

Arid Southwest IPM Network
Progress Report to the Western Regional IPM Center
Aug 24, 2007

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Overview

The Arid Southwest IPM Network (ASIPMN) was previously established as an Information Network project serving the Southeast low desert agricultural region centered in Arizona and extending throughout this arid and semi-arid region. The ASIPMN includes individuals and agencies involved with Integrated Pest Management (IPM) in NM, NV and southern CA (e.g., Imperial & Palo Verde Valleys). This region is characterized by areas of low rainfall, high solar radiation, intensive irrigated agriculture, large urban centers with burgeoning populations and fragile and sensitive natural ecosystems. The pest spectrum confronted by our clientele is at times unique to our environment. This network is comprised of a small, but effective group of scientists and educators including Extension Specialists, Research Scientists, Professors, County Agents and Farm Advisors, and Program Coordinators. We serve a very distinct clientele with specialized needs defined, in part, by the unique environment in which we live. As such, our translation of programs from other areas of the Western region or from other parts of the United States is limited. Many IPM tactics must be homegrown and delivered in a manner sensitive to our unique environmental, production, and natural resource needs.

Project Objectives:

- 1) Serve as a primary and timely information source.
- 2) Assemble diverse interests in IPM to identify critical issues.
- 3) Host and co-sponsor a multi-disciplinary web site for the ASIPMN to address the specific needs of this network.
- 4) Facilitate and participate in Western region objectives and priorities.

This report summarizes activities and progress on Information Network objectives in the past (2006 – 2007) grant cycle.

Objective 1: *Serve as a primary and timely information source*

- **Email Network.** The Arid Southwest IPM Network was established with collaborative contacts in each of the four states (AZ, CA, NM and NV) that comprise the region defined by the Network. Over the past year, additional contacts have been added to email lists and communications. Dr. Al Fournier, who manages communications for the ASIPMN, currently maintains multiple regional email lists, organized by crop and by pest type, to facilitate rapid two-way communication on a variety of IPM-related issues. These serve as a “frontline” communication system for Federal, regional state and local information requests related to IPM, and also as a means of passing along information and informing network partners of new information, publications, meetings, etc. New contacts will continue to be added as they are identified throughout the region.
- **Pesticide Information Requests.** Having a dedicated Network director has greatly improved the frequency, quality and timeliness of our responses to Federal IPM and pesticide information requests. In the past year we have requested and coordinated pesticide information responses on 9 products/active ingredients affecting a broad range of crops, livestock and horticultural commodities (see appendix A). These responses included (where appropriate and where provided) input from Network partners outside Arizona (although we continue to expand contacts throughout the region). In the past two years, we have developed a system for tracking, compiling and forwarding completed responses in a timely fashion. Based on expansion of network contacts in the past year and increased effort at follow-up and telephone contact, our response rates to these requests are increasing, although there is still some room for improvement. The Network director attended training on the Comments Coordinator database developed by Jane Thomas in November 2005, which has helped in organizing information.
- **Pesticide Use Reporting (PUR) Database.** Through ongoing dialog with the Arizona Department of Agriculture (ADA) and the USDA Arizona Agricultural Statistics Service (AZ-NASS), we now have a complete 1080 Pesticide Use Reporting (PUR) database for Arizona (2001 - 2006) and have acquired historical PUR data going back to 1991. We have formalized our partnership with these entities to help ensure the continuance of this important electronic database by providing leveraged dollars through the Arizona Pest Management Center to support data entry and management functions at AZ-NASS. Access to these important data will improve the quality of future responses to pesticide information requests. Pre-2001 data is still in need of major work to proof, correct, reformat and incorporate with our desktop database. This will take an investment of time and resources beyond what is provided in this grant. But we continue to seek adequate resources to support a technical line for this purpose.
- **Crop Insect Losses Data.** Stakeholder-generated data provided through the Crop Insect Losses and Impact Assessment Working Group (a separately-funded WIPMC Work Group) is available and updated on an annual basis for certain key crops (cotton, melons and lettuce). For the past two years we have collected

specific data on insecticide use patterns in these crops. These data also provide an important information source for responding to pesticide information requests

Objective 2: *Assemble diverse interests in IPM to identify critical issues*

Ongoing engagement with stakeholders (including growers, pest control advisors, agricultural industry representatives, researchers, and state and federal agencies) is integrated into the many functions of the ASIPMN. While these are too numerous to list fully in this report, we highlight below a few key interactions related to this objective.

