

# Precocious Cotton Prompts Micronaire Testing

**LITTLE ROCK, ARK.**

**T**hanks to a warm spring and very hot summer, Arkansas cotton is weeks ahead of normal and University of Arkansas Division of Agriculture personnel will be conducting micronaire sampling to help guide defoliation timing and gauge fiber quality.

Micronaire, a measure of cotton fineness, is one of many fiber quality characteristics of which a bale of cotton is classed at harvest. Micronaire readings are a function of variety and environment but can be affected more by environment than some of the other quality parameters.

"This crop is wrapping up pretty quick," Tom Barber, extension cotton agronomist for the U of A Division of Agriculture, said Wednesday. "This heat has moved us well ahead of schedule – at least two weeks ahead of normal."

With last year's gray, rainy summer "we were way late and never accumulated enough heat units," he said. "So far this year we've probably accumulated as many heat units as all of last year."

Heat units are a method of gauging development by incorporating the effects of temperature on the plant's growth processes.

"Early" does have a downside, though.

"The bolls are opening very fast in irrigated fields," Barber said. "I'm concerned whether the bolls will have enough time to allow the fibers to elongate."

Long fibers are more valued than short staple

cotton.

"In the next week or two, we'll be sampling a lot of fields and sending them down to the classing office at Dumas to check on fiber quality," Barber said.

"We need to keep an eye on the end of the season to defoliate at the right time to preserve the fiber, especially micronaire," he said. "Many of these fields may be further along than everyone thinks they are."

Cotton's tropical origins mean the plant "can handle high daytime temperatures fairly easily, probably better than any other crop," Barber said. "But lower nighttime temperatures are required for plant cooling and efficient photosynthesis. High nighttime temperatures can render the squares, or cotton blossoms, sterile."

"If the bloom won't fertilize, the young boll will shed," he said.

Like their soy-growing counterparts, cotton growers are battling hungry insects encouraged by the hot, dry weather.

"The plant bugs have been horrible in spots this year," Barber said. "Spider mites have blown up in areas too."

Bollworms, already a major problem in Arkansas soybeans, have been an issue even on cotton varieties bred to be resistant to the pests.

"We have a tremendous amount of bollworms in cotton," he said. "We mostly grow Bollgard varieties and Bollgard II cotton has received damage and we've had to treat for bollworms."

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