

Cyprinus carpio

(NJC)

(2007/10/1) (2006/7/8)

0.1 0.05 *Cyprinus carpio*
 21 14 7 1 / 1

21 14

Abstract

Cyprinus carpio were exposure to three sublethal concentrations of zinc 0.05, 0.1 and 1 mg/l ZnCl₂ as well as control treatments, during periods of (1, 7, 14 and 21) days of exposure. Concentration levels of zinc were determined in gills, liver, and kidney and muscle tissues. The highest concentration was recorded in the liver, kidney and gills tissues respectively for higher exposure concentration of zinc during (14 and 21) days of experiment, while, the muscle tissue was accumulated lower values of zinc in comparison with control samples.

Key words: Zinc, *Cyprinus carpio*, Sublethal, Organs, Fish.

(Ali *et. Al.* 1999)

"

(Handy , 1992)

(McDonald *et. Al.* 1993)

Cyprinus)

(*carpio*

±

-

Koyama &)

1.528.5

(Ozaki 1984

40

% 20

(Handy , 1993)

/ 1 0.1 0.05

ZnCl₂

Yarbrough & Chambers , 1979)

21 14 7 1

.(

Control

Heiny, *et. al.*

(1997)

(24)

(105)

(Flame Atomic Absorption Spectrophotometer, Model SP 9)

(0.15 – 0.1)

")

Calibration curve(HClO₄)(HNO₃)

-:

. (ROPME , 1983)

()

x (/)

100 X _____ = (/)

()

(P > 0.05)

4 - 1

(0.1 1)

21 14

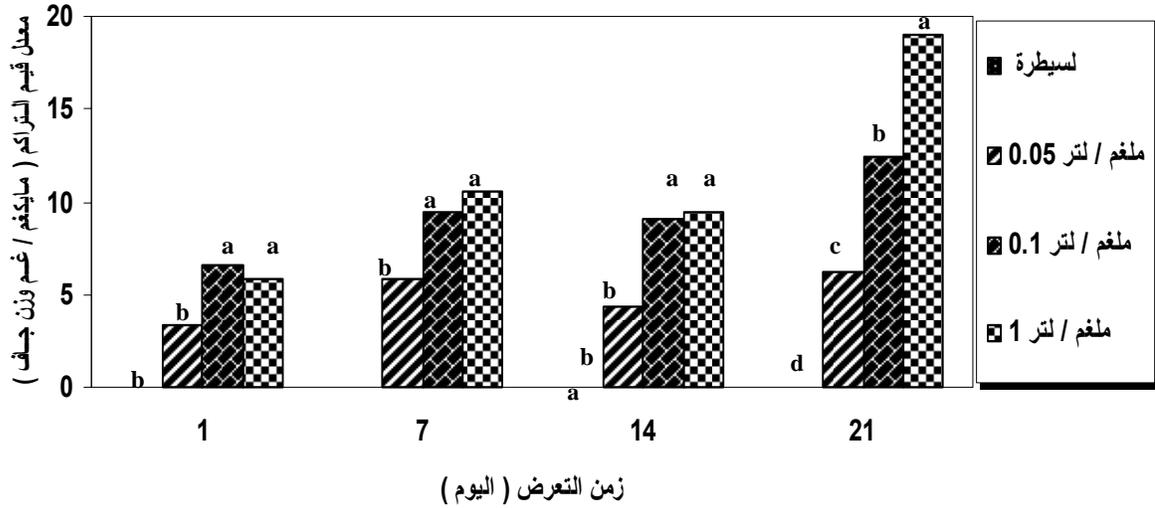
21 14

(0.1 1)

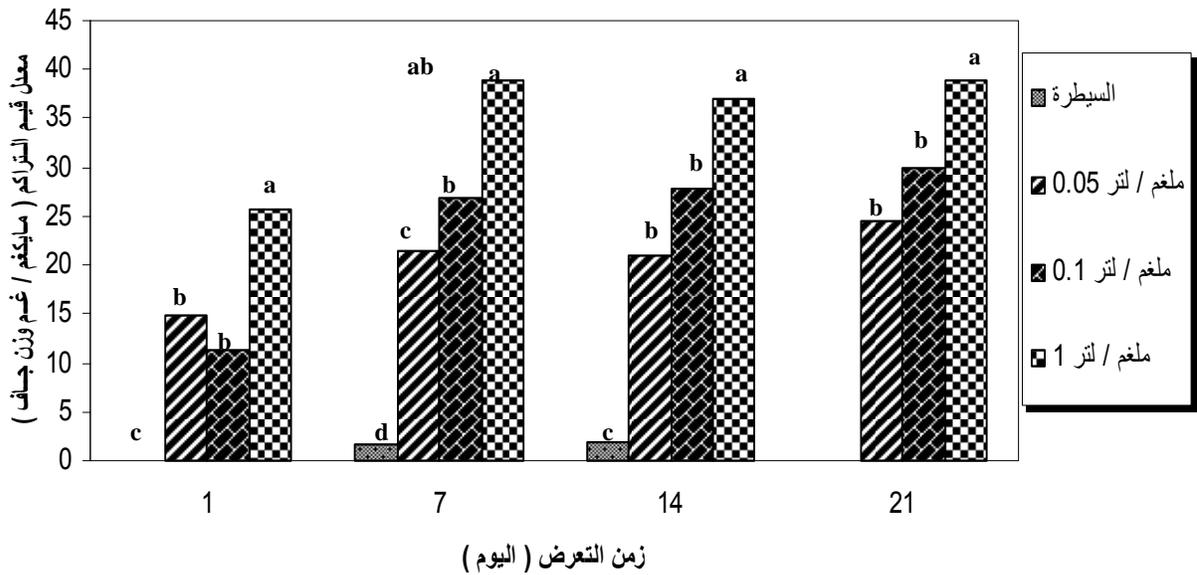
(21)

