

# ***THE INFLUENCE OF VARIOUS TYPES OF PLANTING MEDIA AND AMINO ACID CONCENTRATIONS ON THE GROWTH OF ROBUSTA COFFEE CUTTINGS (*Coffea canephora* L.)***

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## ***ABSTRACT***

*Planting media is one of the factors supporting the growth of robusta coffee cuttings. In addition, the provision of amino acids can help robusta coffee cuttings get nutrients to stimulate the growth of vegetative organs. This study aims to determine the effect of using various types of planting media, amino acids, and the interaction between the two on the growth of robusta coffee cuttings (*Coffea canephora* L.). This research was conducted from September 2023 to January 2024 at the Seed Production Technology Field, Jember State Polytechnic. Factorial Randomised Group Design (RAK) is the research methodology used in this study, with planting media as the first factor and amino acids as the second factor. The growing media used in this study was a mixture of media consisting of P1: top soil, sand, blotong fertiliser (2:1:1); P2: top soil, sand, coffee husk compost (2:1:1); P3: top soil, sand, chicken manure fertiliser (2:1:1). For amino acids used consisted of U0: 0%; U1: 5%; U2 : 10% and U3: 15%. This study has a total of 108 experimental units. Observation data if there are significantly different, then continued with a different test according to the Duncan method at the 5% level. Observation variables include the percentage of cuttings grown (%), number of shoots, number of leaves (pairs), root volume (ml), root wet weight (g), and root dry weight (g). The results showed that the treatment of planting media had a significant effect on the parameters of root volume, root wet weight and root dry weight with P2 treatment: top soil, sand, coffee skin compost fertiliser had the best treatment. Amino acid treatment has a real effect on all parameters except the percentage of cuttings grown, giving A1 (5%) treatment has the best treatment. The interaction of the use of planting media and amino acids had no significant effect on all observation parameters.*

**Keywords:** *Amino acids, robusta coffee, blotong fertiliser, coffee skin compost, chicken manure fertiliser*