

Maryland Information Network for Pesticides and Alternative Strategies

Annual Report

Submitted 17 November 2005 by Amy E. Brown

A. Grant Data

Title Maryland information Network for Pesticides and Alternative Strategies, Progress Report, 2004 - 2005

Type: State Network Project

Lead investigator:

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Team members:

Ms. Sandra Sardanelli (co-PI)
IPM Coordinator
University of Maryland

Ms. Carol A. Holko (co-PI)
Chief, Plant Protection and Weed Management
Maryland Department of Agriculture

States involved: Maryland; closely associated with mid-Atlantic State Network Projects in Delaware, New Jersey, West Virginia, and New York

Funding year: FY 2005

Funding amount: \$15,000

B. Nontechnical Summary

The Maryland Information Network for Pesticides and Alternative Strategies (MINPAS) serves as the State Network Project (SNP) designed to gather and transmit information on issues relevant to both current and transitional pest management strategies, including pesticides. MINPAS aims to improve the level of knowledge, awareness, and understanding of local, state, regional, and national pest management practices. MINPAS is the primary information source for federal and state regulatory agencies and other agencies regarding use and usage of all Integrated Pest Management (IPM) tactics, including pesticides, in all IPM settings in the state.

MINPAS delivers pesticide regulatory and policy information to Extension educators, growers, crop consultants, and pesticide users in the state; gathers pest management data from researchers, Extension educators, growers, crop consultants, and pesticide users; analyzes these data to estimate the impacts of changes in pesticide regulations on agricultural productivity in Maryland; solicits input from other states in the midAtlantic region on shared commodities; and shares this information with other states in the midAtlantic region, the Northeastern Integrated Pest Management Center (NEIPMC), the US Department of Agriculture (USDA), and the US Environmental Protection Agency (EPA).

C. Objectives

- 1. Serve as the primary information source for federal and state regulatory agencies and other agencies regarding use and usage of all IPM tactics, including pesticides, in all IPM settings in the state.* MINPAS has achieved this objective by (1) developing and linking excellent web sites through the MINPAS web site and (2) distributing and collecting information about IPM use and usage in the state. Information requested by the NEIPMC and USDA is coordinated through the MINPAS office and outreach is made to the appropriate contact(s) within the state. Through the web site, where the annual reports of IPM and allied activities as well as other materials and links are posted, agencies and other clientele are kept informed of IPM in all settings throughout the state.
- 2. Serve as a liaison between the NEIPMC, the land grant institution, and other key agencies in the state.* This objective has been met, as the two principals from the land grant university are uniquely situated to serve as liaisons with other programs in their department, the College of Chemical and Life Sciences, the College of Agriculture and Natural Resources, Experiment Station and Extension administrators, faculty, and staff. Similarly, as part of her normal responsibilities, the principal from MDA maintains liaisons with other state agencies and with the university. Co-Directors Sardanelli and Holko are especially active within the NEIPMC and the region.
- 3. Enhance knowledge of IPM components, and promote informed decision-making by state clientele.* This objective has been met through materials developed through MINPAS, including the web site; presentations by the three principals at a variety of venues during the year; and through ongoing contact with Extension and Experiment Station representatives, agency officials, and direct contact with clientele groups.

D. Results

Advisory Committee

The three project co-Directors met with the MINPAS Advisory Committee (Appendix A) by teleconference on 4 October 2005. The Advisory Committee constitutes representatives from Maryland Cooperative Extension, the Maryland Department of Agriculture, grower interests from both conventional and alternative agriculture, and environmentally-oriented non-profits. Prior to the teleconference, Committee members were emailed a summary of MINPAS's accomplishments during the past funding year (extracted from this report). During the conference call, the co-Directors briefly reviewed project initiatives and accomplishments, leaving the majority of the scheduled time for discussion of initiatives for 2006 (Appendix B).

