

EVALUATION OF PREPLANT APPLICATION INTERVALS FOR A CHLORIMURON-ETHYL PLUS TRIBENURON-METHYL PREMIX IN SOYBEANS. Helen A. Flanigan, Marsha J. Martin, and Gregory R. Armel, Field Development Representatives and Product Development Specialist, DuPont Ag and Nutrition, Wilmington, DE 19880.

Canopy® EX is a soybean herbicide premix containing tribenuron-methyl and chlorimuron-ethyl in a 1:3.3 ratio. When applied in the fall or as an early spring preplant application, Canopy® EX provides burndown and residual control of several key broadleaf weeds. Currently, tribenuron-methyl cannot be applied to soybeans unless applications are made at least 45 days before planting, thereby limiting application flexibility. Therefore, research was initiated to evaluate soybean crop response from a variety of tribenuron-methyl applications in order to determine the shortest possible re-crop interval which will afford optimal soybean safety.

Studies were conducted in 2004 at 10 contract and university locations to evaluate soybean response at 0, 3, 7, 14, and 30 days after applications of tribenuron-methyl at 9, 18, and 36 g ai/ha. In order to maximize potential crop response, plots were irrigated with 2.54 cm of water immediately following soybean planting. Soybeans planted on the day of tribenuron-methyl application displayed between 12 and 20% response. Tribenuron-methyl at 36 g ai/ha caused 7 and 17% response to soybeans planted at 3 and 7 days after application, respectively. Regardless of location, soybeans displayed little to no response (0-1%) when planted between 3 and 30 days after applications of tribenuron-methyl at 9 and 18 g ai/ha.

Additional studies were also conducted with university cooperators in 2006 to evaluate Canopy® EX at 23, 34, and 45 g ai/ha applied 7 or 14 days before soybean planting. Soybeans planted 7 days after a Canopy® EX application had minimal response across all rates with only one trial reporting more than 2% crop response by 28 days after planting. No crop response was noted from trials planted 14 days after application.