

ABSTRACT

Tomato fruit is one of the horticultural commodities with high economic value and requires attention and handling, especially to increase the yield and quality of the fruit. Therefore, efforts that can be made to increase planted productivity are by using superior varieties and fertilization. This study aims to determine the production of three tomato varieties on the application of various concentrations of liquid organic fertilizer. This research was conducted in Glee Madat, Paloh Lada Village, Dewantara Sub-District, North Aceh District and Agrotechnology Laboratory, Faculty of Agriculture, Malikussaleh University from December 2022 to March 2023. The study used a two-factor randomized block design (RBD) with three replications. Varieties as the first factor and liquid organic fertilizer as the second factor. The first factor is tomato varieties (Permata, Kinanti, and Servo). The second factor is liquid organic fertilizer concentration of (0, 2, 4, and 6 ml/l) of water. The results of this research show that varieties affected the variables of fruits number, fruit weight and fruit diameter. The best treatment was servo variety. Liquid organic fertilizer treatment has an effected on variables fruit weight and fruit diameter. The best treatment is the concentration of 6 ml/l of water. There is an interaction between the use of varieties and the application of liquid organic fertilizer on the variables of flowering age, number of fruits, and fruits weight. The best treatment was Servo varieties and liquid organic fertilizer concentration of 6 ml/l of water.

Keywords: Liquid Organic Fertilizer, Tomato, Varieties