Herbicide resistance has become a major topic of international research in weed science, with a steady stream of presentations and papers on various aspects of the biology of herbicide resistant weeds. Diverse sources—including WSSA—have generated an equally steady stream of recommendations for preventing and managing herbicide resistance. The situation in the field, however, continues to deteriorate, with new cases of herbicide resistant weeds being reported at an increasing rate. We know what to do, but why aren’t we doing it? Part of the answer may be that insufficient attention has been paid to the human component of herbicide resistance evolution and management, especially the complex web of social and economic drivers affecting grower decisions. This Special Issue of *Weed Science* brings together weed scientists, crop consultants, economists, and sociologists to examine interdisciplinary aspects of the herbicide resistance problem and to explore different approaches to managing it. The ideas presented here are those of the authors: publication of these papers does not constitute Weed Science Society of America (WSSA) endorsement of their contents as WSSA policy. However, we hope this Special Issue will stimulate broader discussion of more innovative ways to address the threat posed by herbicide resistant weeds.

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