

# Study of Effect of Plant Growth Hormone Auxin on the Growth of Bacteria

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**Abstract:** *Auxin is a growth hormone found in plants. It's is used by plants for growing. It has antimicrobial properties too, found in young plants for growing. Various bacteria promote plant root growth in the rhizosphere, as a measure of securing and enlarging their ecological niche. These interactions are mediated by plant growth regulators (PGRs) such as auxin, and indole-3-acetic acid (IAA) is one of the physiologically active auxins. In this study, we isolated an unusual bacterial strain from food process waste with high efficiency and demonstrated its effects on plant rooting and early-stage growth.*

**Keywords:** Plant growth regulators (PGRs), Indole-3-aceticacid (IAA), early stage growth, root growth in rhizosphere