

**APPLICATION OF A COMBINATION OF GOAT MANURE AND  
NPK DOSAGES ON PLANT GROWTH AND  
YIELD LONG BEANS (*Vigna sinensis* L.)**

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**ABSTRAC**

Long beans are a vegetable commodity that contains high protein. Increasing production is carried out through intensification efforts, namely fertilization. This research aims to find out what dose of goat manure and NPK fertilizer is best for the growth and yield of long bean plants. This research was carried out in Banyuraden Rice Fields, Sleman, Yogyakarta. The experiment used a one-factor design prepared using a Complete Randomized Block Design (RAKL) consisting of a combination of goat fertilizer doses at the levels of 10 tons/ha, 20 tons/ha, and 30 tons/ha and NPK doses at the levels of 0 kg/ha, 150 kg/ha, 300 kg/ha, and 350 kg/ha. The research data were analyzed using ANOVA at a 5% level followed by a DMRT multiple range test at a 5% level. The results of this research showed that there was a real effect of the combination of goat manure and NPK fertilizer on the growth and yield of long beans. In the combination treatment, a dose of goat manure of 10 tons/ha and NPK of 350 kg/ha gave better results on the parameters of flower emergence age, harvest age, number of seeds per pod, pod weight per plant, and stover weight. The goat manure fertilizer dose of 30 tons/ha and NPK 300 kg/ha gave better results on the parameters of number of pods per plant, pod weight per unit, conversion yield to ha, and harvest index.

***Key word*** : Long beans, goat manure, NPK