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Biosorption of Heavy metals and Dyes using Plant Weeds – A Review

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Abstract : Nature has derived populous biomaterials for the eradiaction of various pollutants from the environment. The plants are considered to be the prime source for biosorption of toxic metals and they are renewable sorbents. This process binds the hazardous metal ions from the aqueous solution on to the surface of the biomass. The biosorbents include agricultural wastes, few fungal, bacterial, plant biomass, animal biomass, enzymes, polysacchrides and industrial biowaste materials for remediation. This technique is environmental friendly clean up biotechnology and economical since the chemical oxygen demand of the waste water do not increase. The sorption of few heavy metals and dyes using the plant weeds like Eichhornia crassipes and Prosopis juliflora opended the way for alternate green technology. The biosorption of few heavy metals and dyes using the plant weeds are studied. This review helps to contribute intuitiveness for advanced research aimed at sagacious analysis of sorption methods and its applications.

Key words : Biosorption, toxic metals, dyes, adsorption, Eichhornia crassipes, Prosopis Juliflora.

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