

ABSTRACT

Long bean (*Vigna sinensis* L.) is one of the vegetable commodities that have great potential to be developed. The Efforts to increase the productivity of long beans can be done by using goat manure and kirinyuh green manure to improve soil fertility and provide nutrients for the soil that will be absorbed by plants. The purpose of this research was to determine the effect of goat manure and kirinyuh green manure and their interaction on the growth and yield of long beans. This research was conducted out at the Experimental Garden and Laboratory of the Faculty of Agriculture, Malikussaleh University in September to October 2023. This research used a Randomized Block Design with two factor and three replications. The first factor is goat manure which consists of three levels, namely control K0: 0 tons/ha, K1: 20 tons/ha (100 g/polybag), K2: 40 tons/ha (200 g/ polybag). The second factor is the concentration of kirinyuh green manure consists of three levels, namely H0: 0 tons/ha, H1: 10 tons/ha (50 g/polybag), H2: 20 tons/ha (100 g/polybag). The results of this research showed that the application of goat manure affected the weight of the pods and the number of long bean pods. The application of goat manure at a dose of 200 g/polybag gave the highest average value of the observed variables. The application of kirinyuh green manure affects plant height, dry weight, and length of long bean pods. The application of kirinyuh green manure at a dose of 100g/polybag gave the highest average value of the observed variables. There was an interaction between the application of goat manure and kirinyuh green manure on the dry weight and length of long bean pods.

Keyword : long bean, goat manure, kirinyuh green manure, fertilizer, dose