AGRONOMY RESEARCH UPDATE

Soybean Maturity by Planting Date Study

2014

Objectives

- Evaluate yield response when soybeans are planted two or three weeks earlier (mid-April to early May) than the current cultural practice at locations across Michigan.
- Investigate a plausible soybean varietal maturity and planting time interaction.

Eastern Agronomy Research

Study Description

- Three varieties were planted at six locations over two years across north-central Michigan.
- Continuous early-season rains prevented the studies from being planted at the intended early timing (mid-April to early May) during 2013 and 2014.
- Therefore, the study looked at the yield effects of planting full season varieties at a normal timing versus later in the planting season.

Locations:	2013: 4, 2014: 2
Planting Timings:	Normal (mid-May) Later (late May - early June)
Pioneer® brand soybeans Variety/Brand[1]:	92Y51 (RR) 92Y83 (RR) 93Y05 (RR)

Results

- Average soybean yield was 4.3 bu/acre greater at the normal planting timing compared to the later planting timing (Figure 1).
- The 2.5 and 2.8 RM soybean varieties had reduced yields with later planting (Figure 2).

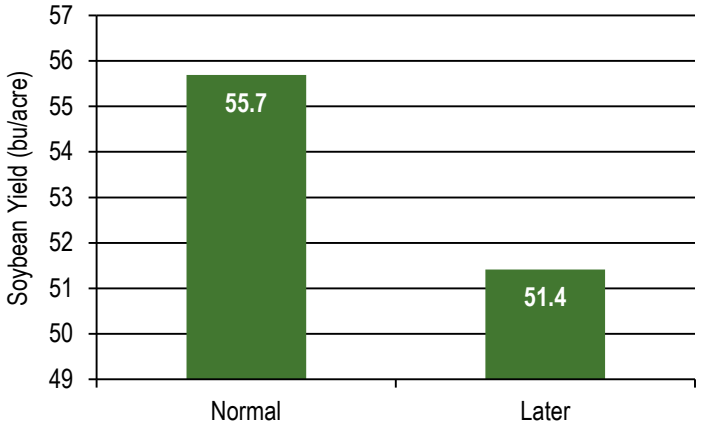

Figure 1. Effect of planting timing on soybean yield.

- The fullest season variety (3.0 RM) had similar yield at normal and later planting timings.
- Later planting delayed plant development by one growth stage, relative to soybean planted at the normal timing (data not shown).

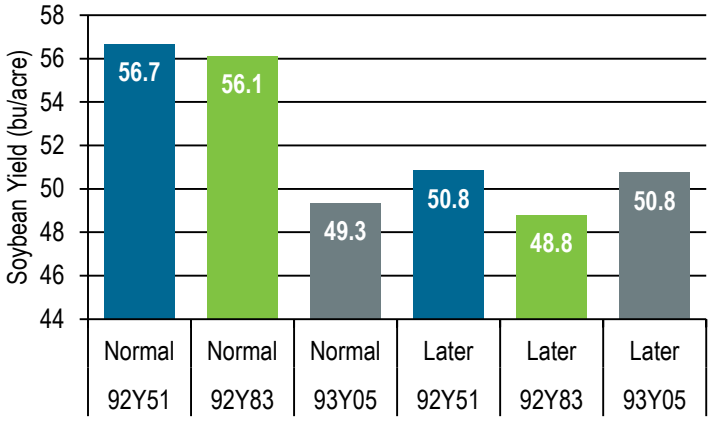

Figure 2. Effect of variety maturity at normal and later planting timings on soybean yield.

- **Conclusion:** Planting a full-season adapted Pioneer® brand soybean variety at the earliest practical time extends the duration of reproductive growth, allows soybean plants to take advantage of favorable conditions during the growing season whenever they occur, and will often result in higher grain yield.

[1]All Pioneer products are varieties unless designated with LL, in which case some are brands.