

**THE EFFECT OF GIVING GROWTH REGULATORY SUBSTANCES  
BAP (Benzyl Amino Purine) AND IAA (Indole Acetic Acid)  
ON TOBACCO SPOTS MULTIPLICATION  
KASTURI 2 (*Nicotiana tabacum L.*)  
IN VITRO**

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**ABSTRACT**

*This study aims to determine the effect of BAP and IAA growth regulators on Kasturi 2 tobacco shoot induction in vitro. This research was conducted in June-July 2022 at the Jember State Polytechnic Network Culture Laboratory. This study used a Factorial Completely Randomized Design (RALF) which consisted of 2 treatment factors, namely the first factor included 4 levels of BAP concentration (0 ppm, 1 ppm, 2 ppm, 3 ppm) and the second factor included 4 levels of IAA concentration (0 ppm, 0.1 ppm, 0.5 ppm, 1 ppm). The explants used were musk tobacco leaves 2. Shoot multiplication responses included the percentage of contamination, time of shoot emergence, number of shoots, and shoot height. The results of the ANOVA data analysis and the 5% BNJ test showed that the results of the combination of BAP and IAA treatments gave very significant interactions with the parameters of bud emergence time, number of shoots, and shoot height.*

**Key words:** BAP, IAA, Shoot Induction