

## Collaborations between Industry and University Extension to Address Resistance

## Christy L. Sprague

Herbicide-resistant weeds, especially glyphosate- and multiple-resistant weeds, continue to be a major threat to crop production in the U.S. and throughout North America. While herbicide-resistance is not new, the extent to which these weeds have been found and the impacts that growers have felt because of these weeds are setting a new precedence. Academic weed scientists for many decades have tried to educate growers and industry on the threats of herbicide-resistant weeds. In many cases, these efforts fell on deaf ear. However, the lack of the development of new herbicide active ingredients with new or novel sites of action "the next silver bullet" and the increased evolution of herbicide resistance has increased industry collaboration with University extension specialists on educational efforts regarding herbicide-resistant weeds. Winter meetings, field days, and major campaigns in the farm press focusing on grower education about herbicideresistant weeds are some of the efforts where industry and university weed scientists have collaborated. Several University weed scientists have also been invited to provide input on industry advisory boards focusing on the management of herbicide-resistant weeds. More recently, the United Soybean Board has provided significant funding to many of the major soybean producing states in an educational effort to promote herbicide-resistant weed education and management. This project "Take Action: Herbicide-resistance" management" would not of been funded without the support of several major herbicide companies. While these collaborative educational efforts are making great progress, there are still concerns by University weed scientists on product stewardship and proposed resistance management strategies as new weed management technologies are released.

