

Lernea cypranace
Cyprinus carpio

Tetrahymena corlissi

Gambusia affinies

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Sumcidin

Tetrahymena corlissi

Lernea cypranacea

Gambusia affinie

Cyprinus carpio

0.1 0.01 0.005 0.001)

72-6

/ (1.0 0.5
(0.01)

T. corlissi

24

/ (1.0 0.5 0.1)

24

Lernea cypranace,

:

Parasitic crustacea

Lernea

Linnaeus

(1970) Kabata

. (1985

Laufer)

3000

(1983) Mhaisen

L. cypranacea

. (1983 Mhaisen)

تاريخ استلام البحث 2012 / 3 / 5

تاريخ قبول النشر 2012 / 6 / 4

Beamish) . (1985 Laufer)
 . (1978 Farling
 (Hb)
 . (1989 Heath 1986 Holmgren Nilsson)

2011

L. cypranace / (%80)
 70 Hand net

40×40×60

/ (0.005 0.001)
 / (1.0 0.5 0.1 0.01)

72 - 6

LC50

. (1968) Luna

Tetrahymena *L . cypranace* *corlissi*

Gamza stain
(1979) Kabata
(2001) Mhaisen Al-Nasiri ;
Minitab
(1980)

L . cypranace
(2001) Mhaisen Al-Nasiri
Tetrahymena corlissi 18

Barbus (2005 Salih)
sharppei

L. cypranacea 5-1
/ (0.005 0.001) *Tetrahymena corlissi*

Tetrahymena *L . cypranace* *corlissi*
6 , 6
/ 0.01
24
6

(1) Anchor

(4 2)

-3
 7-5
 5
 24
 LC50
 / 0.01
 (2006)
 / 0.1
 5
 Majdy

/ 0.01
 24

/ 0.1

Laufer)

(1989) Narain Srivastava
 . (1985

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. ()
 (1990) WHO

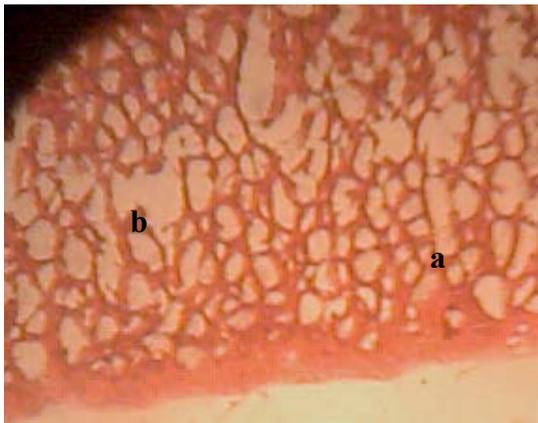
Oxyhemaglobin



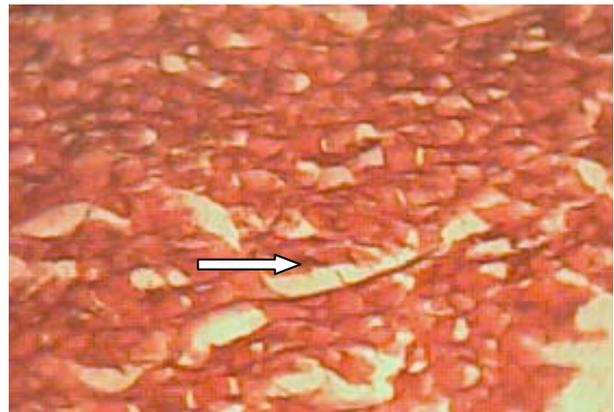
0.01 / .2
 (a) /
 . (400x) - (b)



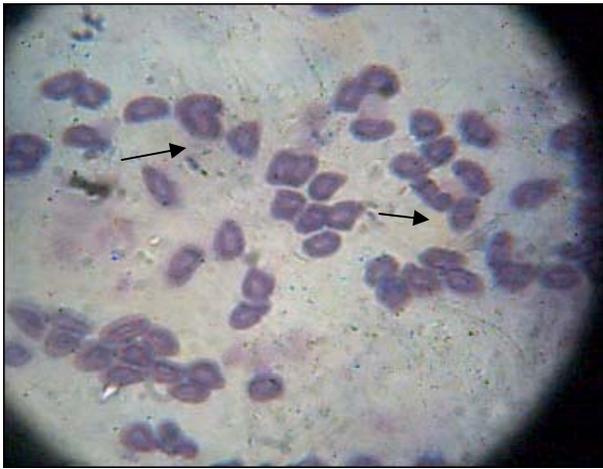
صورة 1. نسيج الجلد يوضح التصاق طفيلي *L cypranacea* في سمكة الكمبوزيا (السهم) .



