

## **Technical Bulletin**

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## **Soybean Planting: When's The Best Time?**

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History has proven that soybean yields are influenced by planting date. Advancements in soybean genetics and improved technology have allowed us to move the soybean planting window earlier and earlier. With that said - when *is* the best time to plant soybeans?

There are two major factors to consider when it comes to early soybean planting:

- 1. Soil conditions soybeans respond well to early planting, if the soil conditions are fit
- Frost risk the risk of stand reduction due to a late spring frost or poor emergence should be offset by the opportunity to capture maximum yield potential when growing conditions are favorable.

Soybeans can germinate at soil temperatures around 50 degrees Fahrenheit at a two-inch depth. However, germination in these conditions is slow. The best temperature for soybean germination is around 75 degrees Fahrenheit. But, in some areas of the corn belt, it can be late May or even early June before soils hit this temperature. Early planting into colder soils generally doesn't have a negative impact on yield – given that your seedbed is fit.

One benefit of early planting comes from the daylight-sensitivity of soybeans. The plant starts to flower around the longest daylight day in June. To capitalize on this, it's important to have as much vegetative growth on the plant as possible when this day hits - which an early planting date can help with.

On the flip side, low soil temperatures at planting can increase the chances of injury to the seedling from pathogens, insects, and the risk of frost injury to emerged plants (don't forget - the growing point on soybeans is above the soil surface). Cold soils can cause slow root development, which makes soybeans more likely to develop issues with root rotting pathogens. To prevent this, it's best to use a seed treatment with a fungicide.

Lastly, early planted soybeans can support a high population of bean leaf beetles. I would recommend managing these pests by scouting and applying a foliar insecticide, or an insecticide seed treatment, so you can capitalize on the higher yields.

All in all, soybeans can be planted early, but the seedbed still needs to have ideal conditions and a fully loaded seed treatment like AgriShield® from LG Seeds is highly recommended. If you'd like to review seed treatment options, contact your local Technical Team Agronomist for details.

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