A REGIONAL PERSPECTIVE ON GLYPHOSATE RESISTANCE MANAGEMENT. Christy L. Sprague, Assistant Professor, Department of Crop Sciences, University of Illinois, Urbana, IL 61801.

As acres of glyphosate-resistant crops increase yearly, there is a growing concern about the development of glyphosate-resistant weed species. World-wide there are currently four weeds that have developed resistance to glyphosate; horseweed, goosegrass, Italian ryegrass and rigid ryegrass. In August of 2002, a survey consisting of several questions addressing attitudes on glyphosate resistance was sent out to weed scientists in the North Central Region. Responses came back from 14 states from as far west as Idaho to as far east as Pennsylvania. The first question asked the participants if there were any glyphosate-resistant weed species in their state. At the time of the survey all participants responded NO, with some caveats. First, most responses had the qualifier not that they were aware of, or what they would call RESISTANT from the WSSA definition of resistance. However, there are few species such as waterhemp with increasingly variable control observed from glyphosate applications. In addition, after this survey a population of glyphosate-resistant horseweed has been confirmed in Indiana. The second set of questions addressed the concern for glyphosate resistance in their state, by weed scientists, dealer/applicators, and growers. Throughout the region over 76% of weed scientists indicated that glyphosate resistance was of moderate to great concern to them, they felt that 75% of dealer/applicators thought it was of moderate concern, and less than 20 and 50% of growers thought it was of great and moderate concern, respectively. The last question focused on if there were any and what were the current recommendations in your state to delay or deal with glyphosate resistance. Ninety-five percent of the states indicated that they had recommendations in place for herbicide resistance. All of these recommendations started with the "*Guidelines on how to minimize the risk of herbicide-resistant weeds*" from the 1995 WSSA newsletter. However, only 25% of these responses indicated that there were additional recommendations specific for glyphosate resistance. Through this survey there were several questions raised on how much glyphosate is enough and how should we approach management of weeds that look like good candidates for glyphosate resistance. It is apparent that this issue of glyphosate-resistant weeds will continue to be a hot topic for years to come.

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