

ESA Liaison to US-EPA Office of Pesticide Programs (OPP)

2011 - First Quarter Report to the Entomological Society

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Interactions with EPA OPP representing the Entomological Society of America as Subject Matter Expert (SME) and Liaison during the first quarter of 2011 included two on-site visits with a seminar (Feb 14-18, Mar 14-16) in Washington, DC, participation in conference calls with OPP personnel (additional informal presentation during a tele-conference), on-going assignments for two EPA OPP branches, communication with several ESA members on ESA-EPA interactions, and delivery of an ESA branch meeting presentation on the status of EPA SME activities. Communications with the P-IE Governing Council, ESA Governance, and ESA Central completed the open access publication usage for non-ESA OPP staff members (13 individuals) involved in entomological work (operational on 1/20/2011- Alan Kahan; [see also fourth quarter 2010 report](#)).

There were numerous discussions on pesticide resistance issues with the Benefits and Economics Analysis Division (BEAD) chaired by Arnet “Skee” Jones, and with the Insecticide Branch – Registration Division chaired by Marion Johnson during this quarter. ESA work also involved two newly appointed branch chiefs, Kimberly Nesci (Insecticide – Rodenticide) and John Hebert (Risk, Integration, Minor Use, and Emergency Response). During the Feb visit to OPP, other SMEs, Jill Schroeder (Weed Science Society of America [WSSA]) and Frank Wong (American Phytopathological Society [APS]), were in Washington where we coordinated participation in EPA staff meetings and offered multi-discipline perspectives on issues of mutual interest to the professional societies.

At the request of several branch chiefs, Skee Jones (BEAD) arranged for my seminar presentation (2/17/11) “[Appreciation of environmental issues impacting the permanency of IPM, a field crops perspective](#).” This was an opportunity to highlight pesticide issues of concern (including insecticide resistance) with a long-term perspective on IPM fundamentals ([Click here for presentation](#)). Participation included staff members from at least four EPA branches in addition to the other SME liaisons.

Pesticide Resistance Working Group activities led by Bill Chism (OPP-BEAD) that were initiated in 2010 included the development of a multi-disciplinary pesticide resistance glossary with the goal of clarifying label language. After compiling definitions from an entomological perspective with additional academic input (including those from a former ESA toxicology editor), I asked one officer (Caydee Savinelli) of the Insecticide Resistance Action Committee (IRAC) for input. The three SMEs are collaborating with OPP-BEAD to provide different perspectives and similarities of pesticide resistance terminology relative to each discipline, usefulness of individual terms, and comparative roles of different management perspectives across disciplines.

The SMEs also participated in the **Annual Meeting of the Insecticide Resistance Action Committee (IRAC-US)** with OPP-BEAD (4/13/11). By conference call, I delivered a [PowerPoint presentation](#) that provided an update to this committee on my SME activities and pesticide resistance management work with EPA ([click here for presentation](#)). Representatives of IRAC included personnel from AMVAC Chemical Corporation, BASF Corporation, Bayer CropScience, Dow AgroSciences, DuPont Crop Protection, Monsanto LLC, NAICC, Nichino America, Syngenta Crop Protection, and Valent. During the meeting, two major on-going initiatives were discussed: (1) Pesticide Mode of Action (MOA) labeling which is already used extensively with insecticides, with few perceived problems in use, and (2) Management Approaches to enhance permanency of pesticide efficacy. Currently, all issues relating to compliance with these two areas toward improving label quality and usefulness are voluntary by the registrants and not regulated. Also, OPP-BEAD indicated that current MOA compliance is approximately 50% (among the top 30 most used insecticides), but higher with chemistry whose patents have not expired. Jill Schroeder (WSSA) discussed the development of stakeholder training modules for herbicide resistance management. IRAC members also pointed out that different resistance action committees have varying views regarding the similarity of elements in resistance management plans. Significant time was allocated to a discussion of “Reactive vs. Proactive Action” for pesticide resistance management. Plans for a symposium at the 2011 National ESA Meeting in Reno were also discussed. The IRAC symposium has been approved for the ESA P-IE Section. A follow-up conference call with BEAD leadership and all SMEs oriented short-term future activities for pesticide resistance management.

