

FALL APPLICATIONS OF DUPONT BASIS<sup>®</sup> AND KARMEX<sup>®</sup> HERBICIDES FOR WINTER ANNUAL WEED CONTROL IN FIELD CORN. Kevin L. Hahn, Susan K. Rick, and David W. Saunders. DuPont Crop Protection, Wilmington, DE .

Diuron (DuPont Karmex<sup>®</sup>) was applied alone and in tank-mixtures with 2,4-D LVE and thifensulfuron + rimsulfuron (DuPont Basis<sup>®</sup>) herbicides during the fall of 2004 and early-spring of 2005. Control of winter annual weeds and early season residual control of summer annual weeds was evaluated prior to corn planting and after corn emergence.

Karmex<sup>®</sup> applied alone provided broader spectrum control of winter annual broadleaf weeds as compared to simazine applied alone with the fall application timing. When 2,4-D LVE was tank mixed with Karmex<sup>®</sup> or with simazine, burndown weed control spectrum was similar with Karmex<sup>®</sup> and simazine. Spring applied timings revealed that Karmex<sup>®</sup> applied alone provided broader spectrum burndown control of emerged winter annual weeds as compared to simazine applied alone.

Weed control evaluations made in May 2005 and June 2005 revealed that both fall and spring application timings of Karmex<sup>®</sup> and simazine provided limited residual control of many key summer annual weeds including large crabgrass, palmer amaranth, and tall waterhemp. Karmex<sup>®</sup> provided better residual weed control of tall waterhemp as compared to simazine. Simazine provided better residual control of common lambsquarters and giant foxtail as compared to Karmex<sup>®</sup>.

Tank mixing Basis<sup>®</sup> with Karmex<sup>®</sup> provided the best overall burndown control of emerged winter annual weeds and the broadest residual weed control spectrum of summer annual weeds.