

**GROWTH AND YIELD OF BITTER MELON (*Momordica charantia* L.)  
ON VARIOUS PLANT MEDIA COMPOSITION AND LIQUID ORGANIC  
FERTILIZER (LOF) CONCENTRATION OF TOFU WASTE**

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**ABSTRACT**

Bitter melon is a horticultural plant that has benefits as a vegetable and medicine. Using organic materials can be an alternative to increase bitter melon production. The research aims to examine the interaction between the composition of the planting media and the LOF concentration of tofu waste on bitter melon plants. The research was a field experiment using a Factorial Complete Randomized Block Design (CRBD) with two factors + control. The first factor is the composition of the soil planting medium : chicken manure : husk charcoal in a ratio of 1:1:2, 1:2:1, and 2:1:1. The second factor is administering POC with concentrations of 5%, 7.5% and 10%. Data were analyzed using the Analysis of Variance at a 5% level, followed by using the Orthogonal Contrast Test at a 5% level and the DMRT at a 5% level. The research results showed that there was an interaction between the parameters of fruit length, fruit weight per planting, and fruit weight per hectare. The composition of the soil planting media: chicken manure: husk charcoal (1:2:1) got better results in terms of the number of branches aged 14 days after plant (DAP) and the number of leaves aged 28 DAP when compared to the media composition (2:1:1). The planting media composition (2:1:1) got better results than the composition (1:1:2) on plant height parameters aged 21 and 28 DAP. Tofu waste LOF concentrations of 7.5% and 10% obtained the best results on fruit diameter.

Keywords : Bittermelon, Plant Media, Liquid Organic Fertilizer of Tofu Waste