

***IN VITRO* MULTIPLICATION OF MOTH ORCHID (*Phalaenopsis* sp.)  
WITH VARIOUS CONCENTRATIONS OF ALTERNATIVE AB MIX  
MEDIUM AND KINETIN**

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**ABSTRACT**

In vitro production of moth orchids using MS media is expensive. Hydroponic fertilizer AB Mix, supplemented with kinetin plant growth regulators, can be formulated as an alternative medium to reduce production costs. This study aims to assess the significant differences between control and treatments, investigate the interactions between AB Mix and kinetin concentrations, and determine the optimal concentrations for in vitro multiplication of moth orchids. The research involved a laboratory experiment using a Completely Randomize Design (CDR) with 2 factors + 1 control. First factor is AB Mix concentration at 3; 4; and 5 ml/L. Second factor is kinetin concentration at 0.5;1.5; and 2.5 ppm. Control is Murashige and Skoog medium. Data analyzed using ANOVA at 5% significance level, followed by contrast orthogonal and Duncan's Multiple Range Test (DMRT) at 5%. The results showed that control treatment provided better outcomes compared to the combination treatments for the shoot emergence. There is an interaction between AB Mix concentration and kinetin on the number of shoot. AB Mix 3 ml/L is effective in increasing the number of roots, while AB Mix 3 and 4 ml/L is effective in increasing root length. Kinetin 1,5 ppm is effective in increasing the number of roots.

Keywords: Moth Orchid, AB Mix, Kinetin