ABSTRACT

Shallot (*Allium ascalonicum* L.) is one of the horticultural commodity in Indonesia with high economic value and strong market demand. The decline in shallot production is due to soil degradation and a decline in soil fertility. Shallot productivity can be increased through the use of organic fertilizers, such as guano and liquid organic fertilizer bean sprouts. This study aims to determine the effect of guano fertilizer and liquid organic fertilizer (POC) bean sprouts on the growth and yield of shallots. This study used a two-factor Randomized Block Design (RDB) with 3 replicates of the combination treatment factor guano fertilizer with consisiting 4 levels: G0 (0 g/*polybag*), G1 (10 g/*polybag*), G2 (20 g/*polybag*), and G3 (30 g/*polybag*), liquid organic fertilizer (POC) bean sprouts at 4 levels: T0 (0 ml/L), T1 (15 ml/L), T2 (25 ml/L), and T3 (35 ml/L). The results showed that the guano fertilizer affected at wet weight of bulbs per clump, dry weight of bulbs per clump, yield per plant and yield tons per hectare. The best guano fertilizer treatment was 20 g/*polybag*. The liquid organic fertilizer (POC) bean sprouts treatment affected of number of leaves, number of tillers, number of bulbs per clump, wet weight of bulbs per clump, dry weight of bulbs per clump, yield per plant, and yield tons per hectare. The bean sprouts POC of 35 ml/liter was the best treatment. There was an interaction between the treatment of guano fertilizer and bean sprouts POC treatment at length of leaves stomata. The best interaction treatment at guano fertilizer 30 g/*polybag* and 15 ml/liter bean sprouts POC.

Keywords: Guano fertilizer, Mung Bean Sprouts, Organic Fertilizer, Productivity.