- **USDA Risk Avoidance and Mitigation Program Proposal.** A major success related to Objective 2 of this project was the successful funding by the USDA of a major regional four-Year project to develop, improve and deliver sustainable, areawide management strategies for Lygus in the Western agricultural landscape and reduce all forms of risk. This collaborative, multi-state, multi-disciplinary project includes 13 principle investigators from Arizona, California, New Mexico and Texas and will address one of the most important stakeholder-identified pest management needs in our region. We view our success in obtaining funding as directly related to the support provided through the ASIPMN. This effort would not have been possible without a significant time investment of the Network director in helping to coordinate communications and documents related to the proposal.
- **APMC Summit.** The Arizona Pest Management Center Summit was held at the Maricopa Agricultural Center on June 6, 2006. This workshop brought together 35 University of Arizona faculty and staff members with 74 diverse stakeholders from urban, agricultural and natural resource sectors, in a forum to identify pest management programming needs and priorities and to discuss the role of the Arizona Pest Management Center (APMC) in helping to address these challenges. While this meeting was Arizona-centric, participants from CA, NV, TX and other states attended, including seven tribal representatives. The meeting included breakout sessions focused on agricultural IPM, urban horticulture, noxious and invasive weeds and school IPM. The priorities identified in the focus sessions will be made available in a proceedings document (currently in draft stage) to be shared with the WIPMC and posted online in the near future.
- **Crop Insect Losses Impact Assessment Work Group (CILIAWG).** Funded through a separate Western IPM Center work group grant, CILIAWG has continued to be a major stakeholder engagement activity each year. In 2006-2007, we conducted 6 face-to-face stakeholder workshops to develop accurate real-world data on insect management practices, insecticide use, crop insect losses and associated costs. In addition to working with Pest Control Advisors, agrochemical representatives, growers, and Extension personnel to develop these data, these workshops serve as a forum for stakeholder input and discussion on critical IPM issues.
- **Roundtable Stakeholder Discussion on Pesticide Applicator Training for Weed Management.** On Nov 2 2006, the APMC hosted a stakeholder discussion to identify stakeholder needs with respect to pesticide applicator training for

invasive weed management and review available resources for addressing these needs. Participants included the Arizona Dept. of Agriculture, the Arizona Structural Pest Control Commission, AZ Dept. of Transportation, USDA APHIS Plant Protection and Quarantine, AZ Bureau of Land Management, National Forest Service, US Fish & Wildlife Service, UA Cooperative Extension, and others. This meeting was initiated at the request of UA Extension faculty and coordinated with the Southwest Vegetation Management Association at their annual meeting in Casa Grande, AZ.

Objective 3: Host and co-sponsor a multi-disciplinary web site for the ASIPMN

- The Arid Southwest IPM Network website was launched in spring 2007 and is now available at http://ag.arizona.edu/apmc/Arid_SW_IPM.html. This site is hosted by and is fully integrated with our Arizona Pest Management Center website (<http://ag.arizona.edu/apmc/index.html>) and links back to the Western IPM Center website and Extension partners in each participating state. This site includes background information and key contacts for the ASIPMN, an inventory of funded IPM projects, links to Pest Alerts (hosted on the Arizona Crop Information Site), and a section on identified IPM priorities for the Arid Southwest region, including links to key PMSP and the proceedings of the 2006 Arizona Pest Management Center Summit.
- Future expansion of this website will be in the area of “Information Requests.” This page (http://ag.arizona.edu/apmc/Arid_SWPMC_Info_Requests.html) currently hosts background information on the role of the ASIPMN in responding to federal pesticide and pest management information requests. In the future, we plan to post our final reports for each information request on the website itself, increasing the transparency of all we do to our stakeholders region-wide.

