## UTILIZATION OF RICE HUSK BIO CHARCOAL AND LIQUID ORGANIC FERTILIZER ON THE GROWTH OF ROBUSTA COFFEE (*Coffea canephora* Pierre ex A. Froehner)

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## **ABSTRACT**

The purpose of this study was to determine the effect of giving Bio Charcoal (Biochar) from rice husks and Liquid Organic Fertilizer (POC) on the growth of Robusta Coffee plant seeds. This research was conducted in September – December 2021, using a factorial randomized block design with 2 factors. The first factor consists of 3 levels and the second factor consists of 5 levels. Each treatment combination was repeated 3 times. The first factor is the provision of biochar, namely B0 (control/without biochar), B1 (50% biochar), B2 (75% biochar). The second factor was the application of liquid organic fertilizer, namely Z0 (control), Z1 (5% POC), Z2 (10% POC), Z3 (15% POC), Z4 (20% POC). Data analysis used ANOVA at the 5% level and if it showed a significant difference, it was continued with a further test of DMRT (Duncan Multiple Range Test). Parameters observed in this study included coffee plant height (cm), stem diameter (cm), number of leaves, root length (cm). The results of this study indicate that the combination of the use of bio charcoal and POC does not show a significant effect on the parameters tested, but the effect is very real on the application of POC. The concentration of 15% POC was seen to have a significant effect on root length, which was 16.58 cm.

Keywords: Biochar, Robusta Coffee, Liquid Organic Fertilizer