Monitoring Lindane Pesticide in Muscles of (Cyprinus carpio, Rutilus frisii kutum & Liza aurata) in the Southern Coasts of the Caspian Sea

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Received Date: January 3, 2014 *Corresponding Author Accepted Date: November 22, 2014

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Abstract

In this investigation, concentration of the organochloric agricultural poison Lindane was measured in the muscle of three fish species including Kutum, Common carp and Golden gray mullet in eight stations located in the southern shore of the Caspian Sea (Bandar Torkaman, Khazarabad Sari, Fereydunkenar, Chalous, Kiashahr, Bandar Anzali, Hashtpar and Astara). In each station, fishes were caught randomly. Lindane extracted and chemical analysis using gas chromatography supplied with electron capture detectors (GC-ECD), has been done. Results showed that average amounts of Lindane in Kutum, Common carp and Golden gray mullet were 1.88 ± 1.65 , 1.83 ± 1.41 and 1.60 ± 1.48 ng/g in fresh weight, respectively. Chalous $(3.16 \pm 1.43 \text{ ng/g})$ fresh weight) was the most contaminated station in terms of Lindane contamination. The reslts showed that the amount of Lindane had a declining trend in recent years.

Keywords: Organochloric poisons, Common carp, Kutum, Golden gray mullet, Caspian Sea.