

RIMSULFURON PLUS GLYPHOSATE FOR ONE PASS WEED CONTROL IN GLYPHOSATE TOLERANT CORN. J. Leslie Lloyd\*, James D. Harbour and David W. Saunders. DuPont Ag & Nutrition, Johnston, IA 50131.

Studies were conducted in 2000 - 2004 comparing herbicide systems in glyphosate tolerant corn (*Zea mays* L.). Glyphosate applied alone early and mid postemergence was compared to tank mixtures of glyphosate and rimsulfuron. 68 studies were placed in replicated small-plot trials with university, private contractor and DuPont investigators. Additional trials were conducted in field-scale plots in commercial fields. Key weeds included giant foxtail (*Setaria faberi* L.), yellow foxtail (*Setaria glauca* L.), fall panicum (*Panicum dichotomiflorum* L.), common lambsquarters (*Chenopodium album* L.) and several amaranthus species. The addition of rimsulfuron to glyphosate improved season-long control of several grass and broadleaf weed species. Rimsulfuron provided residual activity on many grass and small seeded broadleaf species and improved the burndown efficacy of glyphosate on several broadleaf species.