

## Agronomy Update

### Early Planting in Soybeans

#### Overview

Planting date in soybeans has been a topic of great debate in recent years, and has spurred many university and third party studies to help answer the question – How early is too early?

These studies and real world on farm experience has helped shape the discussion and lead to meaningful change on many farms over the last 5-10 years. Here, we will look at some localized data to help you and your growers in their decision-making process this Spring.



#### What You Should Know

The most important benefit to planting soybeans early is spreading workload out and increasing yield potential. Yield potential is increased through more vegetative growth before the plant must expend energy on reproductive mechanisms. “On average, soybean plants add one main stem node every 3.7 days after the first trifoliolate appears until seed development. Each stem node is associated with flowers, then pods, then seeds. Because of this, an earlier start to the growing season results in more stem nodes for flower, pod, and seed production” (Science for Success). In a recent collaborative, multi-state study sponsored by the United Soybean Board, it was found that soybean yields decreased by 7.2-8.2% in Michigan and Ohio by delaying soybean planting from May 1 to May 31. It was found that the degree to which yield loss is experienced varies by season and region but can be as high as .5 bu/day. In another study by Michigan State University in 2019 and 2020 across 11 locations in Michigan, it was found that early planted soybeans (March 29-May 7) increased soybean yield at 9 out of 11 locations by up to 6.5 bushels, and an average of 2.0 bushels when compared to normal planting date at the same locations (May 5-June 2). Planting soybeans earlier comes with



inherent risks of seedling disease, uneven emergence, and other environmental challenges. However, it has been found that “downside yield risk of poor stand establishment is minimal until stand falls below 50,000-75,000 plants per acre.” (Science for Success).

## Management

Managing your farm’s planting schedule is vital to making sure that all crops get planted on time, and into good soil conditions. When considering which crop to plant and when, it is important to know where you can mitigate risk and set your operation up for the best chance at success come harvest time. As the data in the two studies referenced above shows, there is relatively low risk compared to the potential reward in planting soybeans early. It spreads your workload out, allows for more time to plant other crops such as corn when the soil temperatures are higher and conditions are ideal, and potentially could deliver a very positive yield result come harvest time. Be sure to take a look through both of the referenced papers below; they contain the detailed data in this Field Focus, as well as other valuable information on planting populations, seed treatments, and row spacing.

## References/Resources for Further Information

- [2020 on farm Magazine for web\[34\].pdf \(michigansoybean.org\)](#)
- [Science for Success- Planting Date.pdf \(msu.edu\)](#)

## PRODUCT SPOTLIGHT

### B202EE

- Excellent emergence and strong harvest standability
- Peking SCN resistance provides an attractive alternative in cyst areas
- Strong tolerance to white mold and SDS

### B252EE

- Strong emergence and harvest standability
- Very good fit on acres where white mold and sudden death syndrome are a concern
- Broad acre fit with an excellent top end

### B272EE

- Phenomenal top end yield potential in an attractive looking bean
- Planting into optimal field conditions will improve overall emergence
- Good tolerance to iron deficiency chlorosis and sudden death syndrome