

***RESPONSE OF GROWTH AND YIELD OF CUCUMBER (*Cucumis sativus* L.)
PLANT TO VARIOUS DOSES OF GOAT MANURE FERTILIZER AND
RABBIT URINE LIQUID ORGANIC FERTILIZER CONCENTRATIONS***

By : Umairoh

Supervised by : Alif Waluyo

ABSTRACT

Cucumber cultivation in Indonesia requires improvement efforts to increase cucumber production in Indonesia. This study was conducted to determine the response of growth and yield of cucumber plants to the dose of goat manure fertilizer and the concentration of liquid organic fertilizer of rabbit urine. This study was conducted in February - April 2025 using the Complete Randomized Block Design (RAKL) factorial method with 2 factors and 1 control. The first factor is the dose of goat manure fertilizer consisting of 3 levels, namely 20 tons/ha, 30 tons/ha, and 40 tons/ha. The second factor is the concentration of liquid organic fertilizer of rabbit urine consisting of 3 levels, namely 100 ml/L, 200 ml/L, and 300 ml/L. The observation data were analyzed using the orthogonal contrast test and Analysis of Variant (ANOVA) at the 5% level. Further treatment testing was continued with the Duncans Multiple Range Test (DMRT) at the 5% level. The results of the experiment showed an interaction in the parameters of plant height 28 HST, fruit weight per plant, and harvest index. Goat manure dose treatment gave the best results on plant height 14 and 21 HST, stem diameter, number of leaves 14 HST, fruit weight per plant, and fresh weight of stubble per plant. Rabbit manure concentration treatment of 300 ml/L gave the best results on fresh weight of stubble per plant. The combination of treatments was significantly better than the control on plant height 14 and 28 HST, stem diameter, number of leaves 14 HST, fresh weight of stubble, and harvest index.

Keywords : Cucumbers, goat manure fertilizer, rabbit urine