

***Effectiveness of Giving Zpt BA and NAA For Multiplications of  
Black Potato Shoots (Plectranthus rotundifolius) in In Vitro***  
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***ABSTRACT***

*Black potatoes are suitable for cultivation in the lowlands. Black potatoes have a high carbohydrate content compared to regular potatoes. Therefore, this plant has the potential to be used as an alternative food source to substitute carbohydrate sources such as rice. Problems in the cultivation of black potatoes is the ability to grow plant material varies between cuttings from one another. Therefore, a multiplication method is needed to improve the quality of seedlings, namely tissue culture. This research was conducted by adding various concentrations of ZPT BA and NAA to stimulate the multiplication of black potato shoots. The research was conducted in October 2019 until February 2020. All research activities carried out at Tissue Culture Laboratories State Of Polytechnic Jember. Using a factorial Completely Randomized Design (CRD) consisting of 2 factors. The first factor is the concentration of BA with concentrations of 1 ppm, 3 ppm and 5 ppm. The second factor is the concentration of NAA with concentrations of 0.1 ppm, 0.3 ppm and 0.5 ppm. The results showed the addition of ZPT BA with a concentration of 1 ppm significantly affected shoot height with an average of 9,24 cm and the total of shoots with an average of 7.58 shoots and 5 ppm concentration significantly affected the currents of shoots with an average appearance of 3 days . The addition of NAA ZPT with a concentration of 0.1 ppm significantly affected the current callus with an average appearance of 4 days and a concentration of 0.5 significantly affected root length with an average length of 6.46 cm. The interaction of BA 1 ppm and NAA 0.1 ppm significantly affected the total of sections with an average of 6.50 segments.*

*Keywords: BA, NAA, Black Potatoes*