

Update from the ESA Subject Matter Liaison to EPA, May 10, 2017  
Submitted by Allan Felsot

On May 2nd I attended the industry sponsored Insecticide Resistance Action Committee (IRAC) meeting at Crop Life America headquarters in WASH DC. EPA OPP (Office of Pesticide Programs) staff were also invited to the meeting, which gave me opportunity for interaction with them. The SME Liaisons from the Weed Science Society of America (Mike Barrett) and the American Phytopathological Society (Wayne Wilcox) also attended the meetings, giving me ample time throughout the day and evening to discuss with them common interest issues.

Most of the meeting covered aspects of pesticide resistance management but some topics broadened from this specific topical area. However, I was able to provide a somewhat more academic perspective for the IRAC committee members as well as the EPA OPP BEAD staff. For example, because I personally teach a course titled Ecological & Integrated Pest Management at Washington State University, I made the case that we had already incorporated resistance management as a formal part of the IPM elements. I also said perhaps we might do a survey of entomologists teaching IPM for how they handle resistance management issues within their courses. If interest exists in doing such a survey among ESA members, I would be happy to lead that as part of my academic interests in entomological pedagogy.

I think an important point was made by Arnett Jones, the EPA scientist who is the SME Liaison's contact person, to recognize that EPA OPP has multiple sections that do not "think with one brain". Thus, issues such as the recent (2016) chlorpyrifos revised risk assessment and Administrator Pruitt's announcement of plans to not cancel the insecticide's current registrations stem from different perspectives within the agency.

One important issue that was discussed at the IRAC meeting with EPA was "resistance" labeling through the use of MOA (Mode of Action) labeling. These highlighted boxes give the mode of action by number code specific to those developed by IRAC, HRAC (Herbicide Resistance Action Committee) and FRAC (Fungicide...etc.) and are voluntary inclusions. The discussion centered around the utility of these boxes and whether they are useful. As a corollary to this discussion, EPA queried about other narratives for resistance management on the label. EPA had done a lot of work for the PIPs (Plant Incorporated Protectants) technology with regard to resistance management, and the agency was now trying to map their process to the issue of herbicide resistance in weeds where Roundup Ready crops (and soon to be ENLIST crops) are grown. All language on labels regarding resistance management is still voluntary as indicated by EPA PR notices sent out during 2016.

EPA also revisited the issue of a common set of definitions for resistance issues. A table had been put together by EPA staff of how ESA, WSSA, and APA use various terms. EPA is still interested in getting some agreement on common definitions where there are semantic differences. This issue of common agreement on terms definition would have to precede any effort to mandate specific resistance management language on labels. I intend to scan and share this table of terms with interested parties.

Of interest to ESA members is the grant program administered by IRAC for mainly academic institutions that are working on resistance surveillance and management issues. For example, IRAC has been partly supporting the Michigan State University Insecticide Resistance Database. EPA weighed in affirmatively about their use of this database. Other types of projects being funded are surveillance oriented.

EPA intends to convene a Scientific Advisory Panel to review PIPs that are resistant to the cotton bollworm (corn earworm), SW corn borer, fall armyworm and Western bean cutworm. However, more specific organization of this meeting has slowed with the change in executive branch administration. One of the big issues was concerns that some of the Cry protein toxin traits were common in both corn and cotton, thereby causing more intense selection pressure on common pests of each crop. EPA will be developing a "white paper" before any SAP meeting, and this document will be available for public review.

Regarding a final unrelated matter, I have committed to attending in Mississippi the ESA P-IE sanctioned "Science Policy field Tour: Balancing Pest Management and Pollinator Health". The tour occurs August 22-24 and will bring together the following stakeholders: United States Department of Agriculture (USDA), Environmental Protection Agency (EPA), U.S. Fish and Wildlife Services, American Beekeepers Federation, Honey Bee Health Coalition, American Honey Producers Association, National Agricultural Aviation Association, commodity organizations, federal and state lawmakers, Entomological Society of America Subject Matter Expert to EPA, and the ESA Science Policy Chair.

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