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Enhancement of Water Infiltration Character of Hydrophobic Soil by Crude Cell Enzyme Mediated Bio-Alleviation

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Abstract:Hyrophopic soils are generally prevent moisture infiltration. It leads to varied water distribution over the unsaturated soil zone. Unsaturated zone is a soil-air interface, where water infiltrates into the system. Infiltration refers quantitatively the amount of water penetrating into the soil system or the quantity flows away as surface runoff causing erosion. Irregular water distribution affects the irrigation efficiency, surface runoff, and plant growth. This paper focus on the preliminary investigation on water infiltration based on crude enzyme mediated bio-alleviation of soil hydrophobicity. Based on WDPT and MED analysis, the infiltration of water can enhance upto 25 % in 19 days of incubation with repeated crude enzyme exposure.

Keywords : Hydrophobic soil, Permeability, Infiltration, Water Repellance, Crude Enzyme, Bio Alleviation.

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