

ABSTRACT

Shallot (*Allium ascalonicum* L.) is one of the horticultural commodities whose demand continues to increase, utilized as a food seasoning, raw material for the food industry, and medicine. One of the causes of low shallot productivity is the low availability of nutrients for the plants. This study aims to determine the effect of NPK fertilizer and liquid organic fertilizer from goat urine on the growth and production of shallot plants. This research employed a Randomized Block Design (RBD) method with two factors and three replications per treatment combination. The first factor was NPK fertilizer at levels of 0 g/polybag, 2.5 g/polybag (N1), and 5 g/polybag (N2). The second factor was liquid organic fertilizer from goat urine at three levels: 0%/polybag, 20%/polybag (U1), and 40%/polybag (U2). Thus, there were 9 treatment combinations with 3 replications, resulting in 27 experimental units. The results obtained from this study indicate that NPK fertilizer treatment affected plant height at 28-35 days after sowing (HST), number of leaves at 35 HST, dry weight per clump, bulb diameter, and weight of unmarketable bulbs. The 5 g/polybag treatment was the best. Single treatment of liquid organic fertilizer from goat urine affected plant height at 21-42 HST, number of leaves at 14, 21, 28, and 42 HST, number of tillers per clump at 21-35 HST, fresh bulb weight per clump, bulb diameter, and weight of unmarketable bulbs. The 0%/polybag concentration was the best treatment. There was an interaction between the combined NPK fertilizer (N) and goat urine LOF (U) treatments on bulb diameter. The best treatment was found in N2U0 (NPK 5 g/polybag + goat urine LOF 0%/polybag).

Keywords: Shallot, NPK, Goat Urine LOF