

EFFECT OF FERTILIZER-CONTAINING- MICROORGANISMS ON MAIZE GROWTH AND ROOT LENGTH

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Abstract. *The general objective of this research was deliver and implement viable alternatives to mineral fertilizers by developing strategic combinations of BEs with alternatives to the current practice of mineral fertilizations, such as organic farming, low input agriculture, or the use of fertilizers based on recycling products. In this study, 13 bacterial and fungal isolations were tested as BEs. During this investigation the main plant physiological parameters (relative chlorophyll content, height of plants, root growth, dry and fresh weight) of maize (cv Maxxis) were examined. Maize is well known to be particularly sensitive to low phosphorous (P) availability, as well as to show responsiveness to applications of microbial BEs. The experiment was conducted in pots (2 kg soil) under controlled growth chamber conditions with P as the major limiting nutrient.*

Keywords: crop production, microorganism, phosphorous, plant growth, root length

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