

GROWTH AND YIELD RESPONSE OF MUNG BEAN PLANTS (*Vigna radiata L.*) TO PROVIDING MICORYZA BIO-FERTILIZER AND TYPES OF GROWTH REGULATORY SUBSTANCES

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ABSTRACT

The demand for green beans increases every year so efforts are needed to meet the need for green beans. The research aims to determine the response of growth and yield of green bean plants to the mycorrhizal dose and type of PGR. The research used a Factorial Complete Randomized Group Design (RAKL) (3x3)+1 Control. The first factor in the dose of mycorrhizal fertilizer consists of three levels, namely 5, 10 and 15 g/plant. The second factor of the PGR type consists of three figs, namely Gibberellins, Shallots, and Coconut Water. The research data were analyzed using ANOVA followed by Duncan's Multiple Test (DMRT) and Orthogonal Contrast Test at the 5% level. The results showed that the combination of mycorrhizal treatment and PGR type had significant differences with the control treatment in the parameters of stem diameter 56 DAP, number of primary stems 42 DAP, 56 DAP, number of pods per plant, pod weight per plant, and seed weight per plant. The combination of treatments had an interaction on the parameters of plant height at 42 HST, 56 DAP, number of pods per plant, weight of the pods planted, and weight of the seeds planted. The mycorrhizal treatment of 15 g/plant was significantly better for stem diameter parameters 28, 42, 56 DAP and number of primary branches 28, 42, 56 DAP. The coconut water PGR treatment was significantly better in the parameters of dry seed weight per plot and dry seed weight per hectare

Key words: **mung beans, mycorrhiza, ZPT**