

Accumulation of tributyltin (TBT) in the blood of flounder and dab intraperitoneally administered with TBT

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Abstract

The present study was carried out to investigate the accumulation of TBT in the blood of cultured Japanese flounder, *Paralichthys olivaceus*, and dab, *Limanda yokohamae*. TBT-CI was intraperitoneally administered to fish at a dose of 2.5mg kg⁻¹ b.w. At 2, 4, 6 and 8 days after the injection, the blood, liver, kidney, spleen and dorsal muscle were collected. The amounts of TBT within the tissues were determined by GC-FPD. High TBT concentrations were found in the serum of Japanese flounder, levels which corresponded to 22~37-fold those found in the muscle, and 7~12-fold those found in the liver. High TBT concentrations were also found in the serum of dab. The results of gel filtration of the serum showed that TBT was bound to an unknown substance (mol. wt ca 50000).