

**PRECISION FARMING BY ALABAMA COTTON PRODUCERS: RESULTS
FROM THE 2001 PRECISION FARMING SURVEY**

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Abstract

Recent research has shown that only about four percent of American farmers use at least one precision agricultural technology. In many parts of the cotton belt, that percentage is lower due to many factors, physical, institutional, and human. Modern upland cotton production is complicated and costly. The goal of this study was to determine the level of farmer adoption and attitude toward precision agriculture in Alabama cotton production. Results suggested that few Alabama farmers use precision agriculture technology. Survey respondents closely resembled the general farm population in terms of age, tenure, size of farm, and education level. Farmers indicated that "profit" most likely prompted the decision to use precision farming practices. Farmers using precision agriculture indicated a wider variation in within-field crop yield, but similar average yield. This may indicate greater awareness of yield variability rather than an actual yield difference. Few farmers indicated they were willing to consider yield monitoring equipment for existing cotton pickers or purchasing new pickers with yield monitors installed. The most common precision agriculture technology used was grid soil sampling. The information from precision agriculture technology was seen as most useful in "improving yields", followed by "maintaining better financial records". Farmers believed precision agriculture technology would be profitable to use in the future by a margin of over two to one.