

**MEPIQUAT CHLORIDE APPLICATIONS
BASED ON PLANT MONITORING**

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Abstract

Recommendations on mepiquat chloride (MC) use in cotton are complex in the southeastern U.S. due to a varied yield response under dryland conditions. Other regions in the Southeast have been developing recommendations based on plant monitoring, rather than automatic applications. The unique weather patterns of South Carolina justified the evaluation of plant monitoring utilization for MC use. Studies were established at Florence and Blackville, SC, in 1995. Automatic applications of 8 oz. MC at early bloom and low rate multiple applications were compared to those same programs based on plant monitoring, where applications were made on an as-needed basis. Plant growth parameters (plant height, height-to-node ratio) and fruit retention, distribution, and numbers were significantly influenced by MC applications. No lint yield response was detected, despite the differences in plant growth and fruiting characteristics. Droughty conditions could have overwhelmed any potential yield differences.