## Microorganisms could help rid soil of lingering pesticides

Pesticides have been widely used after the Second World War in management of weeds, diseases and pests of plants. Most of these have persistent nature and cause serious environmental concerns. They can be managed only through the biological agents for remediation of agricultural soils. The crop fields are normally over polluted through pesticides.

Biodegradation of pesticides has been an ecofriendly, cost-effective, highly efficient approach in comparison to the physical and chemical means. The chemical means are not only expensive but also not ecofriendly. Biodegradation is sensitive to temperature and pH conversions. The researches hit that bioremediation has more potential than physicochemical approaches.

Rhizosphere bacteria and fungi degrade organic pollutants known as bioremediation/rhizodegradation. If selected vegetation is used, there may be enhancement of pollutant decomposers in terms of numbers and action potential in the rhizosphere, which can result in speedy rhizodegradation of toxic pesticides.

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Recent investigations revealed that plant-related microorganisms in the rhizosphere produce pesticidedecomposing enzymes. This mineralizes toxic pesticides. This rhizoremediation may be a promising technology in removal of pesticides in polluted soil. The chapter deals mainly with microbial interaction of rhizosphere.

Read full, original article: <u>Potential of Plant-Microbe Interactions in Management of Pesticide-Riddled</u> Soil (Behind Paywall)