Objective 4: Facilitate and participate in Western region objectives and priorities

- **National Pest Management Strategic Plan (PMSP) for IPM in Schools.** Rick Melnicoe gave a presentation on the Pest Management Strategic Plan (PMSP) process at a January 2006 meeting of the Arizona Pest Management Center’s IPM Coordinating Committee. As a direct and nearly immediate outcome of this presentation, Dr. Dawn Gouge began coordinating with the WIPMC, U.S. Environmental Protection Agency and the IPM Institute of North America to organize and plan the first National PMSP for School IPM. The workshop was convened October 24-25 in Las Vegas, NV. Arid Southwest IPM Network participants Al Fournier and Dawn Gouge attended the workshop in Nevada in October 2006 and have been active participants in ongoing conference calls and subcommittees involved in drafting the document. The final draft is expected to be published online during fall 2007.
- In 2007, we moved forward with plans to develop a Desert Cotton PMSP. The work group for this project included diverse stakeholders in Arizona and adjacent desert regions of California. With separate funding from the Western IPM Center, we organized a May 2007 meeting of the work group in Maricopa, Arizona,

where we collected stakeholder input and developed the framework for the document. We were pleased with the level of interest and participation achieved. The project is being coordinated by Al Fournier through the APMC with considerable help from Lisa Downey, writer for the WIPMC. The document is currently in first-draft stage, with “homework” assignments completed for most (but not all) sections.

- **Incorporation of Western Region IPM Priorities into UA Call for IPM Proposals.** The IPM Coordinating committee oversees distribution of internal UA IPM formula funds to UA faculty through an internal competitive grants program. In the past year, we added to the call evaluation criteria that included addressing regional IPM priorities as well as national IPM goals. While these funds are not available to out-of-state PIs directly, we do encourage collaborative and multi-state partnerships.

Summary

Through the ASIPM Network:

- We have created and continue to expand a multi-state network capable of responding to IPM information needs for our sub-region, including responses to Federal information requests.
- We have developed improved relationships with multiple government agencies that will facilitate improvement and measurement of our IPM programs and enhance our ability to respond to critical pest management needs and information requests.
- We have built collaborative partnerships that further IPM goals in the desert southwest.
- We have facilitated stakeholder input to identify major IPM priorities for agriculture, urban and natural resource sectors, including participation in and coordination of Pest Management Strategic Plans.

All of these advances were made possible through the partial salary support for the IPM Program Manager, Al Fournier through the ASIPMN project and other leveraged activities. We feel that this has been an extremely productive year for the Arid Southwest IPM Network. We and our partners, collaborators and stakeholders are beginning to realize the benefits of having these resources in place. In particular, the salary funds provided through this grant have contributed to having a dedicated appointed faculty member in place to coordinate these and related IPM efforts in the arid southwest, respond to federal information requests and generally support IPM research, education and evaluation activities that benefit not only Arizonans, but our partners and stakeholders throughout the desert southwest.

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Appendix A: Pesticide Information Requests

Request Date	Product / Active Ingredient	Comments	Reply Date
8/4/06	Dimethoate, public comments sought	Requested information from multi-state contacts; no responses sent to APMC.	9/14/06
12/5/06	Siduron (Tupersan)	Requested information from ASIPMN multi-state contacts and turf specilists. No input received.	
12/12/06	Metaldehyde/Iron Phosphate	Requested information from ASIPMN multi-state contacts. No input initally received.	4/27/07
1/3/07	Acrolein	Requested information from ASIPMN multi-state contacts and citrus specilists. Based on my best information, product no longer used in AZ.	1/29/07
2/21/07	methomyl and thiodicarb	Requested information from ASIPMN multi-state contacts, lettuce IPM specialist, lettuce production stakeholders and pest control advisors. Received significant input from Ca and AZ stakeholders. Prepared a formal report.	3/6/07
3/12/07	Soil fumigant data request	Requested information from ASIPMN multi-state contacts, citrus and melon production specialists in Extension and industry, vegetable IPM specialist and plant pathologists. Received significant input and prepared formal report submitted 4/6/07. Additional letter from Del Monte Fres Produce (Southwest) was received late and forwarded with revised version of report on 4/25/07.	4/6/07, supplement sent 4/25/07

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Appendix A: Pesticide Information Requests

4/11/07	Metaldehyde questions	Requested information from ASIPMN multi-state contacts and citrus specilists. Based on my best information, product no longer used in AZ.	4/27/07
5/8/07	Nicotine use request	Requested information from ASIPMN multi-state contacts and horticulture specilists. Based on my best information, product no longer used in AZ. Formal report submitted.	5/26/07
7/13/07	DDVP (Dichlorvos)	Requested information from ASIPMN multi-state contacts, livestock specilists and pest control specialists for that industry. Based on my best information, product no longer used in AZ. Formal report submitted.	7/27/07
8/1/07	Avitrol	Requested information from ASIPMN multi-state contacts and urban pest control specilists. Minimal feedback received.	8/22/07