

Review Article

Role of Phytoremediation in Reducing Cadmium Toxicity in Soil and Water

Pooja Mahajan and Jyotsna Kaushal

Department of Applied Sciences, Chitkara University, Rajpura 140401, India

Correspondence should be addressed to Jyotsna Kaushal;
jyotsna.kaushal@chitkara.edu.in

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Heavy metals are a noxious form of pollutants present in soil and water. A new plant-based solar energy driven technology, phytoremediation, emerges as eco-friendly and cost-effective approach to remove heavy metal from various media with the help of hyperaccumulating plant species. This review paper aims to provide information on phytoremediation and its mechanisms for heavy metal removal especially to focus on Cadmium (Cd) metal and highlights the role of various hyperaccumulating plants for Cd metal remediation in soil and water. It compiles various field case studies which play the important role in understanding the Cd removal through various plants. Additionally, it pinpoints several sources and the effects of Cd and other technologies used for Cd remediation. This paper provides the recent development in mechanisms of Cd hyperaccumulation by different plants, in order to motivate further research in this field.



1. Introduction

In the present scenario, the most important concern of environmentalists is the alteration in biogeochemical cycles due to the variety of organic and inorganic

