

Row Width Trials

Study Measures Benefits Of Different Row Spacings With Cotton

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Skip row versus every row cotton on three different row spacings of 38, 30 and 15 inches was a topic discussed recently by Dr. Joe Henggeler, University of Missouri Delta Center irrigation specialist.

"We are looking also at nine populations on this," he said. "Farmers started using skip row here in the midsouth, which normally was something done in the west where you could use it to fight the drought. With farmers using it here, we thought we better put some plots in ourselves."

He said the trials include the 15-inch row as there were some earlier indications that some pretty good yields were being recorded with UNR (ultra narrow row). That, however, did include some quality problems because they couldn't pick it with a picker. A stripper had to be used on the 15-inch rows of cotton.

"John Deere now has made a picker unit that will pick the 15-inch rows," he added. "So you can have the quality and the yield potential. We are looking at that and currently from our boll counts there are about 50,000 more bolls per acre on this 15-inch than on our traditional row spacing of 38."

Henggeler's group is looking at that very carefully and took special note of it at the recent harvest. However, the lint per boll was less on the 15-inch rows, making final yields no higher than that of the 30- and 38-inch row widths. High population rates helped the 15-inch treatments, but had little impact on the 30- or 38-inch widths.

The nine populations he planted were thickly placed, then at first square they were thinned. Every 10 feet has a different population. At harvest time he harvested 10 feet at a time, took it to the gin and got the yield and the quality of it.

"There are some fields in Tennessee that looked really good on that 15-inch, and in Carolina it was pretty good as well," he said. "They had some problems last year in Mississippi. If the cotton stays small they have a problem because you need some sort of bulk. It actually cuts a row of 15 inch, moves over to the neighboring row and trips them together, and if there is not enough green mass then there is not enough to make it work well. It will clog up, and that was a big problem in Mississippi last year."

In early August, Henggeler was really pleased with the cotton crop. Although it was planted late because the freeze killed the corn and planting got backed up a bit, the crop looked good.

"I think our boll populations are fairly good

too," he added.

Plants looked good as they were just starting to open. He said that a few miles away in Wardell some small modules of cotton had already been picked.

Henggeler said he would continue to look at the benefits of ultra narrow row, but added that farmers must find a way to pick the crop.

"Otherwise you lose the quality aspect," he said. "You can go with this John Deere unit which is about \$16,000 more on a new picker. I figure if it lasts you five years and you have a



University of Missouri Delta Center Irrigation Specialist Dr. Joe Henggeler, discusses trials on three different row spacings. Photo by John LaRose, Jr.

typical size farm, you will need about a \$3 an acre increase. I think that is very doable."

The skip-row had higher yields only on the 15-inch rows (about 200 lbs/ac), whereas, there was little yield difference between skip- and every-row for both the 30- and 38-inch row widths. The 30-inch treatments averaged about two bales per acre, while the 38-inch treatments averaged 25 lbs/ac less.

"The other thing that we are also looking at is twin row and you can do the same thing by planting twin row on your 38-inch beds," Henggeler continued. "You get the row size, average size closer together so you get the benefit from that, but you do not need to buy any equipment other than the planter because you can pick that with your regular picker." Δ