

The Scientist's Perspective: Weed Science Engaging

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As a scientific society, WSSA is uniquely positioned to provide real value through our growing impact and leadership on subjects important to the membership and the Nation. WSSA members have been called on frequently to provide science-based information and National leadership in areas critical to the country's success.

This year, we created a special WSSA Herbicide Resistance Education Committee to address emerging issues on the topic. Led by David Shaw (Mississippi State University), this committee is developing a comprehensive education strategy on herbicide resistance. One critical deliverable resulting from this committee's activities will be the development of an "Herbicide-Resistant Weeds Management Report", funded by USDA-APHIS. In part, the justification for this report notes that "there exists a need for a systematic understanding of the most contemporary publicly available information on the extent to which weed resistance management programs are being utilized in various managed ecosystems and an understanding of how successful they are at achieving their goals." This report is scheduled to be completed in mid-2011; sooner if possible.

Through our WSSA-EPA Subject Matter Expert, Jill Schroeder (New Mexico State University), we have been steadily moving forward to coordinate our resistance management education efforts with the Agency. As Weed Scientists, we understand that a program of resistance management education will help only if it is based on a comprehensive understanding of resistance, both as an economic as well as a biological phenomenon, and only if it includes active participation by all parties that contribute significantly to herbicide use decisions.

A wide range of new materials are planned for the WSSA website including new training modules targeting the Certified Crop Advisor program, grower organization and Extension Specialist. Additionally, WSSA has formed a sub-committee to begin developing the training modules and materials are planned in a wide range of formats and at a number of levels, including: foundational information, region-specific, commodity-specific, and weed-specific resources.

The regulation of spray drift remains problematical; the risk assessment tools that EPA employs are based on aging data and the application technology in current use has improved significantly. WSSA supports science-based risk assessment that considers the benefits of pest control and the clear validation of the advancements in application technology.

In the further service of our public mission, WSSA has been very involved with the developing National Pollutant Discharge Elimination System (NPDES) permitting program for pesticide use in the riparian corridor. Congress enacted the Clean Water Act (CWA) more than

30 years ago, adding and later updating the NPDES permitting program several times since then. In the decades that EPA has administered the CWA, the Agency has never issued an NPDES permit for the application of a pesticide to target a pest that is present near or in water. Instead, EPA has been regulating these types of applications through the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Overall, this new decision marks a partial pre-emption of FIFRA by the CWA, layering numerous new requirements on applicators of legally-registered products that have wide value in society. This new rule also exposes applicators to extensive legal jeopardy through citizen lawsuits and Agency actions. Without careful design and execution, the implementation of this pesticide NPDES General Permit could have significant unintended consequences. To help EPA understand the impact of this program, WSSA, working with the US Army Corps of Engineers and the Aquatic Plant Management Society, has worked with EPA Office of Water to help them appreciate the need for weed management in the riparian corridor; part of this effort has been the organization of several educational tours for the Agency to more deeply understand aquatic and riparian vegetation management in Florida and New Mexico so that the Agency can communicate directly with those affected.

We know that as Weed Scientists, we have a special responsibility to contribute to both the national and international effort through our basic and applied research into weed physiology, stewardship and the management of natural and managed ecosystems. Because our community of committed scientists provides a unique strength, WSSA has clearly become a visible and recognized force in the public and national discussion.