

***GROWTH AND YIELD OF TOMATO (*Lycopersicum esculentum* Mill.)
PLANT ON VARIOUS CONCENTRATIONS OF GIBBERELLIN AND
TYPES OF NATURAL LIQUID ORGANIC MATERIALS***

By: Fadhila Arkana Andreasari
Supervised by: Oktavia S. Padmini and Maryana

ABSTRACT

Tomato plants are a fruit vegetable that has increased from year to year, but farmers still use a lot of chemical fertilizers and it is still difficult to increase fruit formation. This research aims to determine the concentration of gibberellin and the type of natural liquid organic material that is best for the growth and yield of tomato plants. The research used the split plot method (3 x 4) with the main plot of gibberellin concentration, namely 20 ppm, 40 ppm and 60 ppm. The concentration of natural liquid organic materials as subplots is NPK 100%, Biosaka + NPK 50%, rabbit urine LOF + NPK 50%, and spice LOF + NPK 50%. The research results were analyzed using ANOVA at a 5% level and tested further by DMRT at a 5% level. There was an interaction between gibberellin concentration and the type of natural liquid organic fertilizer on plant height parameters of 14 DAP and 21 DAP. A gibberellin concentration of 40 ppm gave the best results on stem diameter parameters at 14 DAP. Biosaka liquid organic material + 50% NPK gave the best results compared to rabbit urine POC + 50% NPK on the parameters of stem diameter 21 DAP, number of leaves 14 DAP, number of leaves 28 DAP, number of leaves 35 DAP, and number of fruit per plant.

Keywords: Gibberellins, natural liquid organic ingredients, tomatoes