



Bioaccumulation of Heavy Metals from Mining Effluents in the Tissues of Fish *Puntius narayani*

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ABSTRACT Unregulated mining activities not only cause air pollution but also affects the water quality and contributes to the release of heavy metals in the aquatic ecosystem. This poses a major health problem for aquatic organisms. The present study involved heavy metal evaluation, of eight water bodies in the vicinity of mines and study of bioaccumulation of these metals in the tissues of the fish *Puntius narayani*. Result of this study shows interesting findings on the risk posed to humans on account of preference of specific heavy metal bioaccumulation in the tissues of fishes. Liver showed a strong preference to accumulate Ni and Cu, Gills showed accumulation preference for Zn, Cu, Ni and Fe, while Muscle tissue showed affinity to accumulate Cu, Zn, and Ni. Given the findings of this study, it is suggested that the Environmental Impact Assessment should include bioaccumulation studies before the issue/renewal of mining licenses.