Advisory Committee suggestions and the follow-up action taken include the following:

- Comment: The search function for the MINPAS web site was not working properly.
Response: Dr. Brown notified the appropriate web technicians (Oct. 4, 2005).
- Comment: MINPAS is not referred to by name on the home page of the Pesticide Education and Assessment Program.
Response: Dr. Brown asked the Entomology departmental administrative aid to add the term "MINPAS" to Program Overview under Pest/Pest Management Information (Oct. 4, 2005).
- Comment: Consider establishing a bulletin board or other mechanism on the MINPAS web site to enhance communication on IPM and pesticide issues between campus and field faculty at the University of Maryland.
Response: Dr. Brown noted that the College of Agriculture and Natural Resources Advisory Committee, on which she serves, recently discussed establishing such a mechanism on the College web site. She will follow up to determine the College's action and will contact the Advisory Committee members again on this issue if needed.
- Comment: Dr. Dively suggested that an annual summary of insect pest activity throughout the state would be helpful. Such a report could be accomplished through surveying county field faculty to determine outbreaks, levels of pest pressure (not necessarily limited to insects), etc. Ms. Marose stated that information on routine pest occurrence, as well as new and emerging pests, is needed. Ms. Holko noted that MDA already runs surveys for certain endemic, seasonally endemic, and exotic pests and posts these data on the MDA web site. Mr. Bennett commented that NASS would be willing to consider adding a limited number of questions to their surveys.
Response: Dr. Brown commented that this could be an excellent project for which a campus- or field-based faculty member or a representative from another institution or agency might wish to submit a separate proposal for funding, either from NEIPMC or other source(s). Dr. Brown emailed Extension specialists at the University of Maryland to solicit potential questions to be added to the NASS surveys and advised them of the possibility for developing a proposal for a funded project (Oct. 5, 2005).

Coordination with Other Agencies and Programs

The Coordinators of the PEAP and IPM Programs all were appointed in the Department of Entomology at the University of Maryland. During the previous grant period, the Coordinators worked closely on projects and issues of significance to all programs. The programs are already strongly linked, with both formal and informal avenues of communication. Contact has been maintained through electronic mail and telephone communication, regular faculty meetings, and frequent personal contact. Beginning in 2000 and continuing annually, the Maryland PEAP has contributed year-end reports to the University of Maryland IPM Progress Report as an allied program. In 2004, designation of Ms. Sandra Sardanelli and Ms. Carol Holko as co-PDs significantly strengthened the cooperation between these units. Contact was maintained throughout the year by frequent email, telephone, and informal office visits. Ms. Sardanelli and Dr. Brown met at least weekly, and all three principals met formally on August 31, 2005 to review accomplishments and plan for the next cycle.

The SNPs in the mid-Atlantic region continued to maintain close contact. Information generated is still transmitted to each of the mid-Atlantic states, and web sites have been linked.

The Extension IPM Coordinator (Ms. Sardanelli) serves as the principal liaison to federal and state agencies and to the land grant institution on IPM. The IPM coordinator continues as an IPM representative to the College of Agriculture Emergency/Agro Security Focus Team and regularly meets with the MCE Assistant Dean of Programs for IPM information transfer advisory sessions. Sessions in 2005 IPM included Coordinator and IPM Specialist participation in MCE In-Service Training Programs and cooperative IPM / NRCS efforts to support IPM implementation in Maryland.

The PEAP Coordinator / MINPAS Project Director (Dr. Brown) serves as the principal liaison to federal and state agencies and to the land grant institution on pesticide issues. The PEAP Coordinator serves on the Agricultural Health Study National Advisory Panel and the (Maryland) Governor's Controlled Hazardous Substances Advisory Council, and is a member of the University of Maryland Homeland Security Panel of Experts.

The MINPAS MDA co-Director (Ms. Holko) serves as the key MINPAS liaison to other state agencies, bringing IPM and pesticide issues to the attention of state regulators directly through presentation to the MDA Pesticide Advisory Committee. MINPAS maintained an email list of appropriate State regulatory personnel, as well as the USDA-APHIS State Plant Health Director, to provide a direct conduit for information exchange from MINPAS and the NEIPMC to the regulatory community.

In 2005, the University of Maryland SNP participated in ad hoc meetings with the Entomology Department Chair and IPM Faculty and staff and the College of Agriculture and Natural Resource Sciences Assistant Dean of Programs to continue directional planning for the Maryland IPM Program in reference to a Plant Protection Center Initiative. This Initiative has been chosen for support and has been advanced to the Campus Provost by the College of Agriculture and Natural Resource Sciences.

