

P58. POLYCHLORINATED BIPHENYLS IN EDIBLE FISH FROM BLACK SEA, BULGARIA

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Polychlorinated biphenyls (PCBs) can still be a problem for the aquatic environment. Fish species are a suitable indicator for the environmental pollution monitoring because they concentrate pollutants in their tissues directly from water. Concentrations of PCBs were measured in marine fish, collected from Bulgarian Black Sea coast in order to monitor the dynamics of these pollutants in 2007, 2010 and 2015. The fish species: goby (*Neogobius melanostomus*), sprat (*Sprattus sprattus sulinus*), horse mackerel (*Trachurus Mediterraneus ponticus*) and grey mullet (*Mugil cephalus*) were chosen because of their characteristic feeding behavior. The PCBs were determined by gas chromatography system with mass spectrometry detection. The Total PCBs ranged from 93.8 to 513.3 ng/g lipid weight (in grey mullet and goby, respectively). Levels of PCBs in goby and grey mullet decreased in 2010 and 2015. In order to assess the safety of fish as food were calculated TEQ. They are determined by the results of dioxin - like (dl) PCBs. TEQs were calculated from 0.01 to 0.04 pg TEQ/g ww and did not exceed the EC limit of 3 pg TEQ/g ww. The levels of PCBs in fish from Bulgarian Black Sea were comparable to those found in neighboring seas.