

Early Planting Dates for No-Till Soybeans

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Objective

Planting soybeans early may help to spread out planting time 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	Soil Test:	pH 6.7, P 30 ppm, K 123 ppm
County:	Morrow	Fertilizer:	0-0-60 (200 lbs/A)
Nearest Town:	Chesterville	Herbicide:	PRE: Canopy (3 oz/A) POST: Roundup (1 qt/A)
Soil Type:	Chili	Variety:	Callahan 7391 RR, Supercoat trt.
Drainage:	Random tile, well drained	Planting Date:	See Results
Tillage:	No-till	Planting Rate:	212,000 seeds/A
Previous Crop:	Corn	Harvest Date:	October 1, 1998

Methods

Treatments were three early planting dates and a normal mid-May planting date. A single soybean variety with a relative maturity of 4.1 was planted with a 750 JD No-Till Drill. There were three replications in a complete block design. Treatments were sequentially planted to an adjacent strip within each block and therefore were not randomized. Strip plot length averaged 959 feet with widths of 20 feet.

Soil conditions for planting were excellent on March 30 and April 13, fair on April 24, and good on May 13. Excellent = soil crumbles behind drill and no tractor cleat marks form; good = soil crumbles behind drill with some tractor cleat marks in wetter areas of field; fair = soil crumbles some behind drill, tractor cleat marks in many areas of field, and some disk furrows remain open; and poor = planter furrows do not close, seed is exposed, and cleat marks are evident all over field.

Results

Planting Date	% Moisture	Yield (bu/acre)
March 30	11.4 A	51.94 A
April 13	11.3 A	48.60 B
April 24	11.2 A	47.90 B
May 13	11.8 B	49.19 B

Treatment means followed by the same letter are not significantly different at $P = 0.05$

Moisture level LSD = 0.36. Yield LSD = 2.39 bu/ac

CV (moisture) = 1.6% CV (yield) = 2.4%

Summary and Notes

The yield of the earliest planted soybeans was significantly higher than the other three planting dates. Harvest moisture was significantly higher for the latest planting. All plantings had good stands of soybeans. The beans were clean and tall. The early soybeans even survived a late frost of 26 degrees F. From the results of this trial, it appears early planting can be successful in achieving good yields.

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