Corn Date of Planting and Maturity

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Introduction

Inevitably, every year corn planting is delayed or needs to be replanted because of weather somewhere in Iowa. Even if corn planting starts and progresses in a timely manner, there always is the question of what maturity 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 hybrids (P0636, P1151, and P1365) and with different hybrids in 2017 and 2018 (P0589AM, P1197AM, P1555CHR). In the first three years, the four target planting dates were April 15, May 10, June 5, and June 30. In the last two years, the target planting dates were April 10, April 25, May 10, and May 25. 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 35,600 seeds/acre was used. Data collection included growth staging, stand counts, grain yield, and grain moisture.

Results and Discussion

Corn yield was not affected by planting dates from mid-April to mid-May across all maturities (Figure 1). However, late May and early June planting dates resulted in approximately 20 percent yield reduction. As expected, planting dates at the end of June or beginning of July resulted in drastic yield penalties. Overall, yield potential was not affected by earlier hybrid maturity at later planting dates (data not shown).

Acknowledgements

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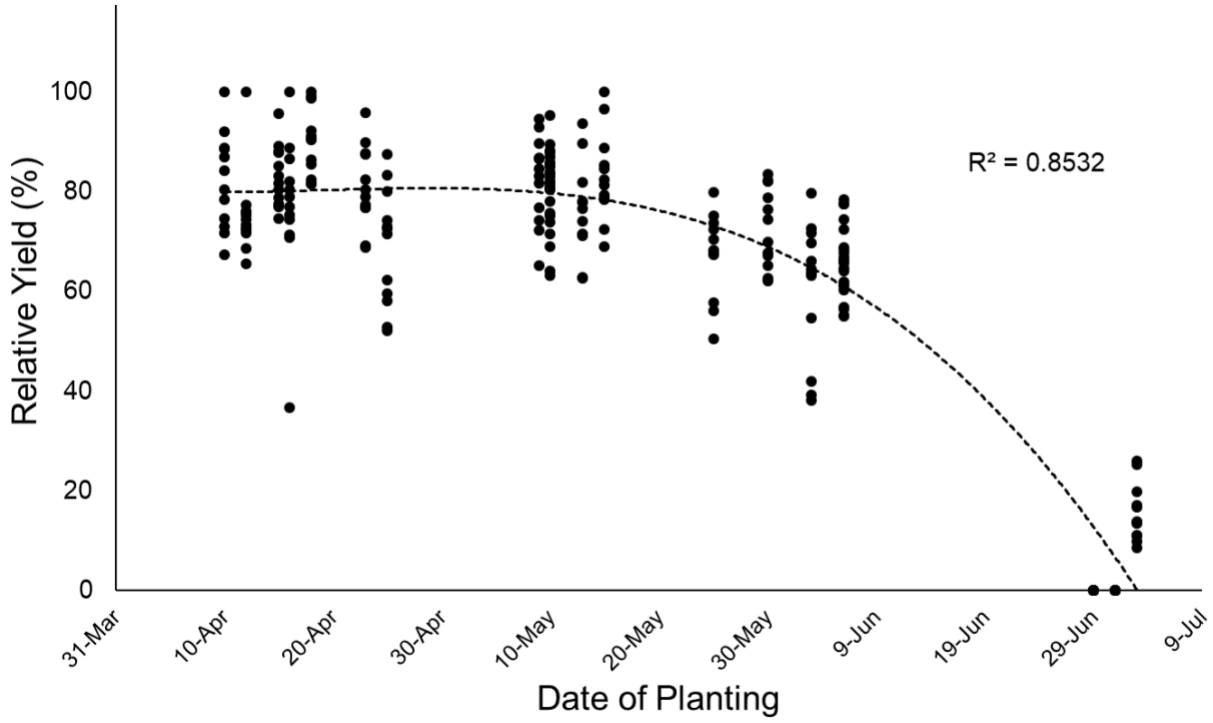

Figure 1. Corn relative yield from 2014 through 2018 as affected by planting date across a range of hybrid maturities.