Work Pertaining to Regulatory Issues

The MINPAS Director serves on the national Pesticide program Dialogue Committee (PPDC), the advisory committee for EPA's Office of Pesticide Programs. Through PPDC, the Director commented on the registration review process, the tolerance reassessment process, budget items, global harmonization of classification and labeling, and environmental indicators and results measurement. The Director also serves on two new workgroups formed within PPDC: the Consumer Labeling Work Group and the Performance Measures Work Group.

The co-PI from MDA serves as the State Plant Regulatory Official (SPRO) for Maryland and is a member of the National Plant Board (NPB). The NPB provides leadership in pest prevention and management and strives to unify efforts to safeguard agriculture, forestry, horticulture, and the environment from harmful invasive plant pests, in part by promoting uniformity and efficiency in the promulgation and enforcement of plant quarantines and inspection polices and practices. In this capacity, the co-PI serves on the Eastern Plant Board (EPB) Executive Committee, the NPB Website Committee, and the NPB Imported Fire Ant Committee, where she represents the interests of Maryland and the EBP with regard to plant pest regulation.

Web site, Newsletters, and Other Stakeholder Outreach

Web site

The IPM and Pesticide Education and Assessment Program (PEAP) (<http://www.mdipm.umd.edu/> and <http://www.pesticide.umd.edu/>, respectively) web sites, were significantly redesigned in 2005. New web site banners for IPM and PEAP highlight the broad scope of work and clientele of each program. The sites' navigation schemes were redesigned to facilitate accessing information through the sites. The MINPAS site serves as the link between the two programmatic sites and successfully bridges both programs.

Items available directly through the MINPAS page include *Pesticide Notes* newsletters (current plus archives), crop profiles, Extension publications in the *Pesticide Information Leaflet* series, MINPAS annual reports, and information on how to register to receive *Just-in-Time Pesticide Information*. The site itself allows one to subscribe or unsubscribe to receive notification of postings and to be added to an electronic distribution list as desired. Visitors to the Maryland IPM site can access activity reports as well as information from or about various IPM units in Maryland.

Newsletters

PestNet, supported by the IPM Coordinator, is an electronic newsletter of pest management information for Maryland. The service links to IPM information from other states in the Mid-Atlantic region. It is posted on the MD IPM web site (<http://www.mdipm.umd.edu/>) weekly, April through mid-October. Subscribers (farmers, agribusinesses, consultants, and other stakeholders) are notified through a listserv when a new issue is posted. The site itself

<http://www.mdipm.umd.edu/PestNet/Pestnet.htm>) allows one to subscribe or unsubscribe for notification as desired.

The monthly newsletter, *Pesticide Notes*, is generated by the MINPAS Director and posted to the MINPAS web site throughout the year. Clientele may subscribe to a free service notifying them whenever a new issue is posted. Issues addressed in FY 2005 included research results of interest, notice of open comment periods, pesticide activities in other countries, and other topics (Appendix C).

MINPAS purchased a subscription and distributed the monthly newsletter *Agricultural Chemical News* to Extension personnel in 2005 to assist them in making pest management recommendations. The newsletter concentrates on product developments in the U.S. agricultural chemical industry.

Publications

A report of IPM programs in the state was produced and posted on the IPM web site (<http://www.mdipm.umd.edu/activityReports/MDIPMAR04Web.pdf>). Topics highlighted in the report included information transfer, Maryland's Master Gardeners, green industries, the periodical cicada, turf and the residential use of materials, reducing pesticides in termite control, education and impact assessment, partners in the Plant Diagnostic Network, emerging issues for pest management, and pest management strategies for field crops.

The co-PI from MDA received a NEIPMC Partnership Grant in 2004 to support the development of a Regional Pest Alert on the Brown Marmorated Stinkbug. After an extensive stakeholder review, it was published and is being distributed throughout the region and the United States.

