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AN ANALYSIS OF PESTICIDES BIOREMEDIATION

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ABSTRACT

The use of pesticides in the production of crops, fruits, and vegetables improves the economic condition of developing nations, establishing a significant success in this area. Despite the fact that pesticides are an essential part of agricultural operations, the widespread use of toxic pesticides poses a serious threat to the environment, water, soil, and public health. Because of the significant risks to human health, their use has been restricted, and several clean-up scenarios have been devised for various polluted locations. For degrading pesticides, biological methods such as bio augmentation, bio stimulation, bio surfactants, and bioremediation polluted areas are available, however the last one has been shown to be the most favoured way to neutralize harmful pesticides. In the presence of adequate nutrition and environmental conditions, bioremediation utilizes biological agents such as bacteria to breakdown pollutants. The type of the pollutants, as well as the properties of contaminated sites, temperature, pH, and the nature of the pollutants, are all significant variables in the bioremediation process. The goal of this chapter is to highlight the bioremediation methods available for removing pesticides from polluted areas, as well as their basics, benefits, limits, and pesticides handled.

KEYWORDS: *Agricultural, Bioremediation, Chemical, Pesticide, Soil.*

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