

Multiplikasi Tunas Anggrek Bulan (*Phalaenopsis amabilis*) Secara *In Vitro* Pada Media $\frac{1}{2}$ MS Dengan Penambahan ZPT BA (*Benzyladenine*) (*Shoot Multiplication of Orchid (Phalaenopsis amabilis) by Tissue Culture Technique In $\frac{1}{2}$ MS Media With BA (Benzyladenine)*) Supervisor : Netty Ermawati, S.P., Ph.D.

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ABSTRACT

*Indonesia is a tropical country that has a diversity of flora, one of which is orchids. Orchid belongs to the Orchidaceae family which has important value in the ornamental plant industry which is usually sold in the form of cut flowers. This condition is very beneficial for Indonesia, because it has a variety of orchid genetic resources. Cultivation with tissue culture technique can be an alternative for producing the best seed and having the same genetics in a short period of time. One of the success factors is tissue culture with use of synthetic hormones. The purpose of this research is to influence the concentration of synthetic hormone benzyladenine in tissue culture cultivation, this research held in the tissue culture laboratory of CV. Handoyo Budi Orchid, Malang. Start from January until April 2022. The research was designed by using Complete Random Design non factorial (CRD) with 4 variables, they are N_0 : $\frac{1}{2}$ MS 0 + BA 0 ppm, N_1 : $\frac{1}{2}$ MS 0 + BA 1 ppm, N_2 : $\frac{1}{2}$ MS 0 + BA 2 ppm, and N_3 : $\frac{1}{2}$ MS 0 + BA 3 ppm. Data were analyzed using the F test (ANOVA) and continued with the LSD test at 5% levels. The results showed that the administration of BA had a significant effect on shoot multiplication of *phalaenopsis amabilis* and it could be concluded that benzyladenine (BA) 3 ppm exerts a very noticeable influence on the parameters of the number of buds, the number of leaves and the height of the buds of the moon orchid (*Phalaenopsis amabilis*) at the age of 12 MST, respectively 1.76 buds, 2.70 leaf blades and 1.37 cm for the height of the shoots*

Key word : orchid, hormone, benzyladenine