Other Stakeholder Outreach

MINPAS has provided the mechanism by which to request information from primary sources and to transmit it back to federal agencies including USDA and U.S. EPA. Requests for information on pesticide use and needs in Maryland have been transmitted by the MINPAS Project Director to Extension campus-based and field-based faculty, consultants, and other appropriate individuals and groups. Requests may come from USDA, the NEIPMC, EPA, or other agencies. Interested parties are asked to respond directly to the source, with a copy to the SNP Director. Pesticides and issues addressed through this process in January - October 2005 included PCNB, soybean rust, EBDC fungicides, chloroneb (twice), bulk containers, azinphos-methyl, malathion, sodium cyanide, tetrachlorvinphos, methyl bromide, and copper fungicides. In August 2005, the SNP Director agreed to contact Pat Hastings with the NJ SNP with follow-up information after each NEIPMC-generated pesticide comment request.

MINPAS has developed a ListServ to provide *Just-In-Time (JIT)* notice to Maryland stakeholders on pesticide issues. Many of the items currently published in the newsletter, *Pesticide Notes*, are timesensitive, particularly requests for comment on proposed regulatory actions. Subscribers to the *JIT* service are notified of upcoming pesticide policy-related meetings; requests

for comment on proposed actions such as cancellations, restrictions, or changes in registrations; and other time-sensitive pesticide issues. Being on the Listserv maximizes the time subscribers have to plan for meetings, learn about possible actions, or prepare comments. Interested clientele may subscribe to the free notification service via the MINPAS web site (see above). From January - November 2005, a total of 26 *JIT* notices were sent to subscribers (Appendix D).

Pest management and pesticide-related information, publications, and reports were circulated to Maryland pesticide researchers and Extension personnel. In some cases, notices of new publications from other states were circulated, and the publications themselves were maintained in a file in the Extension Entomology Secretary's office and made available to borrow.

Other Work

Maryland IPMC SNP leaders are contacts for new exotic pest outbreak mitigation in the State, including *Phytophthora ramorum*, emerald ash borer, brown marmorated stink bug and various Federal noxious weeds. The team effort includes MDA, Home and Garden Information Center, Master Gardeners Program, MCE IPM Specialists, and Maryland components of the Northeast Plant Diagnostic Network and NPB. Ongoing activities include diagnostic lab activities, web based information contacts (http://www.hgic.umd.edu/sod/sod_newss.htm), training sessions and conference presentations for Master Gardeners, Extension specialists and stakeholders.

The co-PI from MDA organized a symposium on invasive species at the 2005 Northeast Regional Community and Urban IPM Conference, Manchester New Hampshire. Invited speakers from Maryland and other states in the Northeast shared information on how natural and urban environments can be unintended accessories to pest invasions. A white paper was produced with recommendations as to how the NEIPMC can support strong regional cooperative efforts to mitigate invasive species outbreaks.

Maryland IPM assisted in IPMC Community Working Group Conference Planning for 2005 via obtaining and categorizing an extensive vendor listing submitted to Kathy Murray, Chair. MINPAS co-Directors Carol Holko and Sandra Sardanelli attended the March 2005 NEIPMC Advisory Board Meeting in Manchester, New Hampshire. Co-Director Holko also attended the September 2005 NEIPMC Advisory Board Meeting in Philadelphia, PA

In-Service Training

The Maryland PEAP Coordinator holds annual in-service training for Extension field faculty on pesticides. The purpose is to ensure that Extension personnel have the most current information on pesticides, pest management, and alternative strategies before they begin planning grower meetings, plant clinics, recertification meetings, and other opportunities for interaction with producers, dealers, crop consultants, etc. These meetings typically are clustered during the late fall and winter months when field work is not ongoing. Information and training tools presented during In-Service help them to keep their clientele informed. Extension educators use the meetings to educate clientele on new pesticides and/or new uses; new alternatives to control pests; new pest management thresholds, sampling techniques, and strategies; and new policies on pesticides and pest management. In-Service Training sessions serve as a means to distribute new and revised leaflets, bulletins, teaching tools, etc. so that Extension faculty can transmit the

information easily to their own clientele. The agenda typically includes both safety and regulatory/policy information (Appendix E). An update on MINPAS activities and discussion of priorities for the upcoming year is presented as a separate topic. Additionally, updates are provided from the state and national perspectives on a wide range of pesticide policies, regulations, and activities. Maryland Cooperative Extension personnel were encouraged to participate in the NEIPMC Working Groups, Crop Profiles and Pest Management Strategic Plan activities, MINPAS, or other activities related to the overall goals and objectives of the NEIPMC.

