INFLUENCE OF ROW SPACING AND APPLICATION TIMING ON WEED CONTROL IN GLUFOSINATE RESISTANT SOYBEANS. Michael Weber* and Jayla Allen, Bayer CropScience, Research Triangle Park, NC.

Since the first introduction of glyphosate resistant crops in the mid 1990's, US growers have become accustomed to the use of a non-selective herbicide. Rapid adoption of this technology in some crops including soybeans has dramatically changed the way in which growers approach weed control. Some areas of the Midwest have seen a market share of glyphosate resistant soybeans approach 95%. With the increase in acreage planted to glyphosate resistant soybeans, most basic manufacturers have abandoned the discovery for new and novel herbicides for soybeans. Coupled with the rapidly increasing acres of glyphosate resistant corn, it would be expected that more glyphosate resistant weeds will develop and spread across the Midwest. Glufosinate has a unique mode of action that can provide an alternative control measure for weeds resistant to glyphosate.

Weed control trials for LibertyLink Soybeans were conducted by Bayer CropScience and Midwestern universities. In 2007, 21 locations evaluated the use of glufosinate in LibertyLink Soybeans for general weed efficacy across a broad spectrum of grass and broadleaf weeds. Weed control was influenced by row spacing, timing and when a preemergence herbicide was used following a glufosinate application.