WEED CONTROL IN GLYPHOSATE-RESISTANT CORN WITH FALL-APPLIED HERBICIDES. Ronald F. Krausz and Bryan G. Young, Researcher and Associate Professor, Department of Plant, Soil and Agricultural Systems, Southern Illinois University, Carbondale, IL 62901.

Glyphosate-resistant corn and fall-applications of herbicides are becoming more popular with corn growers in the southern corn belt. Therefore, the objective of this research was to evaluate the effectiveness of fall-applied herbicides on weed control in glyphosate-resistant corn production. Fall-applied glyphosate provided 95 to 100% control of henbit, common chickweed, smallflower buttercup, and wild garlic by April 1. However, fall-applied glyphosate alone provided no control of giant ragweed by late-April. The addition of simazine with glyphosate in the fall increased control of giant ragweed by 42 to 92%. Winter annual weed competition in the nontreated plots controlled giant ragweed 80% by late-April. Three glyphosate applications (fall, 14 days before planting, postemergence) were required to obtain 100% control of summer annual weeds where no glyphosate was applied preemergence. Two glyphosate applications (preemergence and postemergence) provided 100% control of summer annual weeds where glyphosate was applied preemergence with or without a residual herbicide.