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**Metals contamination in environmental compartments in mangroves of the State of São Paulo, Brazil**

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Contamination degree by six metals (Cu, Cd, Pb, Cr, Mn and Hg) was studied in six important mangrove areas in São Paulo State, Brazil (Cananéia, Iguape, Juréia, Cubatão, São Vicente and Bertioga), each one represented by subareas (n=3). In each area, four abiotic/biotic mangrove compartments (W, water; S, sediment; GL and SL, green and senescent leaves of *Rhizophora mangle*, respectively) were sampled, with concentration of metals measured by atomic absorption spectrophotometer. The data were subjected to cluster analysis by Euclidean distance. The highest concentrations of metals recorded in each four compartments analyzed were: copper ( $\mu\text{g/g}$ ) = S-Iguape (9.52), GL-Cubatão (3.17), and SL (2.52) and W-Bertioga (0.046); cadmium ( $\mu\text{g/g}$ ) = S (0.98), SL (0.30) and GL-Cubatão (0.23) with W samples below the detection limit (nd); lead ( $\mu\text{g/g}$ ) = S-Cubatão (12.34), GL-Bertioga (2.70), SL-Cubatão (2.40) and W-Cubatão (0.20); chromium ( $\mu\text{g/g}$ ) = S-Iguape (25.41), SL-Juréia (5.72), GL-Juréia (4.27) and W (nd); manganese ( $\mu\text{g/g}$ ) = GL (454.65) and SL-Iguape (383.52), S-São Vicente (263.19) and W-Cubatão (0.004); mercury (ng/g) = only in S samples, mainly in São Vicente area (468.98). The cluster analysis pointed out five groups ( $p < 0.05$ ), four of them referring to Iguape, Juréia, Cubatão and Bertioga subareas and another that grouped Cananéia and São Vicente ones. Each mangrove area has distinctive diagnostic features, to what concerns the concentration of metals, some with greater relative proportion: Cubatão and Bertioga (Pb and Cd), São Vicente (Hg), Juréia (Cr), Iguape (Cu, Mn and Hg) and Cananéia (Mn). Metal concentration in sediment not exceeded the value of *probable effect level* (PEL), although Cu and Pb in water were two times higher than allowed by Brazilian legislation for quality (0.005 and 0.01, respectively). Ecotoxicological assays using water from these mangrove areas should be performed in order to elucidate its toxicity, aiming mangroves sustainability on the coast of the Brazilian State of São Paulo.

Keywords: Estuary, Environmental Quality, Metals, *Rhizophora mangle*