

**GROWTH RESPONSE OF ROBUSTA COFFEE SEEDLINGS
(*Coffea canephora* L) TO THE APPLICATION OF
DIFFERENT TYPES OF BIOFERTILIZERS**

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ABSTRACT

*Indonesian coffee productivity is still relatively low, the contributing factor is the lack of plant maintenance. Continuous application of inorganic fertilizers in the long term will increase soil acidity which adversely affects the microorganisms in the soil and if left unchecked, the natural fertility of the soil will decrease. This research aims to determine the growth response of robusta coffee seedlings (*Coffea canephora* L.) to the application of different types of biofertilizers and to determine the best combination of types of biofertilizers that are suitable for the growth of robusta coffee seedlings (*Coffea canephora* L.). This research was conducted in February-April 2024 at Rumah Kawat Politeknik Negeri Jember. This research used a simple Randomized Group Design with 6 treatment combinations. P0; Control, P1; PGPR 20gr, P2; Mycorrhiza 20gr, P3; PGPR 10gr + Mycorrhiza 5gr, P4; PGPR 15gr + Mycorrhiza 2,5gr, P5; PGPR 5gr + Mycorrhiza 7,5gr. Data were analyzed with the F test (ANOVA). If the data obtained significantly different treatments, further test were carried out using least significant different (LSD) at the 5% level. The results showed that the addition of PGPR and Mycorrhiza fertilizers influenced the growth of robusta coffee seedlings (*Coffea canephora* L.) on the parameters of plant height, numbers of leaves, stem diameter, rooth lenght, and plant dry weight.*

Keywords: *Biofertilizer, Coffee Seedlings, Mycorrhiza, PGPR, Robusta*