

ABSTRAK

Shallots (*Allium ascalonicum* L.) are a nutritional horticultural commodity often used as a spice in almost all types of cooking. Apart from that, it also has medicinal effects (medicinal properties) which make the demand increase. To meet the demand and increase the yield of shallot, through increasing the fertility of soil and land capacity, and also by extensification using the sub-optimal land such as inceptisol soil through increasing the cultivation techniques such as the application of bio-vermicompost and organic materials. This research was conducted at the Experimental Farm of the Faculty of Agriculture, Malikussaleh University, North Aceh Regency from January to March 2024. This study used a factorial Randomized Group Design (RGD) with three replications. The first factor was biovermicompost-SMS consisting of B0 (0 g/polybag), B1 (50 g/polybag), B2 (100 g/polybag). The second factor is POC *Moringa oleifera* which consists of P0 (0 ml/polybag), P1 (6 ml/polybag), P2 (12 ml/polybag). The results showed that the provision of biovermicompost-SMS had a significant to very significant effect on the parameters of plant height, number of leaves, number of tubers per clump, tuber diameter, tuber weight per plot, wet weight of tubers per clump, dry weight of tubers per clump. The provision of POC *Moringa oleifera* has a real to very real effect on the parameters of plant height, number of leaves, number of bulbs per clump, diameter of bulbs, weight of bulbs per plot, wet weight of bulbs per clump, dry weight of bulbs per clump. The provision of biovermicompost-sms increases the growth of shallot plants, the provision of POC *Moringa oleifera* increases the growth of shallot plants, there is an interaction between the provision of biovermicompost-sms and POC *Moringa oleifera* on the weight of bulbs per plot.

Keywords: Ameliorant, Biocompost, Potassium