

Application of Vitamin B1 and Monosodium Glutamate to Growth of *Dendrobium* Hybrid Orchids at Acclimatization Stage. Supervised by Netty Ermawati, S.P., Ph.D.

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ABSTRACT

This ornamental plant, nicknamed the orchid, is very popular among Indonesian people. Dendrobium orchids are a very popular type. Conventional orchid production is difficult, so one solution is to use development techniques through in vitro culture. One effort to optimize orchid growth is through in vivo cultivation with special treatments such as concentrations of Vitamin B1 and Monosodium Glutamate. The research was conducted at the Jember State Polytechnic Seed Production Engineering nursery from August to December 2023 using the RAL method. The first factor of Vitamin B1 concentration consists of 3 levels, namely 1 ml/l (V1), 1.5 ml/l (V2), 2 ml/l (V3). The second factor is the concentration of Monosodium Glutamate 6 g/l (M1), 8 g/l (M2), 10 g/l (M3). The results of this study show that there is an interaction between vitamin B1 and monosodium glutamate (V Vitamin B1 (V) treatment on leaf width and leaf length parameters produced significantly different effects. However, the difference is very significant in the number of leaves. Monosodium glutamate (M) treatment on the parameters of leaf width, seed height, number of leaves gave significant differences and very significant differences in leaf length.

Key words: *Dendrobium Hybrid, orchids, vitamin B1, monosodium glutamat*