ABSTRACT

Organic fertilizers have been proven to be effective fertilizers. They are even cheaper to produce and it is environmentally friendly. Abundant sources of fertilizers can be found in surrounding, one of which is benthic soil. This study explored the potential of benthic soil as growth enhancer tested on *Lycopersicon esculentum*. The different soil combinations were T0= negative control (pure garden soil), T1= positive control (pure garden soil with fertilizer), T2= (50%garden soil and 50% benthic soil), and T3= (75% garden soil and 25% benthic soil). The statistical results of one way ANOVA showed that there was a significant effect on the growth rate and morphological characteristics of *L. esculentum*. Positive effects were noted in T3 in terms of growth rate (number of leaves and flowers) and morphological characteristics (height and color of leaves) wherein the results of T3 had only a minimum difference in the results of T1 indicating that the nutrients present in T1 was also present in T3. Therefore, based on the results and observation it was proved that benthic soil can be considered as an effective growth enhancer on *Lycopersicon esculentum*