henry Hogmire; IPM users such as growers and crop consultants, Extension agents, the Extension Specialist for Weeds and IR-4, Rakesh Chandran; and the Director of the organic farm project, James Kotcon, representing environmental groups, Tom McCutcheon and William Shocky, members form the WV- Environmental Stewardship Committee. Two new West Virginia University Extension agents, John Murray and Kari Mazzaferro have joined the Advisory Committee in 2006. Also, Yong Bak- Park, WVU Entomologist has joined the Advisory committee in August, 2006. A list of members can be found at: <http://www.wvu.edu/~agexten/ipm/pestprog/WVINPAS/advisecom.htm>

Members of the West Virginia Advisory committee were contacted by e-mail, phone, fax and regular mail to keep them abreast of the WV SNPactivities and to communicate current pest management issues, and requesting their review comments and suggestions. Contact with members of the advisory committee was made in February, 2006 asking them to provide information dealing with current pesticide and pest management issues and alternative practices in West Virginia. Follow up contacts with the Advisory committee to request their input and comments were made in March and October, 2006. The advisory committee members made comments on important current pest management issues.

The following is a summary list of their comments.

- An advisory member reported on the spread of Rose Rosette Disease (RRD) in West Virginia and neighboring states as a biocontrol of multiflora rose.

Approximately 50% of multiflora rose plants are infected with Rose Rosette Disease virus transmitted by *Phyllocoptes fructiphilus* Keifer (Acari: Eriophyidae) throughout West Virginia. Large numbers of multiflora have died to date; and it is expected that there will be eventual control of 90% of multiflora by RRD throughout the eastern region. It is requested that neighboring states also survey for the rate of infection of RRD in multiflora rose and follow its spread and natural control of this noxious weed.

- Henry Hogmire, Fruit Entomologist, WVU and advisory committee member stated that the primary insect control needs in fruit have arisen because of the cancellations and restrictions of organophosphate insecticides as a result of FQPA. Currently, the primary insect control problem, which lacks suitable control measures, is stink bugs on both peach and apple. New chemistries, which are not pyrethroids, lack sufficient activity against stink bugs to provide acceptable control. Therefore, new non-pyrethroid chemistries with good activity against stink bugs are desperately needed.
- Alan Biggs, Fruit Pathologist, WVU and advisory committee member has made statements on disease management needs. The primary needs have arisen partly due to the development of resistance to the most effective materials. Apple scab continues to be a threat with the emergence of isolates resistant to the DMI fungicides. This group of materials provided excellent control of scab, rust diseases, and powdery mildew. In areas with resistant isolates, there is increased use of other materials that are also susceptible to resistance development (e.g. the strobilurins and pyrimethanil (Scala)). Dr. Biggs believes that more research is needed on strategies to reduce the amount of overwintering inoculum. Strategies could include biological control of scab in the leaf litter with organisms that inhibit or compete with the scab fungus, as well as new approaches to leaf shredding. He further states that brown rot in stone fruits has a similar threat, with isolates resistant to the DMI fungicides recently identified in New York and Georgia. DMI fungicides have been the mainstay for disease management at the pre-harvest stage and have helped maintain high packouts of disease-free peaches even in wet growing seasons. With the loss of DMI fungicides, growers are using more strobilurins and captan. More alternatives are required. Dr. Biggs added that fire blight continues to plague mid-Atlantic growers. Currently there are no effective alternatives to streptomycin and no alternatives with which to build a resistance management strategy. Oxytetracycline is available for use in areas where streptomycin resistance occurs but its use is not permitted until the resistance is confirmed. A top priority would be the development of new materials that are as effective as streptomycin but which have a different mode of action.

- Dr. James Kotcon, Project Leader, West Virginia University Organic Farm and West Virginia Advisory committee member states that organic growers are in need of alternatives for nematode control in West Virginia. He also states that there are a number of fruit and vegetable diseases and insect problems that are in need of alternative controls. Examples are powdery mildew, black rot, and bacterial wilt of cucurbits and squash bug, squash vine borer, and cucumber beetles. Also, there is a need to manage potato leafhopper on potato. More resistant varieties are needed.
- Grant Bishop, Assistant Director, Pesticides Division, West Virginia Department of Agriculture, as a member of the Advisory committee, presented information on registered pesticides for management of soybean rust in West Virginia. He also kept us informed on regulatory issues: (i.e. 144 Tolerances that Are Insignificant Contributors to the N-methyl Carbamate Cumulative Risk Are Now Reassessed and Most Home Uses of the Organophosphate Pesticide DDVP No Longer Permitted). Proposed Phaseout of Pesticide Azinphos-Methyl and Longer Restricted Entry Intervals for Phosmet-(Correction). Revised Risk Assessments on Carbofuran, Available for Comments. Revised Risk Assessments for Dimethoate Now Available. EPA Publishes Cancellation Order on Azinphos-methyl Group 2 Uses.
- Extension Agents on the advisory committee reported the need for vertebrate control (deer) with use of repellents and anti-feeding chemicals.
- Trials for the control of varroa mites using 50% formic acid were conducted by James Amrine, Entomologist, WVU and Bob Noel (MD beekeeper) in April and August, 2006. Dr. James Amrine, as an advisory member, anticipates Florida, US-EPA and USDA approval of this effective method for controlling varroa mites. This method has been used at West Virginia University and in Cumberland, MD since 2000. He would like to see the states of WV and MD to eventually approve this method of control. This method can be viewed at the following web sites, <http://www.wvu.edu/~agexten/varroa06> and <http://rnoel.50megs.com/2000/index.htm>.
- Linda Butler, Entomologist, WVU and advisory member stated that there is a need to continue to educate home gardeners to recognize the difference between insects that are pests and those that are not, and to apply insecticides only when necessary.

