BIOREMEDIATION OF HEAVY METALS FROM SOIL

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Pollution factors occurring in our environment affect the quality of life of plants and animals, especially humans. Environmental pollution dimensions occur in different environments such as air, water, soil, and can interact simultaneously with 2 or 3 of these environments. Again, it can be found in the level of chronic effect in the dimension of pollution, and it can reach the level of acute toxicity by accumulation. Again, depending on the toxic properties of the pollutant type, the concentration at which it will be low dangerous for a pollutant may be an acute toxic level for another pollutant. Although it is known that some of the organic pollutants may have toxic and cancerogenic effects at ppb levels, organic matter is degraded by biochemical reactions, albeit for a long time. Heavy metal ions enter the chain of the gland through the presence of ions in the soil and plants, reaching acute toxic levels in human and animal metabolism. For this reason, it is very important to remove heavy metal compounds and ions from the soil by bioremediation method apart from conventional methods. In this study, the methods used in bioremediation are summarized and the usability of some heavy metals in soil removal is investigated. The study also shows the determination of the toxic levels of heavy metal levels on plants used in phytoremediation. This study also shows the phytoremediation methods that can be used in soil removal, plant species and their applicability in terms of use.