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INFORMATION**

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**SOYBEAN PLANTING CONSIDERATIONS FACT SHEET**

This is one in a series of fact sheets from the Mississippi Soybean Promotion Board and the soybean checkoff. Each sheet presents a brief overview of a topic important to Mississippi soybean production. More information on each topic can be accessed through the link at the bottom of the sheet. To see other fact sheets, click [here](#).

Today's "conventional" soybean production system in the Midsouth is the Early Soybean Production System (ESPS), which is based on early planting of early-maturing soybean (MG IV–early MG V) varieties (click [here](#) for MSSOY variety selector tool). Early planting (late March through mid-April) of soybeans in Mississippi is now common, and is used as a mechanism to avoid drought and late-season pest problems, plus ensure early harvest. The ESPS is likely a significant contributing factor to the Midsouth states' high yields in recent years.

There has never been a set date for the earliest allowed planting in this system. Rather, this is usually dictated by the estimated last frost date for a given location in the region that generally favors the start of planting in the accepted optimum window of April 10-20.

There is no yield advantage from ultra-early planting (before about Apr. 10), and these plantings are more likely to be subjected to temperatures that will result in frost or even a short-duration freeze after emergence. Also, resulting plants will likely be shorter than desired, especially when grown on clay soils. This, plus the fact that pods on these plants likely will be close to the ground, will reduce harvest efficiency.

If any stand failure resulting from frost or freeze injury is unacceptable because of a shortage of seed of desired varieties available for replanting, then delaying planting to ensure that emergence occurs after the estimated 10% last frost date for a location is preferred. If this approximate two-week delay in planting is too great for production and/or marketing goals, then planting on dates that fall

between the 50% and 10% last frost dates will impart a risk of stand loss that falls between those for the two dates.

Achieving an intended stand or plant population in ESPS plantings is imperative for gaining the aforementioned rewards from early planting. Quality of seed that are used in these plantings must be verified to ensure they will likely germinate and emerge. Therefore, it is advisable that producers have seed intended for these plantings checked for germination and vigor just prior to planting. If lower quality planting seed is expected or suspected, an accelerated aging (AA) test should also be conducted to determine the vigor of these seed. Seed with an AA of 80% or greater should be selected in order to have the greatest assurance of achieving an acceptable stand in early plantings.

A broad spectrum fungicide seed treatment (controls both seed- and soil-borne pathogens) should always be applied to soybean seed that are planted at any time. This practice will provide the best insurance for achieving the intended stand, and thus prevent costly replanting and subsequent loss of an early-planting advantage.

The majority of soybeans in the Midsouth are planted on clay soils. Plantings made on soils in this class will benefit from being on raised beds. Planting should be preceded by weed burndown with herbicides and minimum or no tillage (stale seedbed). Any required tillage for seedbed preparation for these plantings should be made in the preceding fall if possible since spring tillage may delay planting on a desired early date.

Late plantings of late-maturing soybean varieties are more vulnerable to late-season insect and disease pests. The added costs incurred for managing this increased pest pressure, plus the lower yield from late plantings, will subsequently reduce producer profits.

Click [here](#) for a detailed discussion of this topic, and [here](#) for the MSSOY Planting Resources page.