

# Soybean Date of Planting and Maturity in Central Iowa

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### Introduction

Inevitably, every year soybean planting is delayed or needs to be replanted because of weather. Even if soybean planting starts and progresses in a timely manner, there is always the question of what maturity group should be planted. This trial was setup to determine what maturities are well suited for a given geographic location, but also how maturity selection should be adjusted as planting dates get pushed into late spring.

### Materials and Methods

This project was conducted in 2014, 2015, and 2016 with the same varieties (P22T69R, P92Y75, P25T51R, and P35T58R) and with different varieties in 2017 (CZ2312LL, CZ2601LL, CZ2915LL, and CZ3601LL) and 2018 (P21A28X, P24A99X, P31A22X, and P36A18X). In the first three years of this study, the four target planting dates were May 1, May 20, June 10, and July 1. In the last two years of the study, the target planting dates were April 20, May 1, May 15, and May 30.

The plots were setup in a split plot arrangement with four replications. Target planting date was the whole plot and hybrid was the split plot. A target seeding rate of 140,000 seeds/acre was used. Data collection included growth staging, grain yield, and grain moisture.

### Results and Discussion

Soybean yields were resilient to planting date from late April to mid-May across all planting dates (Figure 1). These results reinforce the ISU Extension recommendation for planting in the April 25 to May 15 window. As planting date moved into late May, early June, and late June, yield potential continued to decrease.

Soybean maturity was not responsive to planting date. Over the course of the study, all maturities reached physiological maturity prior to a killing fall frost.

### Acknowledgements

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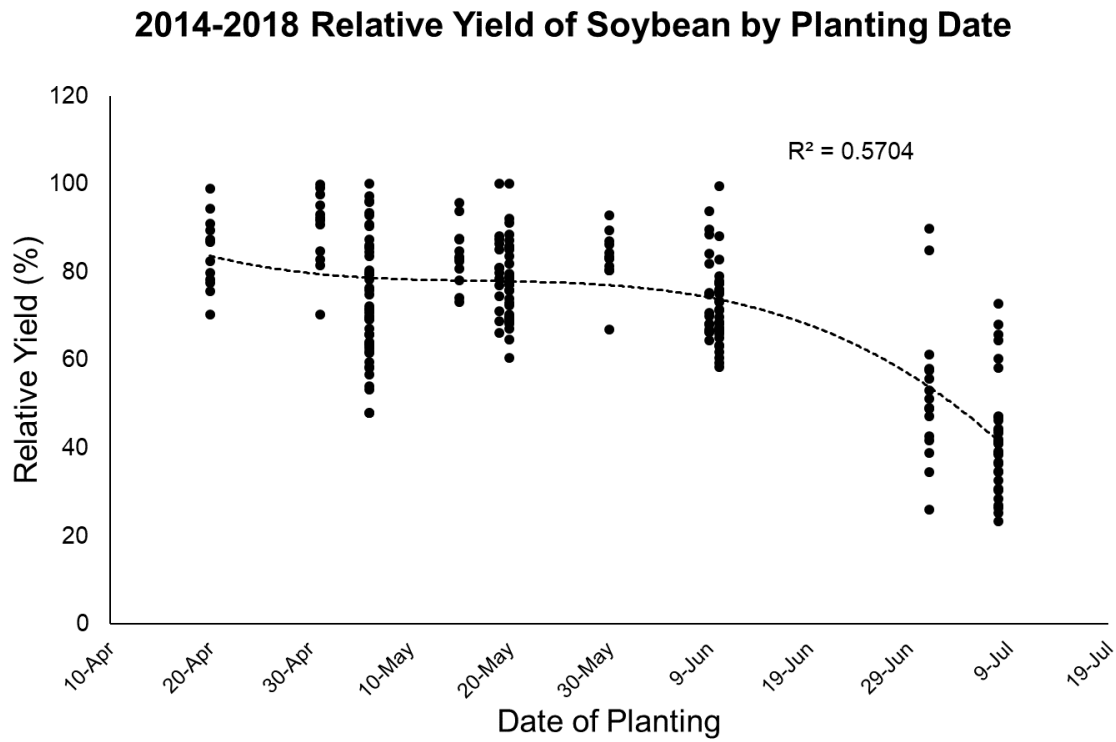


Figure 1. Soybean relative yield from 2014 through 2018 as affected by planting date across a range of variety maturity groups.