E. Appendices

Appendix A. MINPAS Advisory Committee Members, 2005

Name	Title & Affiliation	Contact Information
	Dr. Tito Aighewi	Lecturer, University of Maryland - Eastern Shore , Dept. of Natural Sciences 410-651-8266
Mr. Norman Bennett ¹	Director, Maryland Agricultural Statistics Service	410-841-5740
Dr. John Bouwkamp ¹	Member, Board of Directors	Maryland Vegetable Growers Association 301-405-4334
Ms. Valerie Connelly ²	Director, Government Relations, Maryland Farm Bureau	410-922-3426
Dr. Galen Dively ¹	Professor, Dept. of Entomology, University of Maryland	301-405-7523
Ms. Betsy Gallagher	Senior Agent, Dorchester County, Maryland Cooperative Extension	410-228-8800
Mr. Michael Heller ²	Manager, Clagett Farm Chesapeake Bay Foundation	301-627-4393
Ms. Betty Marose ¹	Faculty Extension Assistant for Weed Science, Dept. of Entomology, Univ. of Maryland	301-405-3929
Mr. Mark Davis	Exec. Dir., Future Harvest/CASA – Chesapeake Alliance for Sustainable Agriculture	301-504-9068
Ms. Dolores Milmoie ¹	Maryland Conservation Associate, Audubon Naturalist Society	301-652-9188 x. 19
Mrs. Mary Ellen Setting ¹	Assistant Secretary, Maryland Dept. of Agriculture , Office of Plant Industries and Pest Management	410-841-5710

¹Indicates members participating in the conference call on 4 October 2005.

²Indicates members who had originally committed to the conference call date but were ultimately unable to participate.

Appendix B. Agenda for the 2005 MINPAS Advisory Committee Meeting.

Maryland Information Network for Pesticides and Alternative Substances (MINPAS)
Advisory Committee Meeting

October 4, 2005
10 11 AM
(conference call)

- 10:00 Welcome, introductions, and purpose Amy Brown, Director, MINPAS
- 10:05 Review of NE IPMC mission and projects Sandra Sardanelli, coDirector, MINPAS
- 10:10 Overview of stakeholder input Carol Holko, coDirector, MINPAS
- 10:15 MINPAS accomplishments, 2005 Amy Brown
- 10:20 Discussion of initiatives for 2006 Advisory Committee
- 10:55 Summary Amy Brown

Appendix C. Table of contents from *Pesticide Notes* issues, January – October 2005.

Volume 24, Number 9 (September 2005)

- New Orleans flood waters
- Protections for subjects in human research
- Chlorpyrifos preconstruction termiticide products phase-out
- Carbofuran risk assessment
- Dimethoate revised risk assessments
- Chlorsulfuron Reregistration Eligibility Decision
- Soil fumigants comment period extended
- Malathion comment period
- MGK-264 revised risk assessment
- Piperonyl butoxide risk assessment

Volume 24, Number 8 (August 2005)

- Pesticide fate database available on web
- Toxics law faulted
- Appeals Court overrules label
- FQPA deadline
- 2,4D Reregistration Eligibility Decision completed
- ETO risk assessment available for comment
- Fumigant risk assessment
-

Volume 24, Number 7 (July 2005)

- CDC report on exposure
- Activitybased reentry intervals
- Simazine risk assessments available for public comment
- Comments sought on pesticide review process
-

Volume 24, Number 6 (June 2005)

- Cat products to be relabeled
- NASDA and affiliates join agriculture coalition to push pesticide bill
- Canadian data show pesticide residues undetectable or below limits
- Latin American pesticide stock worse than previously estimated
- Carbofuran comment period
- 2,4D documents
- Aldicarb comment period
- DDVP comment period
-

Volume 24, Number 4/5 (April/May 2005)

- Two pesticides considered for global phaseout
- European risk assessments available
- DEET in waterways
- CCA treated playground and decks
- Wood preservatives risk assessment
- Ethyl parathion voluntary cancellation request

- Phenmedipham documents available
- Piperonyl butoxide risk assessments
- Pyrethrins risk assessments
- MGK 264 risk assessments
- Ferbam risk assessments
-

Volume 24, Number 3 (March 2005)

