CONTROL OF GLYPHOSATE-RESISTANT AND SUSCEPTIBLE WEEDS WITH 2,4-D ALONE OR IN TANK MIXES WITH GLYPHOSATE. Eric F. Scherder, Marvin E. Schultz, Mark A. Peterson, Jeffrey M. Ellis, Scott C. Ditmarsen, Kevin W. Bradley, Reid J. Smeda and William G. Johnson, Dow AgroSciences, Indianapolis, IN 479076, Associate Professor and Associate Professor, Division of Plant Sciences, University of Missouri, Columbia, MO 65211, Professor, Department of Botany and Plant Pathology, Purdue University, West Lafayette, IN 47907.

2,4-D has provided broad-spectrum, broadleaf weed control in a wide range of crops for many years, but utility in some crops has been limited due to unacceptable crop tolerance. Dow AgroSciences has recently announced the development of a new family of traits that will enable the use of 2,4-D at rates and application timings that were previously impractical. Field studies have been conducted to evaluate the performance of 2,4-D amine alone at rates ranging from 560 to 1120 g ae/ha alone or in combination with glyphosate. Results indicate that 2,4-D provides greater than 90% control of several key broadleaf weed species that are difficult to control with glyphosate alone. In addition, combinations of 2,4-D with glyphosate generally provide more consistent control of many glyphosate-susceptible weed species.