The Use of Cytokines in The Reproduction of Potato Buds (*Solanum Tuberosum* L.) by *In Vitro*

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ABSTRACT

The availability of potato seeds in Indonesia has not been able to reach the desired amount of needs so it needs to be propagated seed potatoes in a short time can produce large quantities. The aimed of this research was to find out cytokines which more effective in using medium MS to suply potato bud that can produce potato bud in large amount and in short time. The methods used non factorial experimental Design of Randomized Complete, consist of 6 treatments and 4 repeatations, total 24 experimental units. This research that the concentration of BAP which consists of 3 levels: 1 ppm; 3 ppm; 5; ppm and Kinetin concentration consists of 3 levels, namely: 1 ppm; 3 ppm; 5 ppm. The parameters measured include the time appeared buds, the time appeared roots, the shoot height, the number of leaves, the number of buds, and the number of roots. The result of parameter observation was analyzed using variance analysis (ANOVA). The results showed that the response was not significant (ns) on the buds (day), the root (day), the number of leaves, and the number of buds of potato plant seeds. While the shoot height parameters gave very significant different results (**) and the number of root parameters gave significantly different results (*).

***Keywords**: BAP, Buds reproduction, Kinetin, Potato (Solanum tuberosum* L.*)*