

ABSTRACT

Shallot (*Allium cepa* L.) is one of the horticultural commodities used as raw material for seasoning dishes. Unstable shallot production cannot keep up with the increasing market demand every year. One of the causes of low shallot production is due to declining soil fertility. Increasing soil fertility can be done by combining goat manure bokashi organic fertilizer and NPK inorganic fertilizer at the right dose. This study aimed to determine the effect of applying goat manure bokashi and NPK fertilizer on shallot growth and yield. This research was conducted in Paloh Lada Village, Dewantara District, North Aceh Regency and Agroecotechnology Laboratory, Faculty of Agriculture, Universitas Malikussaleh from January to March 2024. This study used a two-factor Randomized Blok Design (RBD) and three replications. The first factor was goat manure bokashi consisted of 3 levels B0 (0 kg/plot), B1 (2 kg/plot) and B2 (4 kg/plot). The second factor was NPK fertilizer consisted of 3 levels N0 (0 g/plot), N1 (25 g/plot) and N2 (50 g/plot). The results showed that goat manure bokashi treatment affected the variables of plant height at 28-49 DAP, number of leaves at 14-49 DAP, number of tillers at 14-49 DAP, number of tubers, wet weight and dry weight of tubers per clump, wet weight and dry weight of tubers per plot, production per ha, shrinkage of tuber weight per clump and shrinkage of tuber weight per plot. The best treatment was the goat manure bokashi 2 kg/plot (B1). NPK fertilizer treatment affected the variables of plant height at 21-49 DAP, number of leaves at 21-49 DAP, number of tillers, age 21-49 DAP, number of tubers, wet weight and dry weight of tubers per clump, wet weight and dry weight of tubers per plot, production per ha and shrinkage of tuber weight per plot. The best treatment was 50 g/plot NPK fertilizer (N2). There was an interaction between the treatment of goat manure bokashi and NPK fertilizer on the variables of wet weight and dry weight of tubers per clump, wet weight and dry weight of tubers per plot and production per ha. The best treatment was the goat manure bokashi 2 kg/plot + NPK fertilizer 50 g/plot.

Keywords: Dosage, Inorganic, Nutrition, Organic, Tajuk