

Response of Bt cotton in Synchronizing N and K Supply with Crop Demand to Enhance Nutrient Use Efficiency

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ABSTRACT

A field experiment was conducted during the year 2007-08 at Regional Agricultural Research Station, Lam to study synchronizing effect of N and K supply with crop demand to enhance Nutrient use efficiency. Growth and yield contributing characters differed significantly as time of application and number of splits differed. Plant height and number of bolls increased on application of N with K. The highest seed cotton yield and Benefit Cost Ratio (BCR) was recorded by applying N with or without K in three splits *i.e* at 15, 45 and 75 DAS which was on par with T₄, T₅, T₈ and T₉ but significantly superior over the rest of the treatments. The highest seed index (9.4 g) has been recorded with three splits *i.e* at 15, 30 and 45 DAS. Application of N with or without K in three splits *i.e* at 15, 30 and 60 DAS recorded highest lint index. Ginning Out Turn (GOT) has been increased significantly on application of N with K and the magnitude of increase was to the tune of 8.6%. However, N and K application did not exert any significant impact on fiber quality

Key words : Cotton, Nitrogen, Potassium, Split application.