

Pengaruh Aplikasi Pupuk MKP dan NPK terhadap Pertumbuhan Tanaman dan Produksi Benih Kenaf (*Hibiscus cannabinus* L.). *The Effect of MKP and NPK Fertilizer Application on the Growth of Plants and Seed Production of Kenaf (*Hibiscus cannabinus* L.).* Supervised by Maria Azizah, S.P., M.Si.

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ABSTRACT

*Kenaf (*Hibiscus cannabinus* L.) is a fiber plant with high economic value and potential as a source of vegetable oil and biodiesel raw material. To support the increase in quality kenaf seed production, fertilization is an important agronomic factor. This study aims to determine the effect of various doses of Monopotassium Phosphate (MKP) and NPK fertilizers on the production and quality of kenaf seeds. The study was conducted at the experimental field of Jember State Polytechnic for five months using a factorial Randomized Block Design (rak) consisting of two factors: MKP fertilizer doses (10, 15, and 20 g/L) and NPK fertilizer doses (50, 75, and 100 kg/Ha). The parameters observed included the number of fruits per plant, seed weight per plot, weight of 1000 seeds, fresh root weight, wet weight of stover, dry weight of stover, and stover yield. The results of the analysis of variance showed that neither the single treatment nor the interaction between MKP and NPK fertilizers had a significant effect on the observed parameters. However, plant height, weight per hectare, root dry weight, and root yield showed significant differences. This is likely due to unfavorable environmental conditions, such as suboptimal light intensity and rainfall during the study. Nevertheless, the combination of 20 g/L MKP and 100 kg/Ha NPK yielded the highest descriptive values for several parameters. Therefore, further research is recommended in a more controlled environment with varying doses and application methods to achieve optimal results.*

Keywords: *Kenaf, MKP Fertilizer, NPK Fertilizer, Seed Production, Growth*