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Histopathological Studies and Heavy Metals Accumulation in Water, Sediment and *Chrysichthys Nigrodigitatus* at the Agilit Iarea of the Ogun River

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Heavy metals are considered dangerous water contaminants because of their potential bioaccumulation and toxicity. This study investigates the bio-availability of the heavy metals Zn, Cu, Mg, Mn, Cd, Cr, and Pb in sediment and water over a period of six months (November 2012 to May 2013), and also in the fish (*Chrysichthys nigrodigitatus*) over a period of three months (April to May 2013). A toxicological study was also conducted to determine the effects of aquatic pollutants on the gills, kidney, liver and muscles of *Chrysichthys nigrodigitatus* over a period of three months (April to May 2013) in the Agiliti area of the Ogun River. Sediments and water samples were collected in plastic containers. Concentrations of heavy metals in the water samples were in the order of Zn > Mn > Mg > Cu > Cr > Pb > Cd, and in sediment samples in the order of Mg > Mn > Zn > Cu > Pb > Cr > Cd. In conclusion, the heavy metal constituents present in both water and sediments are within the WHO limits.