

## ABSTRACT

Shallots crops are a source of income for farmers in various regions. Shallots productivity still has to be increased considering the community's need for shallots from year to year continues to increase. Based on the above problems, one way to increase the low productivity of shallots is by providing balanced nutrients in the planting media. Liquid organic fertilizer is a fertilizer whose basic ingredients come from animals or plants that have undergone fermentation and the product form is liquid. The chemical content in it is a maximum of 5%. Goat urine is one of the liquid organic fertilizer ingredients that has not been widely used by farmers. While this goat urine has a high N content. The purpose of this study was to determine the effect of NPK fertilizer and goat urine liquid organic fertilizer on the growth and yield of shallot plants. The purpose of this study was to determine the effect of NPK fertilizer and goat urine liquid organic fertilizer on the growth and yield of shallots plants. This research was conducted in the experimental field and Agroecotechnology Laboratory, Faculty of Agriculture, University Malikussaleh. The research was conducted in February - April 2024. This study used a two-factor Randomized Block Design (RBD) with 3 replicates. The first factor was consisted of N0 (0 gram/plant), N1 (1 g/plant), N2 (2 g/plant). The second was factor consisted of U0 (0 ml/liter of water), U1 (50 ml/liter of water), U2 (65 ml/liter of water). The dose of NPK fertilizer had an effected on all observed variables. The best treatment was N2 (2 g/plant). Then, the concentration of goat urine liquid organic fertilizer affected all observed variables. The best treatment was U2 (65 ml/liter of water). There was no interaction between the combination of NPK fertilizer dosage and goat urine liquid organic fertilizer concentration.

***Keywords:*** Shallot, Dosage, Concentration, Goat urine