

1679 The effects of nitrogen and mepiquat chloride rates applied to an elite cotton variety

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The objective of this study was to determine what is the maximum amount of nitrogen that can be applied to produce high yields and still produce a profit with inputs of both nitrogen and plant growth regulators. The field experiment was conducted in 2005 and 2006 at the Upper Coastal Plain Research Station in Rocky Mount, NC and an on-farm location in Duplin County, NC respectively. The locations represent diverse ranges in soil types ranging from sandy loam to silt loam and are representative of most cotton producing areas in North Carolina. In 2005 the most profitable combination of nitrogen and mepiquat chloride was the formulation of 50lb/a of nitrogen with 16 fl oz/a of MC. For 2006 the most profitable formulation for economic return was 100lb/a of nitrogen with 16 fl oz/a of MC.