

Location, Timing Critical For Double-Crop Success

COLUMBIA, MO.

Double-cropping soybeans after wheat provides the opportunity to harvest two crops in the same year from the same piece of land. But here are challenges and concerns with double-cropping, and a University of Missouri Extension agronomist says location is a big factor.

“In the middle part of Missouri we’re going to be planting soybeans around July 1, but is there enough time for the soybeans to mature before the first frost?” said Bill Wiebold. “In this part of the state, probably, but as you go farther north the growing season shortens just enough that by the time you get to the Iowa border it probably doesn’t pay to double-crop.”

Conversely, as you move farther south in Missouri double-cropping becomes more likely to succeed. Wiebold says that in the southeastern part of Missouri where quite a bit of wheat is grown, almost every acre is double-cropped with soybeans.

Double-crop soybeans don’t typically yield as high as full-season beans, but with recent high soybean prices it can still be very profitable. However, if you lose too much yield on the soybean side, you have to make it up on the wheat side. Wiebold says that can be difficult because wheat prices haven’t followed the same trend soybeans have taken.

“It’s a complex equation between what happens to the wheat and what happens to the soybeans,” Wiebold said. “What are the different prices? What kind of yields can you get? So it’s a little complicated and it becomes even more difficult north of Highway 36.”

Aside from the length of the growing season, there are other considerations when double-cropping, such as straw management.

“The wheat is going to produce straw. You can bale it, and that’s another source of revenue if you have a place to sell that straw,” Wiebold said. “You have to be careful, though. If you wait a couple days to plant, that could hurt your

bean yield. So you have to calculate that into the equation.”

Another challenge is that double-crop beans are planted at such a time that seed filling will occur in late August, when the day length is shorter and the angle of the sun is greater, so there is less sunlight and less yield potential.

“You also get a shorter seed-filling period,” Wiebold said. “It may be 35 days versus 55 days for full-season.”

Moisture is also a crucial factor when it comes to double-cropping.

“The length of growing season is about location,” Wiebold said. “But wherever you double-crop, wheat has taken quite a bit of moisture out of the soil. So what is that weather going to be – not only the day that I plant but also the next six or seven days as I’m trying to get those soybean seedlings out of the soil? Quite often it is just too dry and the beans don’t emerge or they emerge spotty.”

Wiebold says some practices that can make double-cropping successful include having a high-yielding, early-maturing wheat variety, no-till planting, planting as early as possible, using narrow rows, and increasing seed density.

“No-tillage is a good water-conservation practice and it’s a good time-conservation practice,” he said. “Narrow rows are important because that canopy forms more quickly, capturing sunlight sooner and helping yield.”

Wiebold recommends selecting a soybean variety that you would use in a full season, so it is tall enough and produces enough leaves to drive the yield. He also says a higher seed density is needed when double-cropping.

“If we have 100,000 to 110,000 plants per acre, that captures most of the yield in full-season situations,” Wiebold said. “But you may need 140,000 or 150,000 plants in a double-crop situation. The plants are shorter; they don’t produce as many nodes, so you have to add some plants to make up for those nodes.” Δ