

WEED CONTROL FEASIBILITY IN LARGE-SCALE ORGANIC SNAP BEAN AND SWEET CORN PRODUCTION. Heidi J. Kraiss, Jed B. Colquhoun, and Richard A. Rittmeyer, Graduate Research Assistant, Associate Professor, and Research Associate, University of Wisconsin, Madison, WI 53706.

The upper Midwest produces over 50% of the processed sweet corn and snap beans in the U.S. Recent organic market growth has stimulated interest in expanding this industry to include organic processing vegetables. A significant hurdle in developing this industry is the ability to grow organic vegetables on a larger scale where existing weed control methods, such as hand weeding, are not practical. This study focused on the feasibility of managing weeds in organic sweet corn and snap beans, utilizing methods that are practical and economical in large acreage. Organic weed management treatments consisted of either a single management tactic or combinations of tactics including different methods and number of cultivations and utilization of a stale seedbed. An herbicide-based conventional treatment was also included for comparison. Organic weed management was feasible in a short season crop, such as snap beans, with similar yield between organic and conventional management. However, in a long season crop, such as sweet corn, organic weed management was more difficult. Weeds competed more effectively and for a longer period with the crop and thus sweet corn yields in organically managed plots were less than in those managed conventionally. Results are discussed within the context of the economics of organic production methods and premium prices received for organically produced vegetables.