- EPA promotes poison prevention
- School environmental health assessment tool available
- Better labels for mosquito control products
- Data requirements and submission
- RED available for 2,4DB and 2,4DBDMA
- Termination of uses of azinphosmethyl
- Pentachloronitrobenzene (PCNB) documents available
- Ametryn risk assessments and preliminary risk reduction
- Imazalil decision document available
- Dimethipin risk assessments
- Carbolic and oxycarboxin documents
- Thiram decision document available
- Napropamide has no mitigation requirements
-

Volume 24, Number 1/2 (January/February 2005)

- EPA launches new Spanish web site
- EPA's annual report available
- Governments, industry agree on pesticide regulation plan
- Pesticide accumulated in toys not significantly absorbed by children
- Reorganizing MSDSs
- States ask EPA to lower pesticide residue levels
- Alternatives to CCA treated wood
- EPA maintains ban on chlorpyrifos for new home construction
- EPA amends methyl bromide phaseout for 2005 critical uses
- Voluntary cancellation requested for last remaining TBT antifouling paint
- Voluntary termination of certain uses of disulfoton (DiSyston 15G)
- 2,4D decisions
- Methyl eugenol TRED available

Appendix D. Just-In-Time Pesticide Info notices mailed to subscribers, 01/01/05 - 10/07/05

Subject	Issuance Date	Action Date
disulfoton (DiSyston)	01/1/0506/13/052,4-D01/24/0503/14/05	
oxadiazon (Chipco, Ronstar)	02/27/0504/21/05	
school IPM assessment tool	03/15/0505/05/05	
carbolic acid	03/30/0504/26/05	
oxycarboxin	03/30/0504/26/05	
dazomet (Basamid)	03/30/0510/12/05	
napropamide (Devrinol)	03/30/0505/16/05PCNB03/30/0505/02/05	
ametryn (Evik)	03/30/0504/26/05	
azinphosmethyl (Guthion)	03/30/0503/30/05	
malathion	04/04/0504/29/05	
ethofumesate (Prograss, Nortron)	05/06/0505/31/05	
pentachlorophenol (PCP)	05/06/0505/31/05	
cat products	06/24/05	
immediatemaneb (Manzate)	07/11/05	
immediateFarm Bill	08/22/05	
nonedimethipin (Harvade)	03/30/0504/26/05	

dimethoate (Rebelate)09/07/0511/07/05
methyl bromide09/12/0510/12/05
carbofuran (Furadan)09/21/0511/14/05
metam-sodium (Vapam)09/21/0510/12/05
1,3-dichloropropene (Telone)09/21/0510/12/05
lindane10/07/0511/02/05
ethofumesate11/17/0501/09/06PPO11/17/0501/09/06

Appendix E. Topics presented during 2005 In-Service Training for Extension field faculty.

INSERVICE TRAINING: PESTICIDE EDUCATION PROGRAMS

Wye Research and Education Center
September 16, 2005

Washington County Extension Facility
September 23, 2005

9 AM Noon

Introductions Amy Brown, Pesticide Education & Assessment Program, Dept. of Entomology, UM Cooperative Extension

Maryland Regulatory and Policy Update Ed Crow, Dennis Howard, and Rob Hofstetter, Pesticide Regulation Section, Maryland Dept. of Agriculture

- Ongoing initiatives
- New developments
- Enforcement trends
-

Federal Regulatory and Policy Update Ed Crow and Amy Brown

- Global harmonization of pesticide labeling
- Consumer label improvement
-

Pesticide Education and Training Initiatives Amy Brown and Ed Crow

- National manual and exam
- Maryland training and certification outlook for 20052006
- Required subjects for Maryland Pesticide Applicator Training (PAT) 20052006
- Extension Educators' internal web site update
- Accountability plans, indicators, and impacts
- New resources
-

Maryland Information Network for Pesticides & Alternative Strategies Amy Brown

- Progress report
- Planning for the 2006 cycle
-

Maryland Agromedicine Amy Brown

- Agricultural Health Study update

Spray Table Demonstration Susan Whitney King, Delaware Pesticide Safety Education Program; Larry Towle
Delaware Department of Agriculture; Amy Brown

- Effect of nozzle selection on drift
- Calibration