EVALUATION OF GLUFOSINATE IN BURNDOWN APPLICATIONS. R. Darren Unland, Matthew J. Mahoney, Jayla R. Allen, and Michael Weber, Bayer CropScience, RTP, NC 27709.

As glyphosate resistant weeds are becoming more common and the in-crop use of glyphosate in corn and soybean production continues to increase, growers are seeking alternative solutions for controlling emerged weeds at or prior to planting in no-till situations. Glufosinate has been successfully used for several years as a burndown herbicide for cotton to control winter annual and perennial weeds in the spring. A new formulation of glufosinate for use in glufosinate-tolerant canola, corn, and soybean will soon be available for burndown and in-crop applications. Trials were conducted by Bayer CropScience and universities across the Midwest and Northeastern United States to evaluate weed control by glufosinate alone or in tankmixes with other herbicides prior to planting soybean. Glufosinate provided excellent postemergent control of most weeds including glyphosate-resistant horseweed (*Conyza canadensis*). The recently added labeled use of glufosinate as a burndown application offers non-selective weed control with a new mode of action for soybeans.