

TANK MIXES OF CHLORIMURON-ETHYL WITH LINURON, METRIBUZIN, THIFENSULFURON-METHYL, SULFENTRAZONE, OR FLUMIOXAZIN EVALUATED FOR SPRING WEED CONTROL IN SOYBEAN PRODUCTION. Marsha J. Martin, Helen A. Flanigan, AND SUSAN K. RICK. Field Development, Dupont Ag and Nutrition, E. I. DuPont De Nemours and Co. Inc., Wilmington, DE 19898

Both historical and experimental mixes of chlorimuron-ethyl(CE) with linuron, metribuzin, thifensulfuron-methyl, tribenuron-methyl, sulfentrazone and flumioxazin were tested at 25 locations to determine which was the best combination treatment for broad-spectrum weed control in US soybean production.

Chlorimuron-ethyl was tested with metribuzin at both 10.7% CE + 64.3% metribuzin (Canopy DF) and 6.5% CE + 68.5% metribuzin (Preview DF). Chlorimuron-ethyl was tested with linuron at 3.1% CE + 56.9% linuron (Lorox Plus), with thifensulfuron-methyl at 21.5% CE + 6.9% thifensulfuron-methyl (Synchrony XP), and with tribenuron-methyl at 22.7% CE + 6.8% tribenuron-methyl (Canopy EX). Chlorimuron-ethyl was tested with sulfentrazone at 9.4% CE + 46.9% sulfentrazone (Canopy XL) and with 1 ozai/acre flumioxazin. Chlorimuron-ethyl rates were matched to 0.24 - 0.25 or 0.42 - 0.43 ozai/acre for the low and high rate mixes, respectively.

With CE kept as a constant, differences in weed control from the mixing partners were as follows. Sustained common chickweed control was seen with tribenuron methyl and the highest rates of metribuzin or linuron. Higher rates of linuron, metribuzin or flumioxazin improved common ragweed control while higher rates of linuron, metribuzin, sulfentrazone or flumioxazin improved lambsquarters and giant foxtail residual control. Deadnettle burndown was best with metribuzin, sulfentrazone or flumioxazin. Residual eastern black nightshade control was best with higher linuron rates or sulfentrazone or flumioxazin. Sulfentrazone and flumioxazin gave the best residual palmer amaranth and waterhemp control.