

GROWTH OF POTATO VAR. MEDIANS (*Solanum tuberosum* L.) IN VITRO WITH ADDITION TYPES OF CYTOKININ INTO THE COMPOSITION OF MS MEDIUM

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ABSTRACT

Potato is a type of vegetable commodity that has a role in food diversification. Procurement of potato seeds through tissue culture techniques is necessary to meet the increasing consumption needs and to obtain seeds quickly and with good quality. This research aims to examine the interaction between types of cytokinins and MS media composition, determining the most appropriate types of cytokinins and MS media composition for potato plant shoot growth in vitro. Research method was a laboratory experiment using a two-factor Completely Randomized Design (CRD). The first factor was the type of cytokinin, namely BAP, Kinetin, 2-iP and the second factor was the composition of the MS media, namely $\frac{1}{4}$ MS, $\frac{1}{2}$ MS, and MS. The data were analyzed using a 5% level of variance then followed by Duncan's Multiple Range Test at a 5% level of significance. The results showed that there was no interaction between the types of cytokinin treatment and the composition of the MS media. BAP and Kinetin showed good results on plant height and BAP gave good results on plantlet fresh weight. MS media composition showed better results than $\frac{1}{2}$ MS in parameters the day shoots appeared.

Keywords :potatoes, cytokinin, MS media, in vitro