(P > 0.05)

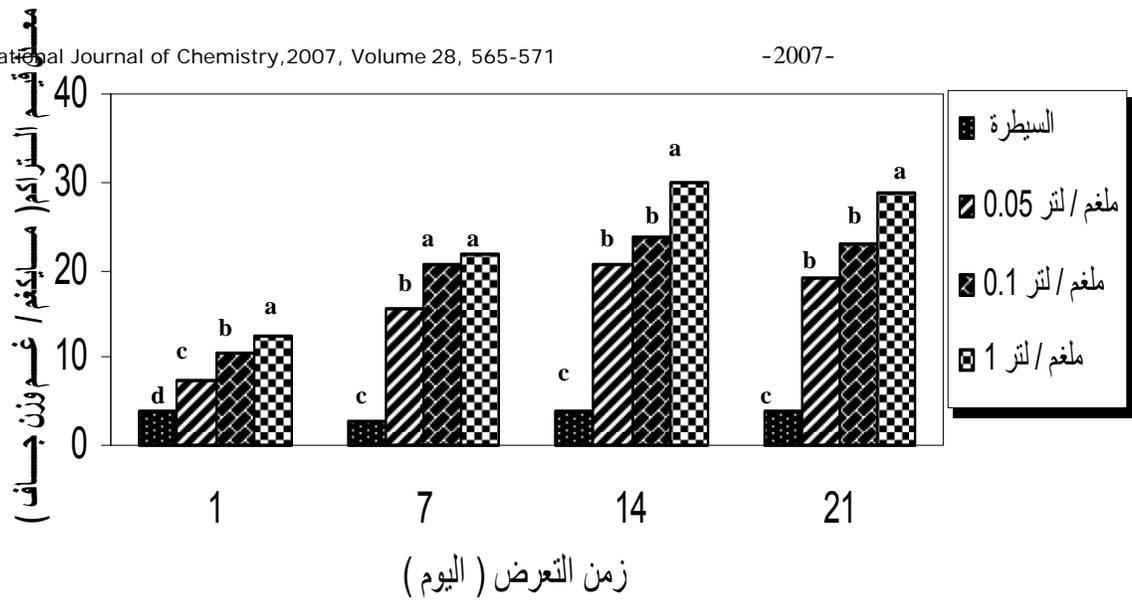
(P > 0.05)



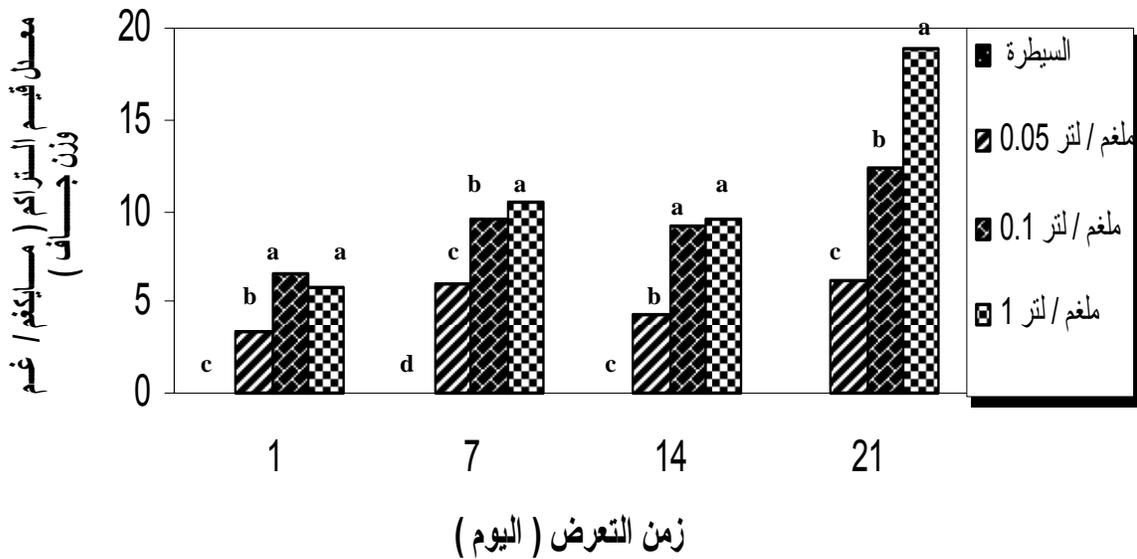
الشكل (١) قيم التراكم الحيوي لعنصر الخارصين في نسيج غلاصم أسماك الكارب الاعتيادي المعرضة لتراكيز مختلفة من العنصر



الشكل (٢) قيم التراكم الحيوي لعنصر الخارصين في نسيج كبد أسماك الكارب الاعتيادي المعرضة لتراكيز مختلفة من العنصر



الشكل (٣) قيم التراكم الحيوي لعنصر الخارصين في نسيج كلية أسماك الكارب الاعتيادي المعرضة لتراكيز مختلفة من العنصر



الشكل (٤) قيم التراكم الحيوي لعنصر الخارصين في نسيج عضلات أسماك الكارب الاعتيادي المعرضة لتراكيز مختلفة من العنصر

Barbus Khalaf *et. al.*, (1985)

Schladot *et. al.*, (1997) *grypus*

Zoarcis viviparus

Ali *et. al.*, (1999)

. *Liza abo* (Park & Pregly , 1997)

. (Philips , 1980)

Hughos)

. (& Flos , 1998

(Hogstrand , 1996)

Albumin

Metalothionin

(Handy , 1993)

MT) Metalothionine

(

Chaffai ,)

CET,)

. (1997

. (1993

Farag *et.)*

. (*al.*, 1995

المصادر

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