

ABSTRACT

A series of statistical analysis, which included : Analysis of Variance (ANCOVA - one way), Two-sample T-Test, and Mann-Whitney Test were performed on water quality data for the city of Baghdad to assess the impact of the aggressive war upon the environment. The environmental data were on the water quality of the river Tigris at Baghdad and that of the Rasafa side of the city.

In addition, statistical investigations into the mode of Variation of the quality of water of the distribution network of the Rasafa side of Baghdad were carried out to assess the uniformity of quality of water supplies to consumers.

Regression models relating different water quality parameter were constructed for possible use in predicting the demand of chemicals needed for the purification processes.

Results of the statistical analysis, which indicated that the aggressive war had damaging effects upon the quality of water of the river Tigris and that of the distribution system, were discussed and conclusions drawn, among which of prime concern is the impact of the aggressive war upon the environment. All these are reported herein.