

Enhancing the Degradation of Bioplastics by Soil Microbes †

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Abstract: Plastic has become a threat to the environment as it causes environmental pollution and due to its difficulty of naturally degrading in the soil. They are polymers that consist of monomers linked together by a chemical bond with a high number of aromatic rings. To overcome plastic pollution, biodegradable plastics (BP) were put into use but with little success. Studies revealed that BPs if left under seawater or buried beneath the soil, can stay as it is. Several microbes have been reported for their ability to degrade the plastics by certain enzymatic activities, due to which the long-chain polymers get cleaved into oligomers and monomers. The proposed study will focus on isolating and analyzing soil microbes for their potential in enhancing the degradation of biodegradable plastics.

Keywords: pollution; bioplastic; soil microbe.

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Conflicts of Interest

The authors declare no conflict of interest.