THE RESPONSE OF ROBUSTA COFFEE SEEDLINGS (Coffea canephora L.) GROWTH TO VARIOUS CONCENTRATIONS AND TYPES OF LIQUID ORGANIC FERTILIZERS

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ABSTRACT

Coffee plays an important role in Indonesia's economic development due to its geographical location that is suitable for coffee plants. The fact that there are policies that regulate how to increase productivity and quality while expanding the area used for coffee cultivation, especially for the Robusta variety. Fertilizer application is one way to increase the production of Robusta coffee plants. The purpose of this study was to determine how Robusta coffee (Coffea canephora L.) seedlings respond to different types and amounts of liquid organic fertilizer. The Innovation Garden of Jember State Polytechnic became the site of this research, which took place from August to December 2023. This study used a group randomized design with two components repeated three times. The first factor is the type of POC, including cow urine POC (P1), kepok banana peel POC (P2), and tofu liquid waste POC (P3). The second factor is POC concentration, including 50 ml/L (K1), 100 ml/L (K2), 150 ml/L (K3), and 200 ml/L (K4). The data were analyzed using ANOVA with further test of BNT 5%. The results showed that between cow urine POC with a concentration of 200 ml/L (P1K4) there was an interaction that gave the best effect on the parameters of seedling height at 90 HST with an average of 43.23 cm, number of leaves at 90 HST with an average of 23.20 strands, stem diameter with an average of 8.14 mm, and root length of seedlings with an average of 44.00 cm. While between cow urine POC with a concentration of 150 ml/L (P1K3) there is an interaction that gives the best effect on the parameters of seedling root volume with an average of 25.67 cm³, seedling wet weight with an average of 63.99 grams, and seedling dry weight with an average of 25.50 grams.

Keywords*: POC Type, POC Concentration, Robusta Coffee*