

**GROWTH RESPONSE OF ROBUSTA COFFEE CUTTINGS (*Coffea Canephora* Pierre ex A. Froehner) AND ARABICA (*Coffea Arabica* L.)  
WITH THE ADMINISTRATION OF SOME TYPES OF NATURAL  
GROWTH REGULATORS**

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***ABSTRACT***

This study aims to maximize the growth of coffee plant cuttings by providing several types of natural growth regulators. This research was carried out from March to June 2023 at the Politeknik negeri Jember Field Laboratory. The study was conducted using a Group Random Design (GRD) with the first factor of applying Natural Growth Regulators, namely C0 (Control), B1 (Shallot Extract), T1 (Bean Sprout Extract), K1 (Coconut Water) which was applied by soaking, and the second factor was the use of coffee types, namely Ro (Robusta Coffee) and Ar (Arabica Coffee). The parameters observed in this study include the percentage of live cuttings, the percentage of cuttings growing shoots, the average when sprouts grow, the length of the shoots, the length of the leaves. The observation data was analyzed with Anova level 5% and if it showed very real different results, it was continued with further BNJ tests. The results of this study show that the treatment of coffee types has very different results in the parameters of the percentage of live cuttings and the average when sprouts grow. Meanwhile, in the treatment of the type of natural growth regulator, the results showed a significant difference in the parameters of the percentage of live cuttings, the average when sprouts grew and showed very different results in the parameters of bud length and leaf length. It was concluded that the application of coconut water had the best influence on all parameters and the use of Arabica coffee had the best influence on the percentage of live cuttings and the average when sprouts were growing.

**Keywords:** Coconut Water, Coffee Cuttings, Natural Growth Regulators