

***THE EFFECT OF USING ALOE VERA GEL AS A
BIOREGULATOR ON THE GROWTH OF ROBUSTA COFFEE
(Coffea canephora Pierre ex A. Froehner) CUTTINGS***

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ABSTRACT

Aloe vera contains the hormones auxin and gibberellins which help accelerate the development of roots, stems and leaves on cuttings. The aim of the study was to determine the effect and best concentration of using aloe vera gel on the growth of robusta coffee cuttings (Coffea canephora Pierre ex A. Froehner). Located on the grounds of the Jember State Polytechnic. The study used a randomized block design (RBD) method with 5 replications. The data obtained will then be analyzed statistically using Analysis Of Variance (ANNOVA). If the results obtained have a significant effect, then a further test will be carried out using the BNJ (Honest Significant Difference) advanced test at the 5% level. Details of the concentration of each treatment: Z0 Rotone F (Control), Z1 0%, Z2 25%, Z3 50%, Z4 75%. Parameters observed were shoot length, root volume, live percentage, fresh weight and dry weight. Based on the results of the analysis above, it shows that the data taken at the end of the observation had a significant (significant) difference in the root volume parameter (ml) treated (control) Z0 with an average root volume of 0.900 ml. While the parameters of shoot length (cm), live percentage (%), fresh weight of plants (gr), and dry weight of plants (gr) showed no significant (non-significant) different results.

Keywords: Cuttings, coffee, PGR.