

ABSTRACT

THE INFLUENCE OF TYPE AND CONCENTRATION OF NATURAL PGR ON GROWTH AND YIELD OF SHALLOT (*Allium ascalonicum* L.)

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Plant need plant growth.regulators (PGR) to grow well in addition to requiring nutrients. PGR is an organic compound that is not a nutrient which functions to regulate plant growth. In the right concentration, PGR will make plant growth good, but in concentration that are too low or too high, PGR wil not be efficient for plants and can even be harmful. The aims of this research is to determine the types of natural PGR and the right concentration that can stimulate the growth and yield of shallot (*Allium ascalonium* L.). The research was done in greenhouse Faculty of Agriculture Siliwangi University on January to March 2022. The research was arranged based on Completely Randomized Block Design in factorial pattern, consisted of two factors. The first factor was the type of natural PGR which consisted of 3 types, namely PGR of coconut water, PGR of bean sprout extract and PGR of bamboo shoot extract. The second factor is the concentration of natural PGR which consists of 3 levels (20 ml/L, 40 ml/L and 60 ml/L). Each soaking treatment was replicated 3 times, therefore, overall there were 27 experimental units. Data were analysed using analysis of variance with F test and continued by Duncan's Multiple Range Test with 5% of critical value. The results of the research showed that there were an interaction between the type of natural PGR and the concentration of natural PGR on the parameters of plant height at 2 WAP (weeks after plant) and the number of leaves at 8 WAP. The applications of the type and concentration of natural PGR did not affect the yield parameters but had an effect on the growth parameters.

Keywords: type of natural pgr, concentration, shallot