

Variations of organotin bioaccumulation in the *Salmo trutta* and *Anguilla japonica* collected from freshwater and seawater habitats: A re-interpretation from biomonitoring point of view.

Abstract

This paper reviewed two important published papers on variation in organotin compounds (OTs) accumulation in relation to the life history in *Anguilla japonica* and *Salmo trutta*. The data cited from the two papers were re-interpreted from biomonitoring point of view. An overall discussion of the tributyltin (TBT) and triphenyltin (TPT) contamination based on the sampling sites was presented. In general, *S. trutta* with higher OT levels inhabiting the sea habitat, namely Hakodate Bay, had higher bioavailability of OTs than the Hekirichi River and Kunebetsu River. Similarly, the eels *A. japonica* with higher OTs collected in the marine habitat at Miyako Bay and its adjacent waters, also had higher levels of TBT than those collected from the Mabuchi River, Hei River and Tsugaruishi River. This indicated that Hakodate Bay and Miyako Bay had higher contamination by OTs than freshwater sampling sites. Since Hakodate Bay and Miyako Bay are characterized by many marinas and shipping activities, this review paper based on the two papers agreed with the fact that higher anthropogenic activities would always be reflected in the higher bioaccumulation of OTs of the two biomonitors.

Keyword: Biomonitoring; Organotin; Diadromous fish.