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

Quarter 1, 2014

May 15, 2014

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

<u> January 27-30</u>

Michael Barrett visited the offices of EPA-OPP in Arlington, VA. During the visit, he visited with personnel from the Registration Division (RD) and the Biological and Economic Assessment Division (BEAD). One of the first meetings was with a new RD reviewer who came to the Division from the Peace Corps and with a background in food science. The meeting included a discussion of how new personnel, particularly reviewers, are trained and how the WSSA Liaison could help in the process. Plans were made to meet on a recurring basis during the liaisons regular visits to EPA-OPP. Other meetings during the visit included discussions of herbicide use patterns and potential label modifications.

On Wednesday, 1/29, I spent the day at a Science Advisory Panel (SAP) meeting that was convened to provide input to the EPA concerning a potential regulatory framework for interfering RNA (miRNA and siRNA), referred to collectively RNAi, either as a plant incorporated protectant (PIP) or topically applied. Much of the discussion concerned the human and environmental risks of this technology and the resulting testing that might be required to insure its safe use. I read a statement into the record (attached) that addressed the WSSA position on the potential utility of RNAi in weed management.

On Thursday, 1/30, I was invited to attend a meeting between RD and BEAD personnel and representatives from the Sorghum Growers Program. During this meeting, the process of herbicide registration was explained to the sorghum grower representatives. In addition, the parallel responsibilities of EPA-OPP and USDA-APHIS in regulating PIPs, such as Bt traits, and other genetically engineered plant protects was discussed. EPA-OPP Biopesticides and Pollution Division regulates the gene and the gene product while USDA-APHIS regulates the release of the plant itself. Also on Thursday, I met with a group from BEAD to discuss their peer review process and the parallels in the academic world. Plans were made to continue this conversation as the EPA peer review process is undergoing reevaluation. During this meeting, we also discussed how the measure behavior changes in growers and agriculture. I discussed plans for the Herbicide Resistance Summit II and how motivations for behavior change, both at the individual and community levels, was a major focus for the summit.

February 3-7 (WSSA Meeting)

During the WSSA meeting I attended two meetings related to my EPA-liaison responsibilities. First, I attended a joint meeting of the Herbicide Resistance Education Committee and WERA-60, a multi-state project dealing with resistance across taxa (weeds, insects, and pathogens). WERA-60 has proposed to put together a webinar for the EPA-OPP and others that will address the differences in resistance terms between the pest disciplines. The second meeting I attended was of the planning group for Herbicide Summit II. I was asked to join this group and am working with David Shaw and John Soteres on the "Incentives and Regulations" segment of the summit. A number of follow-up conference calls between the three of us were held ask we formulated our thoughts on these subjects and wrote and outline of the material that will be presented at the summit. Following the meeting, I worked with others to draft a letter (attached) to the Director of EPA-OPP, Dr. Steven Bradbury, outlining WSSA's requests to the Agency for labelling changes to aid in resistance management education.

March 3

I participated by conference call in a meeting between representatives of the National Association of Independent Crop Consultants (NAICC) and BEAD. This is an annual meeting between NAICC and EPA-OPP. A number of topics were covered, but much of the discussion was concerned with herbicide resistance and what the consultants needed to motivate farmers to adopt herbicide resistance BMPs. The consultants indicated that the BMPs sell best when there is evidence of a long-term economic advantage that can be given to farmers. They also said that field demonstrations and experiments make a big impression on farmers and that uniform and consistent mechanism of action labeling would help the consultants educate growers. All these would help the consultants show their clients the consequences of not rotating weed management practices.

One problem the consultants pointed to was that product unavailability, perhaps particularly of insecticides and fungicides, can make rotation of MOAs difficult. This can be related to distribution of these products.

The consultants expressed concern about the exposure calculations that EPA does when considering pesticide registration and offered to help ground-truth these measures.

Finally, a positive note was the feeling of the consultants that their clients look to them for herbicide resistance information and they thought they could promote adoption of resistance BMPs.

March 18-20

Michael Barrett visited the offices of EPA-OPP in Arlington, VA. During the visit, I visited with personnel from the Registration Division (RD), the Biological and Economic Assessment Division (BEAD) and the Biopesticides and Pollution Prevention Division (BPPD). Among the subjects discussed were herbicide resistance, the registration division reorganization, the pesticide reevaluation (formerly reregistration) process, how the EPA-OPP reviewers for registration and labels do their work, RNAi, weed science training seminars for new employees, and field tours for EPA-OPP. During some of my meetings, we discussed possible herbicide resistance reporting and mitigation strategies. As part of this, I attended a joint meeting between BEAD and BPPD to discuss the Bt resistance management program. BPPD administers the Bt management program. This program has compliance (for use of refuges), monitoring and education components. Compliance is primarily measured by surveys of growers conducted by the cross-company Agricultural Biotechnology Stewardship Technical Committee. Resistance monitoring is done by random sampling of insects, this works for mobile insects, or follow-up from non-performance reports, primarily used for rootworm issues. The information is reported to EPA-BPPD on a county and state basis and the information is publically available (but not necessarily easy to find). Part of the discussion focused on what has been learned about resistance monitoring by the EPA-OPP from this program and what would and would not apply to monitoring for herbicide resistance.

On Thursday, I met with two new RD employees and we discussed plans for basic weed science and herbicide mechanism of action training. I also referred them to the herbicide resistance modules on the WSSA website for information. I also participated in a conference call with Bill Vencill and Carol Mallory-Smith to continue discussion of plans for a webinar on resistance terms. It was decided to physically hold the meeting at EPA offices and that the webinar would be followed by a workshop for EPA employees. The resistance terms would be available in draft form to participants ahead of the webinar. During the webinar, each discipline would be represented and present an introduction to the state of resistance in their discipline (plant pathology, entomology, weed science), the process for approving "official" terms, and why there are differences between the disciplines.