

Bioremediation- A new weapon for mass destruction of environmental pollutants

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Bioremediation is the use of microorganisms and their metabolic intrinsic secretions to eradicate pollutants in the internal and external environment. It provides a good cleanup strategy for some types of pollution and holds great promise for dealing with intractable environmental problems such as crude oil spill, disposal of sewage effluent in septic tank drain, chlorinated solvents, pesticides, agricultural chemicals, and gasoline and creosote contaminations in air, water, food, soil and ground water. Cleaning up existing environmental contamination in global level is unimaginable. Industrial heavy metal toxicity is still a challenge to the mankind. Bioremediation technology minimizes site disturbance compared with conventional cleanup technologies, post-cleanup costs can be substantially reduced. Natural microbial processes can remove the contaminants without human intervention. Intrinsic bioremediation is appropriate, substantial cost savings can be realized along with biostimulation and bioaugmentation. The positive microbial activities include the competitive exclusion of pathogenic bacteria production of bactericidal substances as well as degradation of uneaten feed, organic waste products, and the elimination of toxic substances and organic odors. The elimination of a wide range of pollutants and wastes from the environment is must for a healthy life, to prolong and postpone aging process, prone to different kinds of contagious and non contagious diseases by scavenging the free radicals in the environment. So it is the unique weapon to mass destruct the environmental pollutants.

Biography

D. Gnanasekaran has completed his Ph.D at Ramachandra University, Chennai and working as HOD and Professor at Dept. of pharmacology in Bharathi College of Pharmacy. He guided seven post graduates and published thirteen papers in reputed journals.

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