

ABSTRACT

Shallots are one of the agricultural commodities that have high investment value. Shallots are an important kitchen ingredient that every community must have. This study aimed to determine the effect of manure and liquid organic fertilizer from chicken egg shells on the growth and yield of shallots. This research was conducted in the experimental garden and plant physiology laboratory, Faculty of Agriculture, Malikussaleh University. from November 2024 to February 2025. The research used a Randomized Block Design (RBD) consisted of two factors with 3 replications. The first factor was the dose of cow manure $P_0 = 0$ g/polybag (0 tons/ha), $P_1 = 40$ g/polybag (20 tons/ha), $P_2 = 80$ g/polybag (40 tons/ha). The second factor was the concentration of liquid organic fertilizer of chicken egg shells $C_0 = 0$ ml/liter of water (0%), $C_1 = 50$ ml/liter of water (5%), $C_2 = 100$ ml/liter of water (10%). The results showed that the treatment of manure had a significant effect on the variables of plant height 2 WAP, dry weight of tubers per clump, production tons/ha, root weight, root volume and wet weight of tubers per clump, the best treatment was 40 g/polybag. The treatment of liquid organic fertilizer of chicken egg shells had a significant effect on the variables of plant height 4 WAP, root length, root volume, root weight, wet weight of tubers per clump, dry weight of tubers per clump and production tons/ha, the best treatment was C_2 (100 ml/ liter of water (10%). There was an interaction on the variables of root weight and root volume due to the treatment of cow manure and liquid organic fertilizer of chicken egg shells. The best treatment was P_2 80 g/polybag.

Keywords: Dosage, concentration, combination