

2006 Cotton Defoliation Project Summary

Cotton defoliation trials for GAPAC were applied at four locations across the state. GAPAC consultants picked the locations, trying to choose a representative field for their area. Treatments were chosen by participating company representatives.

Applications were made by Danny Bennett and Lee Dykes. Treatments were applied with a CO₂ spraying system mounted on a tractor sprayer. A five-row by 50 ft. treatment was our standard plot size. The first treatments went out on September 16 (Saturday), and all treatment applications were completed by September 21 (Thursday).

At three locations (Paul Brown, Michael Williams and John Beasley), eleven treatments were made on a dryland site at each location, plus twelve to fourteen treatments on an irrigated site nearby the dryland site. Wes Briggs had fourteen treatments at an irrigated site in Seminole County, but no dryland treatments.

At John Beasley's site in Bacon County, heavy rainfall came unexpectedly four to six hours after our treatments had been applied. For this reason, we did not include his site in the summary statistical analysis. Each consultant was given the option to add a "grower standard". John Beasley and Paul Brown added a grower standard to their irrigated plots and Wes Briggs added two grower standards to his plots.

Weather conditions were typical. Most of the irrigated cotton was in good condition to defoliate. The dryland cotton was difficult to defoliate because it had cut out, gotten rain, and started back over. In general, the irrigated cotton was high-yield potential and ready to defoliate. Ratings were made at five days after treatment and again at 12 days after treatment. The exception was Michael Williams' plots; we did a four day rating instead of five days.

Overall comments: There were some obvious differences in the percent desiccation at the four and five day rating, and some differences even at the twelve-day rating. While desiccation is not as harmful to quality as too many green leaves, it still can be an important factor.

This year was a good reminder of the lesson we have learned in the past: that each field needs to be evaluated and the correct treatment needs to be made for the condition of the cotton.