

DETERMINATION OF CHLORINATED PESTICIDES RESIDUES OF ALDRINE, DDT AND DIELDRINE IN COASTAL REGION OF SOUTHERN PART OF CASPIAN SEA

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In this study, chlorinated pesticides residues of Aldrine, DDT and Dieldrine determined by those waters from paddy farms and rivers that discharged to the Caspian Sea. This study done during 1998 (spring) through 1999 (winter) in eighteen locations (seven stations in west, six stations in middle and five stations in east parts) along the coastal region from Astara to upper side of Gorgan estuary (borderline of Iran). Totally 72 samples were seasonally collected from mixed water in the coastal region (less than 10 meter depth). Those collected waters mixed and then separated to two aqueous and organic phases, analyzed by using US-EPA standard method and GC-ECD.

The maximum amounts of Aldrine in west (station,5 –spring), middle (station,9-spring) and east part (station,18-summer) were 13.8, 16.7 and 17.2 $\mu\text{g/l}$ respectively. The minimum amounts of Aldrine that detected in west, middle and east part were 3.4, 3 and 5.2 $\mu\text{g/l}$ respectively.

The maximum amounts of DDT in west (station,2 –spring), middle (station,11-winter) and east part (station,18-spring) were 9.9, 14.8 and 24.9 $\mu\text{g/l}$ respectively. The minimum amounts of DDT that detected in west (fall), middle (winter) and east part (spring) were 3 $\mu\text{g/l}$.

The maximum amounts of Dieldrine in west (station,2 -summer), middle (stations,9 -fall) and in east part (station,18 -spring) were 19.3, 18.6 and 36.6 $\mu\text{g/l}$, respectively. The minimum amount of Dieldrine that detected in west (spring, fall and winter), middle (winter) and east part (fall) were 3.5, 3 and 3 $\mu\text{g/l}$ respectively.