

**WSSA Liaison to EPA-OPP (Office of Pesticide Programs)
Interim Report to the WSSA Board of Directors**

Submitted by: Dr. Michael Barrett

Quarter 4, 2014

Fourth quarter expenses to visit EPA-OPP offices totaled \$2651.26.

October 15-17

Michael Barrett visited the offices of EPA-OPP and met with representatives of the Registration Division (RD), the Biological and Economic Assessment Division (BEAD). A primary objective of this visit was to meet the new EPA Liaison from APS, Dr. Frank Wilcox of Cornell University, and to help facilitate his first visit to EPA-OPP. I participated in meetings where Dr. Wilcox was introduced to various groups within EPA-OPP. Part of the continuing discussion with BEAD staff concerned the economics of herbicide resistance and ways to alter users' behavior. Among the questions posed were how to compare the cost of control now versus the cost after resistance occurs, how to compare the costs of resistance best management practices versus the most immediately economical approaches, and how to compensate individuals when action is needed to remove an initial resistant population.

There had been an on-going reorganization of RD and this was largely completed by the time of this visit. Sometime was devoted to introduce myself and Dr. Wilcox to the staff of a newly created Fungicide-Herbicide Registration Branch.

Also during this visit, I made the second presentation in Herbicide 101 to EPA-OPP staff. This installment covered herbicide uptake and translocation in plants which considerable discussion of the function and role of adjuvants in herbicide applications.

November 12 – 14

Michael Barrett visited the offices of EPA-OPP and met with representatives of the Registration Division (RD), the Biological and Economic Assessment Division (BEAD). On November 12, Jill Schroeder (representing OPMP), Amy Asmus and I met with both biologists and economists from BEAD. BEAD is very interested in the economics of resistance management and has some ideas for exploring this. We suggested they work with the economists associated with the 2nd Summit on collaborative projects. Among the topics they expressed interest in were comparing the cost of control before and after resistance occurs and the cost of resistance preventive practices versus the most immediately economical control practices,

A highlight of this trip was a meeting with Jack Housenger, Director of EPA-OPP, to discuss follow-up actions with the agency to the summit. Jill Schroeder, representing the USDA Office of Pest Management Programs (OPMP), Amy Asmus, and David Shaw plus RD and BEAD staff also attended the meeting. Among the topics discussed were EPA-OPP's impression of the Herbicide Summit, how WSSA could support EPA-OPP's resistance management objectives, adding MOA and resistance language to the label checklist (used by registrants to insure required language is included on a proposed label), how WSSA could help and support EPA-OPP working ahead to expand the Enlist Duo resistance monitoring, reporting and mitigation standards to other products, especially as will move to more complex/complicated cases than Enlist Duo, and how do we and the agency measure success. Mr. Housenger asked for WSSA's suggestions on how to handle resistance for those herbicide cases for which there is already widespread resistance. In addition, Bill Jordan, OPP Deputy Office Director for Programs, asked WSSA to consider how the information EPA-OPP will be collecting on likely and confirmed resistance to Enlist Duo could be used to be most effective in combatting resistance development and spread.

On November 13, I attended a federal interagency meeting with WSSA representatives. Dr. Sheryl Kunickis, Director of OPMP, chaired the meeting. Multiple federal agencies, including Natural Resource Conservation Service (NRCS), Animal and Plant Health Inspection Service, OMPM, EPA-OPP, National Institute for Agriculture, Agricultural Research Service, and the Economic Research Service made presentations on their role and actions to address herbicide resistance as charged by the Secretary of Agriculture and what is needed from WSSA and others for successful implementation and adoption by growers. David Shaw gave a brief overview of WSSA efforts on resistance and David Ervin discussed concepts on incentives and community-based programs for herbicide resistance management. Of particular interest were the presentations by NRCS on using the EQIP program and the Conservation Innovation Grant program to combat resistance. The Summit participants later followed up on this to encourage submissions to the CIG program on resistance management.

December 10-12

Michael Barrett visited the offices of EPA-OPP and met with Registration Division (RD) and the Biological and Economic Assessment Division (BEAD) staff. The EPA-OPP liaison from the American Phytopathological Society, Wayne Wilcox from Cornell University, visited OPP at the same time. On December 10, Michael Barrett presented another installment of Herbicide 101 to RD staff. This session covered adjuvants for herbicides. There was a lot of interest in the staff about this subject regarding use and regulation of these materials.

Wayne and I met with a group in BEAD working on resistance terms across the pest disciplines. Mark Whalon, EPA-OPP liaison for the Entomological Society, called into the meeting. We discussed a list of resistance terms that were assembled by the three disciplines and how to make the terms more useful and understandable for farmers, consultants, and others. We also discussed how to rationalize similar make similar terms and concepts across the disciplines. Mark was a coauthor on a manuscript on entomology resistance terms and we suggested they

be added to the EPA resistance terms list. I offered to take the weed science terms to the WSSA Herbicide Resistance Committee for review.

During this visit, Wayne and I also met with Jack Housenger and other staff from EPA-OPP. Mark Whalon called in to the meeting. Among the topics discussed at the meeting were updates of the liaisons' activities, a follow up on the November meeting with Mr. Housenger, ideas for tours for OPP staff, and possible roles of the liaisons with OPP.