I have been taking advantage of a continuing opportunity to participate in **insecticide strategy** work which involves meetings (conducted by OPP Director Lois Rossi) that focus on the early phases of a program to assist the insecticide – rodenticide and the insecticide – registration branches’ pesticide labeling and review efforts. My contributions as the ESA SME require separate preparation for each meeting to adequately discuss issues for pests, commodities, or pesticides. In many instances, these tasks require that I consult with other ESA members to access the most current and complete expertise on individual subjects.

The ESA is being encouraged to support student career opportunities as a focus of EPA’s **Future Directions Workgroup**. In addition to regular employment at all educational levels as either a specialist or generalist, EPA’s internship program (sometimes requiring additional external support) interacts with multiple OPP branches. This meeting was coordinated and directed by Dan Rosenblatt (OPP - Registration Division), with Rachel Hollaman (Pesticide Division), Art Williams (Environmental Fate and Effects Divisions), and Jay Ellenberger (Field and External Affairs Division).

I was involved in a meeting with the Risk, Integration, Minor Use and Emergency Response staff and was provided an opportunity to discuss procedures and issues involving **Section 18 applications**. The list provided cited on-going activities (pest management gaps) with repeated exemption requests on targets (bed bugs - residential, emerald ash borer - wood lots, varroa mite - honeybees, thrips - onions, billbugs - orchard grass, grass mites - timothy, grasshopper - alfalfa, fly control - mushroom houses, exotic fruit fly larvae - drench use patterns). In addition, emerging pest management gaps were also cited (invasive stink bugs - tree fruits, lygus bugs - cotton, Asian longhorn beetle - forestry). Other issues of concern or new pests that have few to

no management options that can be documented by ESA can be included in this list. EPA support for critical research needs areas can be solicited through Strategic Agricultural Initiative (SAI) proposals to EPA Regional Centers. Most research priorities involve IPM and pesticide use implementation issues. My responses to questions regarding on-going pesticide reviews were focused on trying to achieve a better understanding and utilization of the principles and priorities of registration, but not inquiring about the details of actions on specific chemistries.

Attendance at the APS Public Policy Board meeting (3/16/11) with OPP helped to highlight the importance of several issues that also pertain to the ESA membership. This meeting included presentations on the **Endangered Species Act** by Cathy Eiden, Pesticide Re-evaluation Division (PRD), pesticide drift labeling by Jill Bloom (PRD) and discussions of National Pollutant Discharge Elimination Systems (NPDES) for pesticides by Skee Jones (BEAD). Of particular significance from the endangered species discussions involving the Environmental Fate and Effects Divisions (EFED) was that when data was unavailable to EPA, risk assessment approaches are broadly inclusive, sometimes to an extreme level. For example, when considering crop/plant usage national registration labels, geographic areas might not be included. Unrealistically, the label review may assume the particular crop (potential “use site”) is produced in all 50 states. In working with the USDA, BEAD expects to develop better crop maps to more realistically determine areas of pesticide effects. To review discussions on the topic of endangered species, public response requirements, and other current OPP regulatory issues one may visit the website <http://www.epa.gov/espp>.

OPP Public Policy Issues were reviewed for all SMEs by Bill Jordan (OPP’s Senior Policy Advisor and Science Attorney) and Skee Jones (BEAD). EPA is required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service because NPDES permits are subject to regulations of the Endangered Species Act. Spray drift regulatory language is still incomplete with numerous issues of uncertainty, including the future exemption of pesticide applications from the Clean Water Act. There are several states that have developed and implemented appropriate regulatory programs addressing NPDES permits. Recently, federal legislation has been proposed that may change the interpretation of the current NPDES system.

Early feedback on use of ESA publications indicates that EPA staff are accessing our journals on a regular basis. A visit to the USDA Office of Pest Management Policy (OPMP) in Washington, DC with a recent appointment, David Epstein (PhD entomologist), and OPMP Director, Sheryl Kunickis, was an opportunity to obtain a better understanding of the role of OPMP in the USDA system and their interaction on Capitol Hill. Finally, I was invited by the National Alliance of Independent Crop Consultants (NAICC) to attend their legislative liaison event “Dads in D.C.”. This event featured a crayfish boil in the Longworth cafeteria (3/15/11) and facilitated numerous discussions with independent agricultural consultants, EPA staff, and representatives from both the Senate and House of Representatives. Future activities with EPA include trips (Apr 25-28, Jun 13-16) with meetings set up with several scientists. For further information, I can be contacted at the e-mail address below.

Respectfully submitted,

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