

ABSTRACT

EFFECT OF CHICKEN MANURE AND ARBUSCULAR MYCORRHIZAL FUNGI (AMF) ON THE GROWTH AND YIELD OF KIDNEY ERECTED BEAN (*Phaseolus vulgaris* L.)

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Chicken manure plays a role in improving soil physical, chemical and biological fertility. Arbuscular mycorrhizal fungi (AMF) are microorganisms that function to increase nutrient uptake by plants from the soil, besides that arbuscular mycorrhizal fungi can help decompose organic matter so that nutrients are available to plants. This study aims to determine the effect of the interaction between chicken manure and arbuscular mycorrhizal fungi (AMF) on the growth and yield of kidney erected beans. This research was carried out in Bantarsari Village, Bungursari District, Tasikmalaya City from October to December 2022 with an altitude of 433 meters above sea level. This study used a factorial randomized block design with 2 factors where the first factor was the application of chicken manure, namely 0 t/ha, 10 t/ha, 15 t/ha and the second factor was arbuscular mycorrhizal fungi, namely 0 g/plant, 10 g/plant, 15 g/plant. Each treatment was repeated 3 times for a total of 27 experimental plots. The results showed that there is no interaction between chicken manure and arbuscular mycorrhizal fungi on the growth and yield of kidney erected bean. Independently the dose of chicken manure affected plant height, number of leaves, leaf area, number of pods, pod weight per plant and pod weight per plot. The application of chicken manure 10 t/ha and 15 t/ha resulted in no difference in growth and yield of kidney erected beans.

Keywords: Chicken manure, Arbuscular mycorrhizal fungi, Kidney erected bean