



**WWW.MSSOY.ORG ⇒ MSPB WEBSITE WITH
UP-TO-DATE SOYBEAN PRODUCTION
INFORMATION**

SOYBEAN ROW SPACING 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, most of the soybeans in the midsouthern US are grown in narrow rows because research has shown that increased yields and better weed management will result when compared to wide rows.

The definition of a narrow row is arbitrary. In some situations, a 30-in.-wide row may be considered narrow. For those who broadcast soybeans, a 7- or 8-in.-wide row may be the definition of narrow. Anything in between these two extremes, then, would also be considered narrow.

A variety planted on a particular early date on most loamy soils will produce a larger plant than will that same variety planted on the same date on most clayey soils. Therefore, Early Soybean Production System (ESPS) plantings grown in 30-in.-wide rows on loamy soils will probably form a complete canopy, while the smaller-statured plants that will be produced on clayey soils by the same variety planted on the same date will require a narrower row, say 20 in. or less, to achieve complete canopy closure in most cases. Therefore, the definition of “narrow” should be considered relative to the soil texture of the field that is being used.

A twin-row planting system is being used with increasing frequency. This system allows planting on 38- or 40-in.-wide beds but at row spacings on the beds that are less than the bed width. Research in the midsouthern US has generally shown that yields from a twin-row system will be greater than those from 38- and 40-in.-wide rows, which is the usual comparison. For example, twin rows spaced 8 inches apart on a 38-inch-wide bed give the same spacing between rows on adjacent beds as a single row planted on a 30-inch-wide bed. This spacing between rows on adjacent beds is sufficiently narrow for soybeans grown on loamy soils.

Early planting of early-maturing soybean varieties on clay soils will necessarily dictate that they be planted in some sort of narrow row configuration to ensure canopy closure. The 30-in.-wide row spacing in the twin-row system discussed above may be too wide for ESPS plantings made on these clayey soils because of the aforementioned growth differences between soybeans grown on the two diverse soil types. Thus, a wide-bed planting system—e.g. 80-in.-wide beds constructed in the fall—with narrow rows planted on the beds may be the answer. Such a wide bed will accommodate various narrow row spacings on them that will be suitable for not only soybeans, but also for crops such as corn and grain sorghum that will often be rotated with soybeans. This wide-bed system is probably the best and most manageable bed system for clayey soils since their cracking nature will allow lateral movement of water across the width of the beds when surface irrigation is applied.

In summary, soybeans should be grown in “narrow” rows in the Midsouth. The determination of the proper “narrow” row spacing should be made with soil texture in mind. Generally, a wider “narrow” row spacing can be used on loamy soils than on clayey soils. A twin-row system is a variation of a narrow-row system and is better suited for loamy soils than for clayey soils. A wide-bed with an accompanying narrow-row configuration on the bed likely offers the best management option for soybean production on clayey soils in the midsouthern US.

A final point. Planting soybeans early in the Midsouth is more important for increased seed yield than is selection of row spacing.

Click [here](#) for a detailed discussion of this topic.

Composed by Larry G. Heatherly, Mar. 2019,
larryheatherly@bellsouth.net