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Accumulation of Heavy Metals in Freshwater Organisms: Assessment of Toxic Interactions

of

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**Abstract:** Heavy metals are continuously released into the terrestrial environment by natural sources and human activities. The uptake and accumulation of heavy metals by plants promotes a mechanistic understanding of the biological significance of particular metal concentrations and distributions in biota. The toxicity of chromium, zinc, copper and cobalt ions and their binary mixtures are studied at varying test levels using duckweed as the test organism. The accumulation of metal ions are determined by atomic absorption spectroscopy. The type of toxic interactions in binary mixtures is assessed as 'synergistic', 'antagonistic' and 'additive' by a statistical approach.



**Key Words:** metal accumulation, heavy metal interactive effects, duckweed

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