

## ABSTRACT

Tomato (*Solanum lycopersicum* L.) is a type of vegetable that is liked by many people because it tastes good. The decline in tomato production is due to a decrease in the quality of agricultural land to increase tomato production and nutrient enhancement. One of the efforts is done by adding organic materials, namely chicken manure and liquid organic fertilizer of vegetable waste. This study aims to determine the effect of applying chicken manure and liquid organic fertilizer of green vegetable waste on the growth and production of tomato plants. This research was conducted in Paloh Lada Village, Dewantara Subdistrict, North Aceh District and Faculty of Agriculture Laboratory from March to May 2024. This study used a factorial Randomized Blok Design (RBD) with three replications. The first factor is chicken manure (K) consisting of 3 levels K0 (0 kg/plot), K1 (2.16 kg/plot) K2 (4.32 kg/plot). The second factor is Liquid Organic Fertilizer of vegetable waste consisting of three levels P0 (0 ml/l), P1 (275 ml/l), P2 (550 ml/l). The results show that the use of chicken manure affects the variables of plant height, stem diameter, number of fruits per plant, fruit weight per plant, fruit diameter and fruit length and production/Ha. The application of liquid organic fertilizer of vegetable waste affects the variable of plant height. There is no interaction between chicken manure and liquid organic fertilizer of vegetable waste on all variables.

*Keywords: Concentration, Nutrient, Organic, Servo FI.*