

PROJECT TITLE: NITROGEN AND PLANT GROWTH REGULATOR RATES ON COTTON YIELD AND FIBER QUALITY

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SUMMARY: Nitrogen rates had no effect on the observed plant heights, but the PGR strategy did affect plant heights. No PGR application of the late season application applied alone resulted in the tallest plants (Table 2). There was no difference between the the low and high PGR strategies or when the late season application was included. Nitrogen rates or PGR strategies had no effect on plant biomass at defoliation, while final node count was only influenced by PGR strategy. An interaction was observed for lint yields between nitrogen rates and PGR strategies. The high PGR strategy that included a late season application produced the lowest yields, regardless of N rate. However, lint yields measured from the other nitrogen and PGR strategies were similar to each other. Interestingly, cotton that received the recommended rate of 90 lb N ac⁻¹ with no PGR produced the highest lint yields. The dry conditions experienced during the 2006 growing season indicate PGRs were not beneficial, regardless of application strategy.