Early Planting of No-Till Soybeans: Four-Year Summary

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Objective

Planting soybeans early helps to spread out the spring workload for producers. The objective of this study was to determine the effect of early planting on yields of no-till soybeans.

Background

Cooperator: Tom Weiler Fertilizer: None County: Morrow Tillage: No-Till

Nearest town: Chesterville Herbicides: Canopy 3 oz/A

Soil Type: Chili loam Roundup Ultra 1qt/A + AMS

Previous Crop: Corn Variety: LG Seeds C3767RR

Drainage: Naturally well drained Row Width: 10 inches

Soil Test: pH 6.3, P 46 ppm, Planting Rate: 210,540 seeds/A

K 159 ppm Harvest Date: October 19, 2001

Methods

Rains in April and May prevented the intended planting date schedule that was at two-week intervals. Four dates (March 29, April 26, May 11, and June 10) were used in 2001. Each planting date was replicated four times in a randomized complete block design. Planting was done with a 750 JD No-Till Drill. Each plot was 30-feet wide and approximately 750 feet long. The center 20 feet of each plot was harvested and weighed with a weigh wagon.

Results

Table 1. Four Years of Soybean Yields from Early Planting Date Trials.¹

1998		1999		2000		2001	
Planting Date	Yield (bu/A)	Planting Date	Yield (bu/A)	Planting Date	Yield (bu/A)	Planting Date	Yield (bu/A)
March 30	51.9 a	March 29	42.6 a			March 29	45.3
April 13	48.6 b	April 14	41.6 a	April 6	41.0 ab	April 26	47.8
April 24	47.9 b	April 27	41.6 a	April 26	42.5 a	May 11	48
May 13	49.2 b	May 7	37.6 b	May 8	39.1 b	June 10	45.2
LSD (0.05)	2.4		2		2.3		NS
F	6.6		12.1		5.5		3.1
CV (%)	2.4		2.3		4.1		3.8

¹ Means in the same column followed by the same letter are not significantly different.

Summary and Notes

For 2001 the date of planting did not have a significant effect on yields in this study.

This is the fourth year the early planting dates of late March/April have provided favorable results. We have selected well-drained fields and used a soybean with a good, protective seed treatment each year. Each of the four years the trial was conducted on Chili loam. Experiment design and inputs were practically the same all four years. The largest difference among years was that a different variety was used: 1998 Callahan 7391RR, 1999 Callahan 8367RR, 2000 Callahan 8367RR, and 2001 LG Seeds C3767RR.

The results appear to support the idea that soybeans can be planted early. This expands the days available for spring planting activities, thus helping to avoid late plantings.

Acknowledgment

Thanks to Royster Clark and LG Seeds for providing the soybeans used in this study. Also thanks to Tom Weiler for being the cooperator.

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