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Abstract

In order to develop a bioaccumulation model which predict the levels of hazardous chemicals in food chain of sea area, we carried out the surveys in Tokyo Bay to examine concentrations of coplanar-PCB (Co-PCB), crude fat levels and so on in fish (conger-eel : *Conger myriaster* and Japanese whiting : *Sillago japonica*).

From these research data, we could discuss about bioaccumulation profiles of Co-PCB of living fish in Tokyo Bay. As the results of discussion, the profiles were presumed as follows.

・The bioaccumulation levels of Co-PCB in conger-eel and Japanese whiting are risen with their age, but the level of fat does not affect to the increase of accumulation of age-related Co-PCB.

・In the conger-eel inhabiting Tokyo Bay, the Co-PCB is mainly distributed in that fat.

・The lower fat fish inhabiting Tokyo Bay has higher concentration of Co-PCB in crude fat unit.

・In the conger-eel and Japanese whiting inhabiting Tokyo Bay, the accumulation rates of Co-PCB congenr which have 5 or 6 chlorine atoms are higher than that of Co-PCB congeners which have 4 or 7 chlorine atoms.

・Non-*ortho* PCBs have lower accumulation rate than mono-*ortho* Co-PCBs.

・In the Co-PCB congeners which have same number of chlorine atoms, a Co-PCB congener which has higher water solubility has higher accumulation rate.