## CONSERVATION TILLAGE CONFERENCE TILLAGE AND NITROGEN INFLUENCE ON COTTON

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## **INTERPRETIVE SUMMARY**

The experiment was conducted during 1996 - 1998 on a Dothan sandy loam (fine, loamy siliceous, thermic Plinthic Kandiudults) at the North Florida Research and Education Center, Quincy, FL. The objectives of this study were to determine optimum N rates for cotton, the impact of fallow, small grain and legume as winter covers on N requirements of cotton, and to compare N requirements in strip tilled cotton with conventional plantings.

The experiment was conducted during 1996 - 1998 on a Dothan sandy loam (fine, loamy siliceous, thermic Plinthic Kandiudults) at the North Florida Research and Education Center, Quincy, FL. The treatments were applied tillage (Strip tillage vs. Conventional), winter cover (Fallow vs. Legume vs. Wheat), and N fertility rates on cotton (0, 60, 120, and 180 lb N/acre). CONCLUSIONS

- C Higher yields of cotton were obtained after crimson clover than wheat or fallow.
- C Nitrogen application up to 120 lbs/A significantly increased lint yield of cotton.
- Cotton bolls were heavier in strip-till than conventional till, heavier after fallow than wheat with positive response to N rate of up to 60 lbs/A.
- <sup>C</sup> Plant height was greater in strip-till than conventional planting and greater after crimson clover than wheat and fallow, and increased with increasing N rates on cotton.

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