

Mycoremediation - a potential tool to control soil pollution

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SUMMARY : One of the major environmental problems faced by the world today is the contamination of soil, water and air by toxic chemicals. The distinct and unique role of microorganisms in the detoxification of polluted soil and environments is well recognized. Mycoremediation systems basically depend upon microorganisms (fungi) native to the contaminated sites. Examples of fungi used as mycoremediators are - *Pleurotus ostreatus*, *Rhizopus arrhizus*, *Phanerochaete chrysosporium*, *P. sordida* and *Trametes hirsute*, *T. versicolor*, *Lentinus edodes* and *L. tigrinus*. Mycoremediation application falls into different categories. *In situ* mycoremediation treats the contaminated soil in the location in which it was found, whereas, *ex situ* processes require excavation of contaminated soil before they can be treated. However, despite being the living dominating biomass in soil, fungi have not yet been significantly exploited for mycoremediation of such polluted environments. More extensive research needs to be carried out on the use of fungi in mycoremediation. The present review aims to promote the potential of fungi as mycoremediators to remediate soil pollution.

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