EFFECTS OF PIX, BAS130W, AND MEPPLUS ON COTTONGROWTH, LINT YIELD AND FIBER QUALITY IN THE COASTAL PLAINS OF SOUTH TEXAS

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Abstract

The objective of the experiment was to compare the effects of Pix, MepPlus and BAS130W on cotton growth and yield. Cotton was irrigated according to calculated evapotranspiration requirements in order to minimize field variability due to drought stress. The experiment was planted on 38" rows with DP 33B at 14 seed per meter. A randomized complete block design displayed in Table 1. Plant measurements were conducted throughout the growing season to monitor plant development.

All three formulations of mepiquat chloride reduced height, number of main stem nodes and average internode length of the top 5 nodes. The second application further decreased these variables. All three formulations increased earliness 5-10% compared to the untreated check. Similarly, the formulations caused an increase in fruit retention on branches 6-10 (at mid-bloom stage) presumably by reducing vegetative growth rate. This effect was not visible at harvest time and possible affected fruit retention on higher branches. Second pick lint yield was lower in treatments receiving mepiquat chloride because of lower fruit retention on upper branches. There were no significant differences between BAS 130W, Pix, and Mepplus in plant height, number of main stem nodes, lint yield, and percent first pick.

Table 1. Time and rate of applications of growth regulators. Application 1 was made at Matchhead Stage (5-14-98) and Application 2 was made on (6-1-98; early bloom).

Application 1 (5-14-98) (12-14 Main Stem Nodes)	Application 2 (6-1-98) (Early Bloom)
UTC	UTC
AS130W @4.1 oz/ac	----------
Pix @4.1 oz/ac	----------
MepPlus @4.1 oz/ac	----------
BAS130W @4.1 oz/ac	BAS130 8.5 oz/ac
Pix @ 4.1 oz/ac	Pix 8.5 oz/ac
MepPlus @4.1 oz/ac	MepPlus 8.5 oz/ac

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