

**COTTON YIELD RESPONSE
TO MID-BLOOM APPLICATION OF PGR-IV
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Abstract

Plant growth regulators are widely used in cotton to control growth and enhance yield. Research indicates that mid-to late- bloom applications of PGR-IV can enhance maturity and increase lint yield. These demonstrations were conducted to evaluate the yield response of cotton treated with PGR-IV (6.0 oz/A) during the third to fourth week of bloom. Three demonstrations were conducted in producer fields using strips the length of the field in 1997 and 1998. Replicated treatments were harvested with conventional pickers and weighed in the field using boll buggies equipped with load cells. Samples were ginned on a laboratory gin to determine lint fraction. Lint yield did not differ as a result of mid-bloom applications of PGR-IV. Yields were enhanced with PGR-IV numerically in only one of three sites in each of the two years tested. Overall, lint yields averaged 1112 lb lint/A and 1106 lb lint/A for untreated- and PGR-IV- treated demonstrations, respectively. These demonstrations in producer fields failed to produce significant positive yield response with PGR-IV at mid-bloom.