APPLICATION OF MEPIQUAT CHLORIDE WITH A WICK APPLICATOR

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Abstract

A field experiment was conducted on a wagram loamy sand to evaluate the growth and yield response of cotton when mepiquat chloride was applied with a wick applicator. Four ratios of mepiquat chloride were applied with a canvas wick applicator on June 26 (early bloom) and July 9. The ratios of mepiquat chloride to water were 1:1, 1:3, 1:10 and 1:100. The application volume was 50 ounces per acre resulting in rates of mepiquat chloride applied for each application of 25 16.6, 5 and 0.5 ounces per acre respectively.

All mepiquat chloride treatments had reduced plant height, number of nodes, number of sympodia, and number of effective sympodia compared to the check. Plant height for the 1:100 ratio was higher than the more concentrated ratios indicating that future research needs to focus between the 1:10 (10 total ounces) and the 1:100 (one total ounce) application rates. Mepiquat chloride treatments had increased yields and number of bolls on monopodia compared to the check. This method of applying mepiquat chloride appears to control plant height and offers the grower the option of treating only taller plants in a given field. Application volume can be altered by changing orifice size. Wicks can easily be attached to any piece of equipment so that application can be piggy-backed to any trip through the field. Future research will focus on various wick application rates compared to foliar spray application rates and potential application volumes.