

Replant Decisions

Study Aims To Determine Economic Advantage Of Replanting Cotton

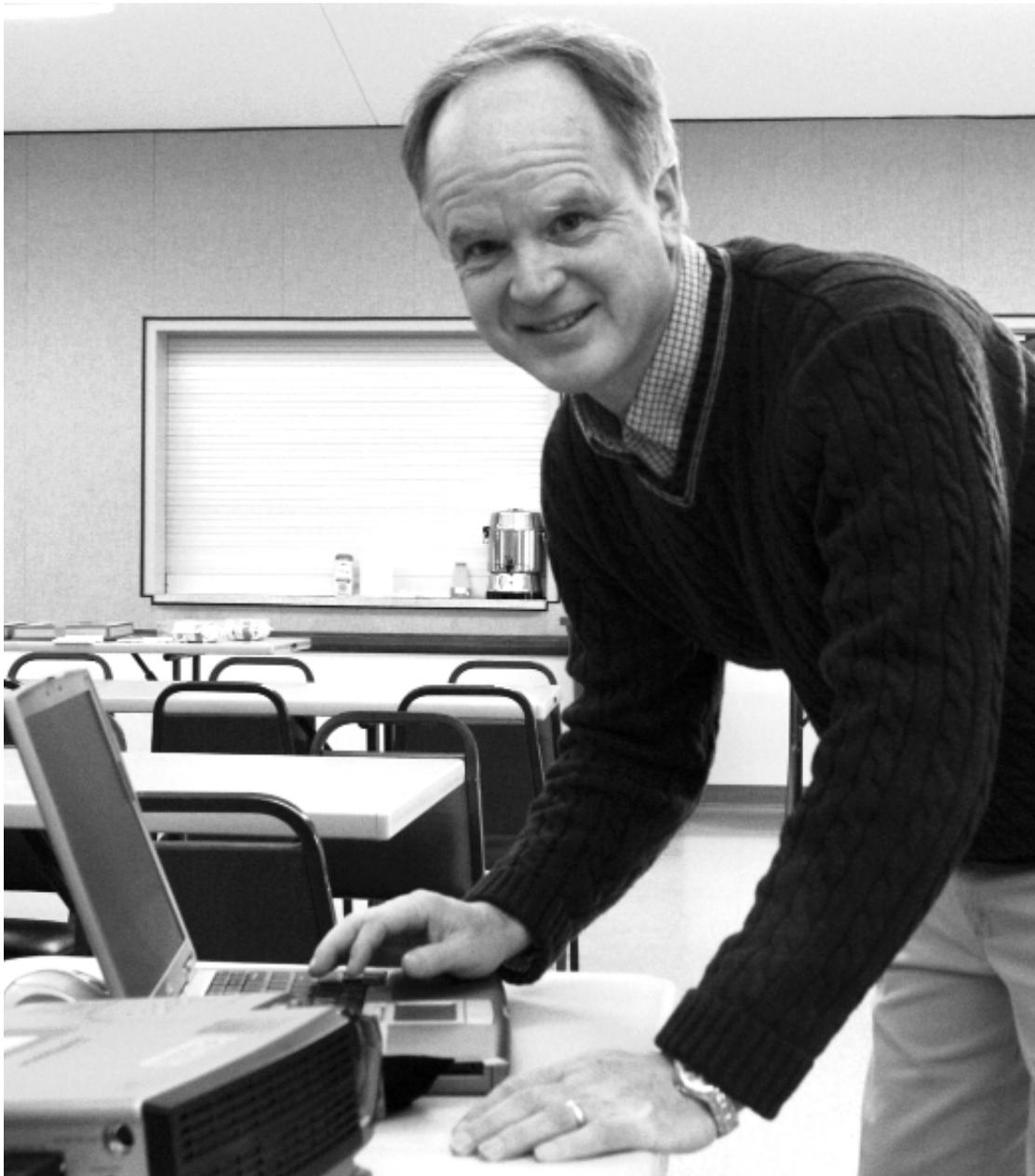
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“If you are having a hard time deciding whether to replant or not, don’t.” That’s the advice of Dr. Gene Stevens, Crop Production Specialist at the University of Missouri Delta Research Center.

as far as your yield goes it doesn’t really affect that,” Stevens said. “Of course, when you have a three foot or longer skip it becomes significant, particularly if you have a lot of them. We are working with the National Crop Insurance Program so when an adjuster comes out he uses charts and we are trying to calibrate those to be sure those are accurate.”



Dr. Gene Stevens preparing for a presentation at a recent extension meeting.

Photo by John LaRose

Stevens said the Delta Center is in a project cooperating with Clemson University in South Carolina trying to determine the economic advantage of replanting when a stand of cotton is damaged from hail or other catastrophes.

“We are looking at 50 percent stand reductions, 60-70, up to 90 percent, and I have been amazed at how much the cotton will compensate for low stand,” he said. “Years ago, an extension agent in Mississippi told me ‘if you have a hard time deciding whether to replant or not, don’t,’ and we are finding that to be true.”

He explained that the project looks at skips in a row, and so far the conclusion is that a one foot skip is insignificant. Normally, cotton is planted about four seeds per foot of row, and the optimal seeding rate is a plant population of about three. However, the research is showing that if the crop ends up being only one plant every foot, the loss is not dramatic.

“The plant will respond to short skips by growing new vegetative branches. It may delay the maturity and your micronaire might go up, but

“You could have crusting, you may have planted too deep, or cold weather may cause it,” Stevens said.

Allen Wrather, Bobby Phipps, and Stevens recently finished two long-term planting date studies at the Delta Center. Based on their research, the group released a new computer program called “Replant Decisions” which allows growers to enter different plant populations and planting dates. The free software shows yield predictions in normal and cool weather scenarios.

“The program looks really simple, but there was a whole lot of data that went into it,” Stevens explained. Growers can download Replant Decisions on the internet at no charge from www.plantsci.missouri.edu/deltacrops. The Delta Center scientists will also publish a scientific paper, showing their plant population and planting date results, in the next issue of Journal of Cotton Science, an on-line publication sponsored by Cotton Foundation. Δ