

# **GROWTH RESPONSE OF CUCUMBER (*Cucumis sativus* L.) ON LIQUID ORGANIC FERTILIZER CONCENTRATION OF TOFU WASTE AND COMPOSITION OF THE PLANT MEDIA**

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## **ABSTRACT**

Cucumber (*Cucumis sativus* L.) is a horticultural crop that is widely cultivated by Indonesian people. The aims of the study were to determine the concentration of liquid organic fertilizer from tofu liquid waste and the composition of the planting medium that gave the best growth to cucumber plants. The research was conducted in June - July at the Condong Catur Experimental Garden, Faculty of Agriculture, Yogyakarta "Veteran" National Development University. The research method used was a field experiment in polybags arranged in a factorial Completely Randomized Design consisting of 2 factors. The first factor is liquid organic fertilizer tofu liquid waste concentration of 5%, 10%, 15%. The second factor was the composition of the planting medium Soil : Rice Husk Charcoal : Cow Manure (1:1:2), Soil : Rice Husk Charcoal : Compost (1:2:2), Soil : Cow Manure : Compost (1:2:2) 3). The data were analyzed for diversity using analysis of variance (ANOVA) at the 5% level and if there was a significant difference a further test was carried out with Duncan's Multiple Range Test (DMRT) at the 5% level. The results of the study showed that there was no interaction between the concentration of liquid organic fertilizer in tofu liquid waste and the composition of the planting medium. The concentration of liquid organic fertilizer from tofu liquid waste 5%, 10%, 15% did not significantly affect the growth of cucumber plants. Soil Composition : Rice Husk Charcoal : Compost (1 : 2 : 2) gave the best results on plant height at 14 HST and 21 HST, number of leaves at 14 HST and 21 HST, stem diameter of plants at 14 HST and 21 HST, number of branches, number of leaves in the branch of the plant, the distance between the branches of the plant.

**Keywords:** cucumber, tofu liquid waste, growing media