

Growth Response of Orchids *Dendrobium* Hybrid to Concentration and Interval of Foliar Fertilizers at Acclimatization Stage. Supervised by Netty Ermawati, SP., Ph.D.

Julia Salsabilla Putri

Study Program of Seed Production Technique
Majoring of Agricultural Production

ABSTRACT

The Dendrobium orchid hybrid is a type of ornamental plant that is much loved by the people of Indonesia. The production of orchids in Indonesia in the last 3 years has decreased. One of the efforts to optimize the growth of orchids is through in vitro culture with special treatments such as concentration and interval treatment of foliar fertilizers. The research was conducted at the Seed Technology Green House, Jember State Polytechnic. The experimental design used was a factorial completely randomized design with 2 factors. The first factor was the concentration of foliar fertilizer which consisted of 3 levels, namely: 1 g/l (K1), 1.5 g/l (K2), 2 g/l (K3). The second factors is the interval of foliar fertilizer application 5 days (V1), 10 days (V2), 15 days (V3). The data will be analyzed using the F test formula (ANOVA) and continued with the Duncan Multipel Range Test (DMRT) at an error lever 5%. The results showed that the concentration of foliar fertilizers had no significant effect on all parameters. While the fertilization interval has a significant effect on the leaf width parameter, it has no significant effect on other parameters. The interaction of concentration and interval of application of foliar fertilizers had a very significant effect on the leaf width parameter, but had no significant effect on other parameters.

Key words: *Dendrobium hybrid, orchids, foliar fertilizer, fertilization intervals*