

Aplikasi Dosis Pupuk NPK dan Pemberian Pupuk MKP terhadap Produktivitas Benih Buncis (*Phaseolus vulgaris* L.) (*Application of NPK Fertilizer Dosages and MKP Fertilizer on Common Bean (*Phaseolus vulgaris* L.) Seed Productivity*). Dr. Ir. Nurul Sjamsijah, M.P. as chief advisor. Ir. Hari Prasetyo, M.P. as a member counsellor.

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ABSTRACT

*The intent of this study is to optimize common bean (*Phaseolus vulgaris* L.) productivity using NPK and MKP fertilizers. This research was undertaken at CV Aura Seed Indonesia's R&D facility from September to December 2021. Located at an altitude of 130 m, the field has a soil pH ranging from 5,7 to 6,5; a temperature ranging from 23°C to 31°C; and a relative humidity ranging from 63% to 78%. This study's design is a factorial randomized block with two levels of NPK fertilizer dosage and three levels of MKP fertilizer concentration: $N_1 = 4$ g/plant, $N_2 = 6$ g/plant, $M_0 = 0$ g/l, $M_1 = 9$ g/l, and $M_2 = 11$ g/l, repeated four times. ANOVA was used to analyse the data, followed by DMRT 5% if there was a significant impact. This study examined flowering and harvesting ages, the number of seeds in each pod and pods in each plant, the weight of seeds in each plant and plot, production in each hectare, and the weight of 1000 seeds. The study concluded that the NPK fertilizer dosage significantly affected the flowering age parameter (36.63 HST). The MKP fertilizer treatment significantly affected the number of seeds in each pod (6,85); the number of pods in each plant (80,55); the weight in each plant (565,67 g); the weight in each plot (2,37 kg); and the production in each hectare (1,97 tons/ha). In contrast, neither harvesting age nor weight of 1000 seeds differed significantly between the two treatments.*

Keywords: NPK fertilizer, MKP fertilizer, common beans