

Determination of Dichlorodiphenyltrichloroethane Residues Levels in Commercial Marine Dry Fish from Different Regions of Bangladesh

ABSTRACT

Dichlorodiphenyltrichloroethane (DDT) residual levels are available several commercially dry fishes. So, these fishes were detected and determinate the contamination status of dichlorodiphenyltrichloroethane (DDT). The most popular dry fish-Ribbon fish (*Lepturacanthus savala*), Chinese pomfret (*Pampus chinensis*), Bombay duck (*Harpodon nehereus*) and Shrimp sp. (crustaceans) were selected for this study and these dry fishes were collected from nine different markets (three from each of Khulna, Chittagong and Cox's bazar district) of Bangladesh during December-March in 2013. A total number of 36 samples were selected for analyzing in the laboratory by using gas chromatography-mass spectrometry electron captured (GC-ECD) detector. The ranges of DDT in all samples were 2.81 to 877.82ppb. The ranges of DDT in the samples of Bombay duck, Chinese pomfret, Ribbon fish and Shrimp were 13.7-874.35ppb, 2.81-877.82ppb, 3.73-253.68ppb and 4.27-585.97ppb respectively. The mean concentrations of DDT were found highest amount from retailer markets while compared to that from the producer's markets. Results indicated that the concentration of DDT in dry fish from Bangladesh are higher and may cause chronic disease and potential long-term risk for human health.