Shoot Induction of Granola Lembang Potato (Solanum tuberosum L) Against the Administration of Zpt Kinetin and Naa (Napthalene Acetic Acid) In Vitro Supervised by Rudi Wardana, S.Pd., M.Si

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ABSTRACT

The availability of potatoes in Indonesia still does not meet the needs of the community. This is due to the difficulty of procuring potatoes in large quantities and in a short time. Therefore, it is necessary to do propagation using tissue culture method. The purpose of this study was to analyze the best concentration of NAA and Kinetin on the induction of granola lembang potato shoots. This research was conducted at the Laboratory of Tissue Culture of Jember State Polytechnic. This study was designed using the RALF (Randomized Complete Factorial Design) method consisting of two factors. The first factor is the concentration of NAA consisting of 1.3 ppm/L; 2 ppm/L; and 2.7 ppm/L, while the second factor is the concentration of Kinetin consisting of 0.6 ppm/L; 1.3 ppm/L; and 2 ppm/L. The results of this study showed that the results were not significantly different on shoot emergence time, root emergence time, number of shoots, number of roots, and root length. The results showed that there was an interaction in the treatment of 2 ppm/L NAA and 2 ppm/L Kinetin on the number of leaves (22.67 strands) and the number of internodes (21.67 internodes). At 1.3 ppm/L NAA treatment was significantly different on shoot height (20.06 cm), but not significantly different from the concentration of 2 ppm/L (18.81 cm).

Keywords: Potato, Shoot Induction, Concentration, Auxin, Kinetin.