

COMPARISON OF COTTON VARIETAL RESPONSES TO APPLICATION OF AUXIGRO® WP PLUS CAL-MAX.

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AuxiGro^a WP (active ingredients = 29.2% gamma aminobutyric acid and 29.2% glutamic acid) was applied at the rate of 4 oz./acre in combination of one qt./acre of CalMax (a fertilizer containing 11% calcium) to three cotton varieties at second boll stage of development. Data documented a very highly significant ($p < 0.0001$) increase in leaf chlorophyll of 25-33% at 2.5 weeks after application. Treatments resulted in three additional nodes of growth at 17 days post treatment, but also resulted in approximately 10% less fruiting structure retention. Varieties differed in their lint responses to the treatment. Yield increases were noted in DPL 449BR and Phytogen 710R, but a large yield reduction occurred in FiberMax 991BR. Fiber lengths were reduced in all three varieties, with greatest reduction (0.04-0.05 inch) noted in FiberMax 991BR and Phytogen 710R. Micronaire was reduced slightly (0.1), did not change, or increased (0.58) in DPL 449BR, FiberMax 991BR and Phytogen 710R respectively.