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ARTICLE

A REVIEW ON THE TOXICITY LEVELS IN DOMINANT FINFISHES FROM SELECTED RIVERS OF INDIA

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The present work is an intensive research review encompassing the data of last two decades to provide a wholesome idea about the health of freshwater ecosystem. The study has been carried out in 7 major rivers of India namely Ganga, Yamuna, Kali, Subarnarekha, Godavari, Gadilam and Thamirabarani. Selected heavy metals (Cr, Cu, Zn, Cd and Pb) in water, sediment and dominant finfish species (Labeo rohita, Heteropneustes fossilis and Puntius sp.) were studied. Results suggest that Yamuna waters have Zn, Cu, Pb levels considerably higher than the WHO (2011) and BIS (2012) standards. Sediment data has shown Cr in Ganga and Subarnarekha, Cu in Yamuna and Subarnarekha and Pb in Subarnarekha and Kali rivers respectively are considerably higher than the USEPA and TEL standards. The records for Cr, Zn and Pb in Labeo rohita; Cr, Cd and Pb in Heteropneustes fossilis and Puntius sp. have shown considerably higher than the fAO/WHO (2019). These records have been found much higher than the FAO/WHO (1989) standards. The target hazard quotient (THQ) and hazard index (HI) were calculated and found consumption of L. rohita from river Ganga and H. fossilis and Puntius sp. from river Kali are not safe for human health.