ABSTRACT

Shallots are vegetables that have many benefits and high economic value and are suitable for planting in Indonesia, which has the Latin name (Allium ascalonicum L). One effort to increase the growth and production of shallots is by fertilizing. The study aims to determine the effect of liquid organic fertilizer (LOF) from chicken eggshell and NPK fertilizer and their interactions on the growth and yield of shallots. The study was conducted at the experimental garden of the Faculty of Agriculture, Malikussaleh University in Reuleut, Muara Batu District, North Aceh Regency from December 2024 to February 2025. This study used a Factorial Randomized Block Design (RAK) with three replications. The first factor is (C0) 0%, (C1) 30%, (C2) 60%. The second factor is (N0) 0 g/polybag, (N1) 5 g/polybag, (N2) 10 g/polybag. The results showed that LOF chicken eggshell had a significant effect on various parameters, including plant height, number of leaves per clump, number of tubers per clump, root length, wet weight of tubers per clump, dry weight of tubers per clump and production per hectare. Meanwhile, NPK fertilizer also showed a significant effect on all parameters, namely plant height, number of leaves per clump, number of tillers per clump, number of tubers per clump, root length, wet weight of tubers per clump, dry weight of tubers per clump and production per hectare. There is an interaction between LOF chicken eggshell and NPK fertilizer that affects root length. The best treatment was obtained from a combination of LOF chicken eggshell treatment at a level of 60% (C3) and NPK fertilizer 10 g/polybag (N2). This treatment provides new insights to increase the growth and yield of shallots.

Keywords: chicken eggshell, liquid organic fertilizer, npk, shallot