

**Teknik Hardening dan Aplikasi Paclobutrazol dalam Meningkatkan Vigor Pada Periode Aklimatisasi Planlet Krisan (*Chrysanthemum*)** (*Hardening Technique and Application of Paclobutrazol in Increasing Vigor During the Acclimatization Period of Chrysanthemum Planlets (Chrysanthemum)*) Supervised: Netty Ermawati,SP, Ph.D

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***ABSTRACT***

*The increasing interest and demand for chrysanthemum plants affects their economic value which causes the quality of chrysanthemum plants to be demanded from all sides. One effort to meet the needs of chrysanthemum plants in a short time is tissue culture. However, the acclimatization stage becomes a critical stage that threatens the life presentation of the chrysanthemum plantlets. The purpose of this study was to determine the interaction between the hardening technique and the concentration of paclobutrazol on the growth of chrysanthemum plantlets at the acclimatization stage. This research was conducted at the Green House Tissue Culture Laboratory, Jember State Polytechnic from November 2022 to January 2023. This study used a factorial complete randomized design (CRD) which was repeated 4 times. The first factor is the hardening technique which consists of 2 levels, namely H0 (without hardening), H1 (hardening). The second factor was the concentration of paclobutrazol which consisted of 3 levels, namely P1 (10 ppm), P2 (15 ppm), P3 (20 ppm). Observational data were analyzed statistically using ANOVA, if the results show a significantly different effect then proceed with the BNT test at the 5% level. The results showed that the hardening treatment had a significantly different effect on leaf color. Meanwhile, in the treatment of paclobutrazol concentration of 20 ppm, it had a highly significant different effect on the increase in plant height, increase in the number of leaves, leaf color and had a significantly different effect on the parameters of stomatal observation.*

*Keywords: chrysanthemum, acclimatization, hardening, paclobutrazol*