

Organochlorine Residues in Cuttlefish from the Arabian Gulf

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Abstract : Contaminations of persistent organic pollutants (POPs) such as, dichlorodiphenyl trichloroethane (DDT), hexachlorocyclohexane (HCH) and chlordane (CHLs) were examined in the edible mantle tissues of the commercial cuttlefish *Sepia pharaonis* Ehrenberg 1831, collected from the marine water of the Arabian Gulf. The mean concentrations of DDT, CHLs and HCH were in the ranges of 29.4 - 56 ng/g, 47.4 - 100 ng/g and 1 - 4 ng/g, respectively. Among the POPs analyzed, HCH showed the lowest concentrations ranging between 1 to 5 ng/g lipid wt. However, concentrations of DDT, CHLs and HCH, detected in this study, were generally comparable or lower than those found in studies of similar cephalopod species from other areas subject to a high anthropogenic impact. Relationships between total body lengths and/or dorsal mantle lengths of the organisms and the concentration values of the studied POPs were also considered. Compared with recommendations of the international organizations, there are no potential risks associated with consuming the studied cuttlefish species.

Keywords : cuttlefish, *Sepia pharaonis*, organochlorine, DDT, CHLs, HCH, Arabian Gulf

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