GROWTH RESPONSE OF GRAPE (*Vitis vinifera* L.) CUTTINGS WITH VARIOUS TYPES AND SOAKING TIME OF NATURAL PLANT GROWTH REGULATORS

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Increasing grape production can be done by vegetative propagation by cutting. However, in the implementation of cuttings, there is often a delay in the plants forming roots. Increasing the success of cuttings can be cultivated by giving natural Plant Growth Regulators (PGR) and the right way of application. This study aims to determine the type and soaking duration of natural PGR which are the best for the growth of grape cuttings. This field research used a factorial Completely Randomized Design (CRD) with 2 factors. The first factor was natural PGR including coconut water, shallot extract, and mung bean sprout extract. The second factor was the soaking time covering 2 hours, 4 hours, and 6 hours. There were 9 treatment combinations and repeated 3 times. Observational data were analyzed statistically using the Analysist of variance (ANOVA) at 5% level and was continued with Duncan Multiple Range Test (DMRT) at 5% level. The results showed that there was an interaction between the shallot extract treatment and the soaking time of 4 hours at the age of shoot growth. The best natural PGR treatment is with shallot extract. The long soaking treatment of natural PGR had no effect on grape cuttings.

Keywords: grape, cutting, natural PGR, soaking time