APPLICATION OF TRICHODERMA AND MYCORRZA ON THE GROWTH, YIELD AND QUALITY OF JAPANESE CUCUMBER (*Cucumis sativus* L. var. Japanese.)

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ABSTRACT

Japanese cucumber (*Cucumis sativus* L. var Japanese) is a type of vegetable that has high nutritional content and economic value. The productivity of japanese cucumbers can be increased by the application of Trichoderma and Mycorrhiza. This study aims to determine the effects of Trichoderma and Mycorrhiza on the growth, yield, and quality of Japanese cucumbers. The research method used a Completely Randomized Design (CRD) with a single factor, namely *Trichoderma* sp. doses of 10g/plant, 20g/plant, 30g/plant, Mycorrhiza doses of 10g/plant, 20g/plant, 30g/plant, *Trichoderma* sp 5g/plant+ Mycorrhiza 5g/plant, *Trichoderma* sp 10g/plant + Mycorrhiza 10g/plant, *Trichoderma* sp 15g/plant + Mycorrhiza 15g/plant. The data obtained were analyzed using analysis of variance (ANOVA), and the Scott-Knott test at 5%. Parameters observed include the number of leaves, shoot dry weight, root dry weight, flowering time, fruit length, fruit diameter, total number of fruits per plant, fruit weight per fruit, fruit weight per plant, fruit weight per hectare, fruit hardness level, and fruit sweetness level. The research results show that giving *Trichoderma* sp 15 g/plant+ Mycorrhiza 15 g/plant provide the most effective results on the growth, yeild and quality of Japanese cucumber plants.

Keywords: Japanese cucumber, *Trichoderma* sp., Mycorrhiza