You don't need to push soybean seeding rates

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March 28, 2017

Last spring I was driving around with a farmer who told me that he was going to plant his soybeans at 180,000 seeds/acre. When I asked him why, he said "More mommies and daddies make more babies." That statement makes sense, but does it apply to soybeans?

From a crop physiology perspective in order to maximize yield, a soybean crop needs to have as much canopy closure by the beginning of flowering (R1) as possible. To say it different way, we need to intercept as much of the available sunlight by the time the soybeans begin to flower as we can. The way that we achieve this is by planting the right maturity group (MG), at the right planting date, at the proper row spacing, at the proper seeding rate.

We already know that for furrow irrigated soybean in Mississippi (and the rest of the Mid-South) the ideal situation is planting a mid- to-late MG 4 soybean in April. The majority of soybeans in Mississippi are planted on either 38 inch single rows or 38 inch twin rows with some 30 inch rows and some narrow rows mixed in. Moving to a narrower row spacing will certainly help to ensure maximum light interception, but unless you are planning on buying a new planter at this point in the year, changing row spacing right now probably isn't feasible for most soybean producers.

So if you are planning on planting our MG 4 soybean in April with your current planter, then you need to be planting at a seeding rate that is going to allow you to **get maximum light interception by flowering (R1)**. But what is that seeding rate?

Looking at soybean production guides for Louisiana and Arkansas, the general recommendation is to plant around 120,000 seeds per acre. This recommendation is based on the results of dozens of studies over a number of years investigating the response of soybean yield to seeding rate.

Over the past few years, multiple researchers at Mississippi State have conducted a series of studies across the state looking at seeding rates in soybeans. Here is a quick roundup of the results of some studies from 2016:

Location	Soil Type	Study	Optimum Seeding Rate
Stoneville	Clay	Field Scale Row Spacing × Seeding Rate	100,000 seeds/A
Hollandale	Clay	Field Scale Row Spacing × Seeding Rate	100,000 seeds/A
Stoneville	Clay	Row Spacing × Seeding Rate	135,000 seeds/A
Scott	Silt Loam	Row Spacing × Seeding Rate	100,000 seeds/A

The results from other growing seasons look similar. So when planting soybeans this spring shoot for a seeding rate of 120,000 seeds/acre. If conditions look more stressful (ie. wet and cold), increasing seeding rates slightly will not hurt (and probably make you feel better as well). As we progress through April into May and planting conditions improve, seeding rates around 120,000 seeds/acre will be more than enough to maximize yields.

If you have any questions about soybean seeding rates, feel free to give us a call.

