RESPONSE OF CORN HYBRIDS TO GLYPHOSATE APPLICATION TIMINGS. Kelly A. Nelson and Clinton G. Meinhardt, Associate Professor and Research Specialist, Division of Plant Sciences, University of Missouri, Novelty, MO 63460.

No-till corn plant establishment is difficult in claypan soils. Concerns related to burndown herbicide selection and corn hybrid response had been expressed on soils with low pH. Sites with a low soil test pH were selected in 2007 and 2008 to evaluate corn hybrid response to glyphosate application timings (21, 14, and 0 days before planting) and rates (0, 860 and 1730 g ae/ha). There was no interaction between corn hybrid selection and glyphosate application timing or rate. Harvested plant population and yield differences between hybrids were detected, but no effect of glyphosate application timings and rates was observed.