ABSTRACT

The decline in tomato production in Aceh requires a breakdown in order to meet market needs. The attempt to meet the increasing demand for tomatoes is to use superior varieties and appropriate cultivation techniques. This research aimed to find out more about the effect of guano fertilizer and POC paitan on the growth and yield of tomato plants. This research was carried out at the experimental Garden and Laboratory of Agriculture, Malikussaleh University. This research was conducted from January to April 2024. The experimental design used a factorial randomized block design with three replications. The first factor was guano fertilizer consisting of tar league, namely G0 (0 tons/ha), G1 (10 tons/ha) and G2 (20 tons/ha). The second factor is the concentration of POC paitan which consists of three levels, namely P0 (0 ml/L), P1 (150 ml/L) and P2 (300 ml/L). The results showed that the interaction of guano fertilizer and POC paitan application was very sugnificant on the parameters of plant height, stem diameter, fruit length and fruit production per hectare. Application of guano fertilizer was significant on plant height, stem diameter, flowering age, number of fruits per plant, fruit weight per unit, fruit length and fruit production per hectare with the best treatment of 20 tons/ha (G2). Application of POC paitan is significant on plant height, stem diameter, flowering age, fruit weight per unit, fruit length and fruit production per hectare with the best treatment of 300 ml/L (P2).

Keywords: Dose, Concentration, Quality, Variety Servo F1