APPLICATION BIOLOGICAL FERTILIZER MYCORRHIZA AND COMPOUND FERTILIZER NPK 15-15-15 TO INCREASE PRODUCTION OF CORN CROPS (Zea mays L)

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ABSTRACT

The use of mycorrhizal biofertilizers can increase the nutrient content of the soil. Fertilization pays attention to the dosage of these two factors which are affected by the production results. The aim of the study was to analyze the interaction of mycorrhizal biofertilizers and NPK 15-15-15 compound fertilizers. The research was conducted from August to November 2022, on agricultural land at the Jember State Polytechnic, using a factorial randomized block design. The first factor is the dose which includes 10 grams/plant, 20 grams/plant, 30 grams/plant, then the second factor is the dose which includes the control, 250 kg/ha, 300 kg/ha. The results showed that the interaction of the application of arbuscular mycorrhizal fungi biological fertilizer 30 grams/plant and NPK compound fertilizer 15-15-15 250kg/ha, the notation was significantly different on the variable dry weight of stover per sample, dry cob weight per sample, then the notation was significantly different on the variable weight dry seeds per sample, dry seed weight per plot, then the notations were not significantly different on the variable stem diameter, cob length, weight of 100 seeds per plot. The best results were the interaction of 30 gram/plant mycorrhizal biological fertilizer treatment with 15-15-15 250 kg/ha NPK compound fertilizer, the lowest results were 10 gram/plant mycorrhizal biological fertilizer treatment with 15-15-15 0 kg/ha NPK compound fertilizer.

Keyword :Biological Fertilizers Mycorrhiza, Corn ,Compound Fertilizer NPK 15-15-15