

Wilson explains that his goal is to have a full canopy of soybeans in their reproductive stage of growth on the longest day of the year—June 21st. “This makes use of the maximum amount of solar energy to boost yield, not vegetative growth. We like planting in 30-inch rows because the more closely spaced seedlings help each other emerge, so to get a full canopy by that date with the wide rows we have to plant early. If we wait and then get delayed by the weather, the yield falls rapidly,” he says.

Planting depth proved to be key to establishing a stand of soybeans planted on March 23 by Beaver Dam, Wisconsin, farmer Ryan Nell. “Deeper planting seemed to insulate the seedlings. We planted 140,000 seeds per acre and where they were planted deeper than 1.75 inches we got a stand of 85,000 to 115,000, which is adequate. Shallower planting resulted in stands below 50,000 plants per acre,” says Nell.

“We only planted four acres that early, but they made 77 bushels per acre, including the area with a poor stand. The rest of that field was planted on April 26th and it made 72 bushels. Beans we planted in mid-May made 65 bushels while those from late May made 62 bushels. Our last beans were planted on June 6th and they made just 52 bushels,” adds Nell.

Nell credits the drier, warmer berms left by strip-till done in the fall with his success, as well as favorable planting conditions in late March. “Surprisingly, we had a soil temperature of 51 degrees at the two-inch depth. In April we got 18 inches of snow and a soil temperature that fell as low as 29 degrees. I thought surely the beans would rot or freeze, but they began emerging on May 4th.

“We suffered some ridicule, but also got a lot of encouragement and it’s been fun,” adds Nell. “I’ve pushed myself to learn more about how soybeans develop, and I know the early-planted beans reached the R1 growth stage on June 13th, which was earlier than the later planting, so they were able to take advantage of the longer day lengths. We’re now planning to plant soybeans before corn and have bought a second planter to get both crops in early.” Favorable results from early-seeded soybeans have also

led Colwich, Kansas, farmer Bruce Seiler to purchase a second planter that will allow him and partner Justin McGonigle to plant 15-inch corn and beans at the same time. “We’ve previously planted corn first—usually in late March—and always noticed that volunteer soybeans were up and growing at that time, so that got us thinking. Last year we wanted to plant on March 24th but ended up on April 4th, which was a month or more earlier than normal. Under irrigation, those early beans were our best and made over 90 bushels per acre. We also planted early on non-irrigated acres, but a springtime drought hurt them while rain arrived in time to save our later planted beans,” says Seiler.

Seiler adds that he’ll expand early planted acreage this season. “With current low commodity prices, we’ve got to keep trying new things to boost yields whenever possible,” he says.

An on-farm research project into soybean planting date also has Miami, Oklahoma, farmer Brent Rendel evaluating standard production practices in his area. “We typically plant full-season soybeans in the later part of May and then again as a double-crop after wheat harvest, which means we’re planting in late June. In two years of research we’ve learned that those late soybeans were netting \$50 to \$100 per acre less than those planted earlier,” says Rendel.

Rendel says those findings have him questioning the common practice of double-cropping soybeans after wheat. “The profitability of growing wheat is questionable already, so I’m wondering if I can give up that much money on my soybean crop just to grow wheat ahead of it,” he says.

Rendel compared two maturity groups at four seeding rates (64,000 to 160,000) and four planting dates (May 14/28 and June 10/25). Planting rate had little impact on the early planting date where yields ranged from 49 to 54 bushels. Yields from May 28th were slightly higher but only at higher seeding rates. Yields from the latest planting ranged from 23 to 40 bushels and only peaked at the highest seeding rate.

“We think we can improve profitability by planting earlier to increase yields and decrease seeding rate to cut input costs,” says Rendel. ❁

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- Bruce Seiler

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