

Effect Of Growth Regulatory Substances Concentration And International Position On The Growth Of Robusta Coffee (Coffea canephora P.) Clone BP 308 Cuttings.. Supervisor: Netty Ermawati, SP .Ph.D.

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ABSTRACT

This study aimed to evaluate the effects of growth regulator (Atonik) concentration and cutting node position on the growth of robusta coffee (Coffea canephora P.) clone BP 308 seedlings. The research was conducted in Tegal Bako Hamlet, Arjasa Village, Jember, East Java, from July to December 2024. A factorial randomized block design (RBD) was used with two factors: cutting node position (3rd, 4th, and 5th nodes) and Atonik concentration (500 ppm, 550 ppm, 600 ppm, and 650 ppm). The observed parameters included shoot height, shoot diameter, number of leaves, number of roots, and root length. The results revealed that cutting node position had a highly significant effect on shoot height and number of leaves, with the 3rd node showing the best growth performance. Atonik concentration showed no significant effect on all observed parameters. However, the interaction between node position and Atonik concentration significantly affected the number of roots. This study concludes that selecting the appropriate cutting node plays a more critical role in seedling success than varying the growth regulator concentration. These findings can serve as a reference for improving robusta coffee seedling quality through cutting propagation techniques.

Keywords: *robusta coffee, cutting, growth regulator, cutting node, Atonik*