Ten acres in Field 1a used to determine the optimum time for planting organically grown soybeans to reduce weeds and to provide the best economic return as a balance of yield, weed control and crop quality.

Determine the affect of planting date on weed control, yield, and profitability for food-grade organic ridge-till soybeans produced in west-central Illinois. This is the second experiment for this study. The first experiment, in 1997, supported the contention that later plantings provide easier weed control; however, the yield loss at later plantings indicated that this is not economically feasible. The results of the 1997 study are supported by the 1999 results.

: Crop: IA 3001 organic soybeans, Planting System: ridge-till Planted Population: 182,000, Mechanical Weed Control:

Planting Date #1: May 22, 1999 Planting Date #2: June 1, 1999 Planting Date #3: June 15, 1999 Planting Date #4: June 25, 1999

Weed control was easier with later planting dates, but crop reproductive development was inhibited and yields were significantly reduced at the later planting dates, . Some aspects of seed quality, i.e. % large beans, % unblemished, % brown stain and % splits, were improved by later planting dates, while other aspects of seed quality, i.e. % green and % damaged, were decreased by later planting dates, Table 1. The % purple stain and % shriveled seed were not significantly changed with planting date, data not shown. The % seed coat splits was lowest at the June 1st planting date, but increased at later dates. Since the later planting dates significantly reduced yields, we are terminating these studies.

**Table 1** Summary of soybean yield and seed quality analyses. Each value represents the mean of four replicates.IA 3001 was used in this study.

Date Planted	Yield Bu/ac	% Large Beans*	% Unblemished	% Brown Stain	% Green Stain	% Damaged	% Splits	% Seed Coat Splits	
					-	C		-	b
			9.9 a	66.6 <sup>ab</sup>	1.2 ab	6.9 b	23.0 ab	17.6 <sup>b</sup>	
6/15	20 c	79.0 <sup>b</sup>	20.3 <sup>b</sup>	54.7 <sup>c</sup>	2.1 <sup>b</sup>	5.8 <sup>b</sup>	18.6 <sup>ab</sup>	19.8 <sup>ab</sup>	
6/25	13 d	75.2 <sup>b</sup>	21.5 <sup>b</sup>	56.7 <sup>bc</sup>	2.5 b	6.7 <sup>b</sup>	12.9 <sup>b</sup>	24.7 a	

\* Large beans are defined as whole beans, (undamaged) whic