

Ecotoxicological Effects of Cadmium on Aquatic Life: From Microorganisms to Fish [†]

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Abstract: The usage of heavy metals has increased in different industries due to their unique properties. Among heavy metals cadmium is one of the most common and hazardous metals that can be seen in aquatic environments, and the major reason for the presence of heavy metals in water is the dumping of this heavy metal waste. The ecotoxicological effects of cadmium on aquatic life, i.e., from bacteria to fish, are concerning. Cadmium is one of the major pollutants in water bodies that enter the food chain and cause harmful effects on living things. Exposure to cadmium can cause cellular processes, affecting their ability to grow, reproduce, and operate as a whole ecosystem. This cadmium cannot be easily decomposed by aquatic organisms. Cadmium is a non-essential metal for living things and can produce several adverse effects due to its high toxicity. This review paper focuses on the sources, hazards, and toxic effects of cadmium on aquatic organisms in aquatic environments and also discusses the current knowledge of the effects of cadmium pollution on numerous aquatic creatures at different trophic levels.

Keywords: cadmium; toxicity; heavy metals; aquatic; fish.

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Conflicts of Interest

The authors declare no conflict of interest.