



ORIGINAL ARTICLE

## A COMPARATIVE STUDY BETWEEN THE EFFECT OF BENZYL ADENINE AND ADENINE SULPHATE ON GROWTH AND MULTIPLICATION OF BANANA SHOOTS (*MUSA SPP.*) *IN VITRO*

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**Abstract:** Current study was carried out in Tissue Culture Laboratory of Department of Horticulture and Landscape, Faculty of Agriculture, University of Kufa during 2019-2020 season to compare the effect of three concentrations of Benzyl adenine (0, 0.5 and 1mg/L) and three concentrations of Adenine sulphate (0, 3 and 6mg/L) on the multiplication stage of Indian short banana variety. Results showed that the treatment of 0.05mg/L of Benzyl adenine was significantly exceeded other treatments in growth traits including branches number, leaves number, fresh weight of branches, fresh weight of roots and dry weight of roots as it reached 5.2branch/plant, 16.86leaf/plant, 8.00g/plant, 5.57g/plant and 0.223g/plant, respectively in comparison with the 0.0mg/L concentration which gave the lowest average of the above traits. There was significant effect of Adenine sulphate as the 6mg/L concentration exceeded the rest of treatments in branches number and leaves number traits and recorded 3.6branch/plant and 13.46leaf/plant, respectively compared to 0.0mg/L concentration which gave the lowest average of these traits.

**Key words:** Banana, Benzyl adenine, Adenine sulphate, Vegetative growth, Multiplication stage.

### Cite this article

Makki N. Nayyef, Hasanain Ali Abdulhussein Awadh, Zaid Khaleel Kadhim, Mohammed J.H. AL-Shareefi and Muslim Abd Ali Abdulhussein (2022). A Comparative study between the Effect of Benzyl Adenine and Adenine Sulphate on Growth and Multiplication of Banana Shoots (*Musa spp.*) *in vitro*. *International Journal of Agricultural and Statistical Sciences*. DocID: <https://connectjournals.com/03899.2022.18.385>