

**APPLICATION OF MYCORRHIZA AND LIQUID ORGANIC
FERTILIZER (LOF) OF TOFU INDUSTRIAL WASTE ON THE
GROWTH AND YIELD OF WATERMELON (*Citrullus vulgaris* Schard.)**

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ABSTRACT

The use of mycorrhiza and LOF of tofu industrial wastewater can increase the production of watermelon plants. The aim of this study was to determine the most appropriate mycorrhizal dose and LOF concentration of tofu industrial wastewater on the growth and yield of watermelon plants. This study used a factorial experimental design with a complete randomized group environmental design consisting of two factors and one control with three replications. The first factor was mycorrhizal doses of 10, 20 and 30 g/plant. The second factor was the LOF of tofu industrial wastewater with concentrations of 5%, 10% and 15%. Controls are plants without treatment. Observations were analyzed using Anova test at 5% level, followed by using the Orthogonal Contrast Test at 5% level, and Duncan's Multiple Range Test at 5% level. The results showed that there was an interaction with the combination dose of mycorrhizal 20 g/plant and 10% LOF of tofu industrial wastewater and mycorrhizal dose of 30 g/plant and 15% LOF of tofu industrial wastewater on the parameter number of leaves 6 WAP. Giving mycorrhizal 30 g/plant gave real results on the parameters of the number of branches 6 WAP, fruit diameter, fruit weight per plant, and fruit weight per ha. Giving LOF tofu industrial waste with a concentration of 10% gave real results on the parameters of plant height 6 WAP, number of leaves 2 and 4 WAP, and number of branches 4 and 6 WAP.

Keywords: watermelon, mycorrhiza, LOF tofu industrial wastewater