

***THE EFFECT OF IAA AND KINETIN ADDITION ON IN VITRO
STUFF MULTIPLICATION OF STEVIA (Stevia rebaudiana
Bertoni)***

Supervised by Rahmawati SP., MP

Annisa Puji Raharjo

Plantatin Cultivation Study Program
Department of Agricultural Production
e-mail : annisaraharjo4@gmail.com

ABSTRACT

The purpose of this study was to determine the effect of adding IAA and Kinetin to shoot multiplication of stevia (Stevia rebaudiana Bertoni). This research was conducted in February – April 2022, using a factorial completely randomized design with 2 factors. The first factor is the concentration of IAA which consists of 4 levels, namely 0 mg/l, 0.5 mg/l, 1 mg/l, 1.5 mg/l. The second factor is kinetin concentration which consists of 4 levels, namely 0 mg/l, 1 mg/l, 1.5 mg/l, 2 mg/l. Data analysis used ANOVA at the 5% level and if it showed a significant difference, it was continued with a further test of BNJ (Tukey's Honestly Significant Difference). Parameters observed in this study included early germination, percentage of contamination, number of shoots and percentage of explant survival. The results of this study indicate that the combination of the use of IAA and Kinetin did not show a significant effect on the parameters tested, but the significant effect was seen in the single factor kinetin with a concentration of 0 mg/L.

Keywords : Stevia, IAA, Kinetin, Tissue Culture