

EFFECT OF TIMING ON FALL APPLIED HERBICIDES. Ryan F. Hasty, Christy L. Sprague, Aaron G. Hager, and Bill Simmons. Graduate Research Assistant, University of Illinois, Urbana, IL 61801; Assistant Professor, Michigan State University, East Lansing, MI 48824; Assistant Professor, and Associate Professor, University of Illinois, Urbana, IL 61801.

Experiments were conducted in the fall of 2001 and 2002 to determine the optimum timing of fall herbicide programs for early-season weed control prior to soybean in Illinois. Herbicide treatments included chlorimuron plus sulfentrazone plus tribenuron, flumetsulam plus metribuzin, imazaquin plus glyphosate, and a non-residual control (paraquat) with six application timings based on soil temperatures ranging from 22 to -1.1 C. There was an increase in weed biomass collected 2 weeks after planting (WAP) in the non-residual control with applications made later in the season. Application timings within residual herbicides were not different with respect to soybean yield and control of giant foxtail, common lambsquarters, fall panicum, and common waterhemp when applied according to label specifications (application after harvest and prior to ground freeze). Residual herbicides controlled >90% of common chickweed, mouseear chickweed, henbit, and annual bluegrass, regardless of application timing. The main effect of timing was not significant for any dependent variable tested. The main effect of herbicide resulted in differences in control of fall panicum and common waterhemp with chlorimuron plus sulfentrazone plus tribenuron > flumetsulam plus metribuzin > imazaquin plus glyphosate.