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METAL LEVELS IN THREE PUFFERFISH SPECIES CAUGHT FROM MERSIN BAY

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Abstract

The macro (Na, P, Ca, Mg, K), trace (Cu, Zn, Fe) and toxic (As, Pb, Cd, Cr) elements in the liver and muscle tissues of *Lagocephalus sceleratus* (Gmelin, 1789), *Lagocephalus spadiceus* (Richardson, 1845) and *Lagocephalus suezensis* (Clark & Gohar, 1953), and their effects on metal levels of seasonal and sexual changes were investigated. The pufferfish species used in the study were seasonally caught with bottom trawls, longliners and fish hooks from the Mersin Bay throughout four seasons. Metal analysis was performed on the fish tissue using ICP / MS. It was determined that the levels of the macro and trace elements were high in the tissues of three pufferfish species that were analyzed. However, it was determined that they contained high levels of Pb and As. To date no study on the metal levels of the three species of pufferfish was found in the literature. This study was carried out to determine the most common species of *Lagocephalus spp.* And also it was the first study to investigate seasonal and sexual changes in metal levels of pufferfish species in the Mediterranean Sea.

Keywords: *Lagocephalus spp.*, macro element, trace element, heavy metal

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