HERBICIDE PROGRAMS FOR GLYPHOSATE RESISTANT CORN. J. Leslie Lloyd, Richard M. Edmund, Christopher M. Mayo, and David W. Saunders, Development Representatives and Product Development Manager, DuPont Ag & Nutrition, Johnston, IA 50131.

Studies were conducted at 17 locations in 2003 comparing herbicide systems in glyphosate tolerant corn. Glyphosate applied alone early post emergence was compared to tank mixtures of glyphosate and rimsulfuron and to tank mixtures containing glyphosate and metolachlor and glyphosate, metolachlor and atrazine. A standard tank mix of Steadfast (nicosulfuron + rimsulfuron), Callisto (mesotrione) and atrazine was included. Key weeds included giant foxtail, yellow foxtail, fall panicum, ivyleaf morningglory, and tall waterhemp. For season long weed control it was necessary to add a residual product to the glyphosate for control of both grass and broadleaf weed species. Rimsulfuron provided good residual control of many grass and small-seeded broadleaf species and improved the control of the glyphosate on several broadleaf species. For most weed and grass species the tank mix of Steadfast, Callisto and atrazine provided equal or superior season long control compared to treatments including glyphosate.