PLANT GROWTH AND YIELD RESPONSE OF SERVO TOMATOES (Lycopersicum esculentum) ON VARIOUS MULCH TYPES AND VARIOUS CONCENTRATIONS OF BANANA PEELS LIQUID ORGANIC FERTILIZER

By: Annisa Millen Nastiti Supervised by: Oktavia S. Padmini and Heti Herastuti

ABSTRACT

The application of the right mulch type and banana peels liquid organic fertilizer (LOF) are expected to increase tomato's productivity. The study aims to find out interaction between mulch and concentration of banana peels LOF, to determine the best mulch and concentration of banana peels LOF on the growth and yield of tomato. The research arranged in split plot design with 2 factors and 3 replications. The first was mulch type = without mulch, SBPM, and rice straw. The second was concentration of banana peels LOF = 0 ml/L, 50 ml/L, 100 ml/L, and 150 ml/L. Data were analyzed using analysis of variance and continued with Duncan's New Multiple Range Test 5%. The result showed that there was interaction and the bestest was between rice straw mulch and 100 ml/L banana peels LOF on number of fruits per plant, total weight of fruits per plant, plot, and hectare. Rice straw mulch showed the best result on all parameters except plant height and number of banana peels LOF showed the best results on all parameters except number of leafs on 21 DAP and shoot-root ratio.

Keywords: mulch, liquid organic fertilizer, banana peels, tomato