

ABSTRACT

Atha Wahyuning Utami, 24020121140140. The Effect of Vitamin B1 with Different Concentrations on the Growth of Anggrek Bulan (*Phalaenopsis amabilis* (L.) Blume.) After Transplanting. Under the guidance of Nintya Setiari and Yulita Nurchayati.

Phalaenopsis amabilis (L.) Blume is often exploited from its natural habitat to be converted into an ornamental plant, causing plant stress. Providing vitamin B1 will help reduce plant stress levels, thereby increasing plant growth. This study aims to examine the effect of vitamin B1 on the growth and proline content of *P. amabilis* and the concentration of vitamin B1 that produces optimal growth. The method used is spraying Vitamin B1 every 3 days on all parts of the orchid plant attached to the fern board media. This study used a Completely Randomized Design (CRD) with one factor, namely the concentration of vitamin B1 0, 2.5, 5 and 7.5 ml/L with 6 replications for 3 months. The parameters observed include the number of new leaves (blades), the length and width of old leaves (cm), the number of new roots (roots), the length of new roots (cm), and proline content. Data analysis used ANOVA (Analysis of Variance) with a 95% level and continued with DMRT (Duncan's Multiples Range Test) at a 5% level using the SPSS version 25 application for windows. Vitamin B1 treatment significantly affected the length and width of old leaves, the number of new roots, and the length of new roots, but did not affect the number of new leaves, with the best concentration of 7.5 ml/L and successfully reduced the proline content of *P. amabilis*. Vitamin B1 with a concentration of 7.5 ml/L increased the growth of *P. amabilis* (L.) Blume except for the number of leaves.

Keywords: Vitamin B1, *Phalaenopsis amabilis* (L.) Blume, vegetative growth, proline content.