

# **Respon Pertumbuhan Anggrek Bulan (*Phalaenopsis amabilis*) Terhadap Pemberian Pupuk Daun Dan Vitamin B1 Tahap Aklimatisasi**

*(Growth Response of Moon Orchid (*Phalaenopsis amabilis*) to Foliar Fertilizer and Vitamin B1 Application at Acclimatization Stage)*

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## **ABSTRACT**

*The Moon Orchid (*Phalaenopsis amabilis*) is an ornamental plant commodity of high economic value, frequently propagated through tissue culture techniques. The acclimatization stage is a critical phase in this process, as plants are highly susceptible to environmental stress. This study was conducted to analyze the effect of leaf fertilizer and Vitamin B1 concentrations on the growth of moon orchids during the acclimatization stage. The research was carried out from June to October 2025 at the Tissue Culture Laboratory Greenhouse of Jember State Polytechnic. The experimental method employed was a Factorial Completely Randomized Design (CRD) consisting of two factors: the first factor was leaf fertilizer concentration at 0 ml/L (K0), 2 ml/L (K1), and 3 ml/L (K2); the second factor was Vitamin B1 concentration at 0 ppm (V0), 0.5 ppm (V1), and 1.5 ppm (V2), with three replications. The observation variables consisted of six parameters: root length, plant height, number of leaves, leaf length, leaf width, and stem diameter. Data were analyzed using ANOVA followed by the 5% Least Significant Difference (LSD) test. The results indicated a significant interaction between the application of leaf fertilizer and Vitamin B1 across all observed parameters. The optimal treatment combination for overall vegetative growth was K1V2 (2 ml/L leaf fertilizer and 1.5 ppm Vitamin B1), which yielded the highest values for plant height (0.62 cm), number of leaves (1.66), leaf length (1.46 cm), and leaf width (0.95 cm) at 120 days after transplanting (DAT). Meanwhile, the K2V2 combination (3 ml/L leaf fertilizer and 1.5 ppm Vitamin B1) produced the best results for root length (3.22 cm), and the K2V1 combination (3 ml/L leaf fertilizer and 0.5 ppm Vitamin B1) resulted in the largest stem diameter (2.09 mm).*

**Keywords:** *Acclimatization, Foliar Fertilizer, *Phalaenopsis amabilis*, Vitamin B1.*