

M. ZIYAN 'AINUN AZKA, NPM 0417011131. The Effect of Types Organic Fertilizer and Dosage of P Fertilizer to the Growth and Production of Mung Bean (*Vigna radiata L.*) under the guidance of Ir. Eka Adi Supriyanto, M.P. and Syakiroh Jazilah, S.P., M.P.

Abstract

Mung bean is one the most important Leguminosae plants in Indonesia. Its position occupies the third place after soybeans and peanuts. This study aims to know the effect of types fertilizer and dosage of P fertilizer with the interactions to the growth of Mungbean (*Vigna radiata L.*) has was conduct at laboratory garden of Agrotechnology Faculty, Pekalongan University. Experimental design used in this study is Randomized Block Design (RBD). The first factor is type organic fertilizer (manure of goat, cow and chicken). The second factor is dosage of P fertilizer (0, 0,6, 1,2, 1,8 gram/plant). The results show the type of organic fertilizer have real different to the variable of plant height, when flowers growth, the number of pods, very real different to the variable weight of 100 seeds. The best type of organic fertilizer manure of goat. The dosage of P fertilizer was real different on the variable of root nodules, real difference on weight of wet pods, weight of dry pods, weight of seeds in each plot. The optimum dosage of P fertilizer is 0.85 grams/plant. The interaction between types of organic fertilizers and the dose of P fertilizer was significantly different on the variable number of pods, weight of 100 seeds, significantly different on the weight of wet pods, weight of dry pods, and weight of seeds in each plot. The best combination is achieved of Goat manure and P fertilizer dose of 1.2 grams/plant.

Keywords: Mung bean, organic fertilizer, Dosage of P Fertilizer.