

ESA SME Liaison to EPA Report for August 2019
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During the last week of July I attended a three-day PREP (Pesticide Regulatory Education Program) workshop in Milwaukee, WI. These workshops are held in several locations across the U.S. periodically throughout the year. The workshops are attended by State pesticide regulators, typically associated with State Departments of Agriculture and/or Environmental Protection. Each workshop has several different themes but the objectives are to inform regulators of Federal issues affecting State implementation of the authority deigned under FIFRA and allow direct interaction with EPA staff attending the workshops. Academics from universities who have been studying various aspects of pesticide technology are also frequently invited to provide insights garnered from the research literature. For example, I was invited to give a presentation on the basic processes of volatilization of pesticides last April in a workshop held in WA State. One of the main themes of that workshop was discussions of the problems with use of dicamba herbicide on GM soybeans and consequences of off target movement.

For the workshop in Milwaukee, I gave a presentation titled, "Science Skepticism and Addressing Pressures for Developing Regulatory Policy." The basic theme of my presentation was a caveat regarding the current primary research literature about pesticide toxicology and being able to differentiate hazard identification studies from risk characterization studies. Using examples from a few research papers, I made the case that hazard identification studies, while making big splashes in the news, were not useful for making regulatory decisions. Rather, risk characterization studies were needed, although not very prevalent in the primary literature.

Much of the discussion at the meeting involved issues of FIFRA Cooperative Agreements, herbicide drift, and experiences by regulators themselves in handling certain regulatory issues and case investigations. Pertinently, State pesticide regulators have their primary authority for regulating pesticides granted to them by the EPA owing to the agency's responsibility for implement FIFRA. However, States also have their own pesticide laws under which they operate, but the primary authority driving enforcement will be FIFRA.

One issue that was discussed that is likely of more interest to members of the ESA was a presentation by one of the EPA staff updating the agency's neonicotinoid risk assessments that are part of the registration review process. The neonicotinoid insecticides of concern owing to comparatively high bee acute toxicity include imidacloprid, clothianidin, thiamethoxam (which is insecticidal by virtue of its metabolism to clothianidin), and dinetofuran. Acetamiprid is several orders of magnitude less acutely toxic to bees than those four neonicotinoids, and thus this compound of critical utility in orchard and vegetable crops is not of major concern. Furthermore, sulfoxaflor, a sulfoxime insecticide with similar modes of action, was recently given an unconditional and expanded use registration by EPA. EPA must complete registration review of the four neonicotinoids of concern by October 2022. This "new" registration review is actually a continuation of what was started a couple of years ago that culminated in a draft risk assessment. ESA members should be aware that they can help maintain registrations by helping provide data for how compounds are actually used and the benefits accrued, especially as they contribute to functional IPM programs. The latter information can help EPA in formulating best risk management plans for the registered compounds.