Using the Northeastern IPM center website, information from the IPM Working Group in the Northeastern was reviewed and contacts with field corn growers were made in Mason, Harrison, and Lewis counties to seek information on current practices and needs. Comments were made concerning the need for more information on genetically modified corn and its impact on pest management.

Additional Work (Coordination, Surveys, Events, Publications, Training)

The WV SNP liaison provided technical assistance to State associations (Pest Control Operators Association, Vegetation Management Association, and Golf course Superintendents Association) to facilitate training of their members to maintain pesticide certification. The project director is technical advisor and board member of the WV Pest Control Operators' Association, board member of the WV Vegetation Management Association, and honorary member of the WV Golf Course Superintendents Association. Approximately 375 members have attended the state association workshops in 2006. We participated in commodity meetings and pesticide-user meetings to stay abreast of pest control measures used in the state.

The WV SNP liaison coordinated a workshop on new and upcoming IPM solutions for insect and disease problems on turf and ornamentals relating to new pesticides and alternatives. The workshop was held on September 20, 2006 in conjunction with the Pest Control Association Annual meeting at the Ramada Inn, Morgantown, WV. A note concerning program information and recertification credits was sent to Extension agents, specialists, and stakeholders in the state. Approximately 45 people attended the turf and ornamental sessions.

Upon advisory member's suggestion, a survey was conducted to gather information on Genetically Modified Corn as alternative to use of pesticide in the state. A Name list of growers who used GM corn was obtained from Extension Agents. One-on-one interview with growers in Mason, Harrison, and Lewis County was conducted and a survey was sent to other growers in Grant and Jefferson County to collect information on GM corn and its utility. Collected data has been summarized and tabulated. The final document will be posted at the WV Pest Management Website.

A presentation on pesticide and the environment was delivered to 71 Biology students at West Virginia University. Presentations on pesticide and pest management were given to stakeholders in Ritchie and Wood counties in 2006.

In 2006, plant Identification clinics were conducted in Wetzel and Marshal Counties

to provide stakeholders with technical information on integrated pest management and problem solving techniques.

Presentations on plant diseases and their management were delivered to approximately 192 Master Gardener candidates in 10 counties in West Virginia.

The WV SNP submitted an article titled "Tips on Home Gardening" was published in the West Virginia Garden Calendar-2006.

In 2006, a CD with images of Plant Diseases: Field Crops, Fruit, Ornamentals, Turf, Vegetables was updated and made available to county Extension agents for their reference. Also, a CD with images of Insects: Field Crops, Fruit, Household, Ornamentals, Turf, Vegetables was also updated and made available to county Extension agents as a reference.

Three PowerPoint presentations titled (Pesticide and the Environment, Turf Diseases and Management, and Dealing with Landscape Problems) were developed for presentations to stakeholders in the counties.

The WV SNP liaison provided technical and financial assistance for the development of a DVD for the Private Applicator Recertification Training-2006. The DVD contains three presentations that were given by the project director dealing with pesticides and their uses to stakeholders.

A member of the WV SNP has attended the Pennsylvania Association for Sustainable Agriculture Annual Meeting in Feb. 2006. Information obtained from the workshop was used to update a presentation on pesticide and the environment and to reply to Extension agents and stakeholders requests for solutions to pest problems in organic and conventional farming. Also, information from the PASA meeting was shared with participants of the Master Gardener's program in West Virginia. Information from SARE has been provided from Tom McConnell, SARE representative at West Virginia University.

The WV SNP members completed technical review for the pesticide and plant pathology sections of the West Virginia Master Gardener Manual.

Collaboration was carried out with 120 Future Farmers of America, training them in pest identification and integrated pest management methods for field, fruit, and vegetable crops and ornamentals and turf.

Approximately 99 e-mail inquiries on pests and pest management were answered by the WV SNP members.

Appendices

Baniecki, J.F. Plant Diseases: Field Crops, Fruit, Ornamentals, Turf, Vegetables. 2006. CD. Images.

Baniecki, J.F. Tips for Home Gardening. West Virginia Garden Calendar. Article. 2006.

Baniecki, J.F., Dabaan, M.E., and R.S. Chandran. "Look What's Out There in Integrated Pest Management" newsletter, 11 issues. 2006.

<http://www.wvu.edu/~agexten/pubnwsltr/newslett.htm>

Baniecki, J.F. Economic Insects and Management. 2006. PowerPoint Presentation.

Baniecki, J.F. Pesticides and the Environment. 2006. PowerPoint Presentation

Baniecki, J.F. and McCutcheon, T. Insects: Field Crops, Fruit, Household, Ornamentals, Turf, Vegetables. Updated 2006. CD. Images.

Baniecki, J.F. Dealing with Landscape Problems. Updated 2006. PowerPoint Presentation.

Baniecki, J.F. et. Al. West Virginia Master Gardener Manual (in preparation). 2006.

Baniecki, J.F., T. McCutcheon, et al. 2006 Private Applicator Recertification Training. DVD.

Note: Copies of the above produced program materials (i.e., CD's, Presentations, and DVD) are available upon request.