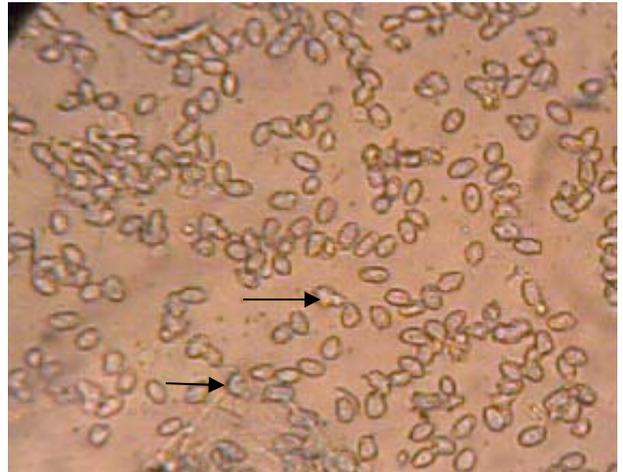
.4 / 0.1
 - (b) (a)
 . (400x)



.3 () - (400x)



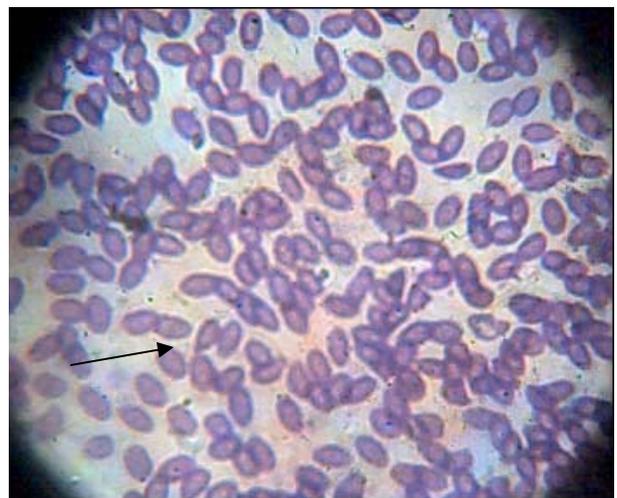
0.01 / خلايا الدم (السهم) . صبغة المثيل الأزرق . (400 x) .6



0.01 (السهم) . صبغة المثيل الأزرق (400X) .5



.8 . صبغة المثيل الأزرق (400X) .



.7 . صبغة المثيل الأزرق (400X) .

المصادر

- . 1980 .
 . 488 . - .
- Al-Nasiri, F. S. and F. T. Mhaisen. 2001. First Record of the Ectoparasitic Crustacean *Lernea oryzophila* .Monod, 1932 (copepoda : Lernaeidae) in Iraq on the common carp *Cyprinus carpio* , *Al-Mustansiriga J. Sci.* 12(7) : 123 - 127 .
- Farling, S. and F. W. H. Beamish .1978. Changes in blood chemistry and critical swimming speed of largemouth Bass, *Micropterus salmoides* with physical conditioning. *Trans. Am. Fish Soc.*, 107: 523-533.
- Heath , E. B. 1989. Behavioral , hematological and histological studies on toxicity of Fenvalerate *Cyprinus carpio* . *Biochem . Physiol.* , 85 : 9 – 12 .
- Kabata, Z. 1970. Diseases of fishes .Book 1 : Curstacea as enemis of fishes .T. F. H. Publ., *Jersey city* :171pp.
- Kabata,Z. 1979. Parasitic copepoda of British fishes . the *Ray Society* , *London , U.K.* , 468pp.
- Laufer , J. I. , M. Pellate and D. B. Sattelle .1985 . Action of pyrethroid insecticides on insect axonal sodium canals . *Pesticide Sci.*,16 : 651 – 661 .
- Luna, L. E. 1968 . Manual of histology stains methods of the armed position . *Institute of pathology* . 3rd ed. 205p.
- Majdy, F. M. , A. B. Majed and M. Z. Adil . 2006 . Study on some hematological changes in *Cyprinus carpio* (L.) fish after exposure to different concentrations of Sumcidin pesticide . *The Iraqi Journal of aquaculture* 2(2): 122 – 132 .
- Mhaisen , F . F. 1983 . *Diseases and Parasites of fishes* . Basrah Univ . Press , Basrah : 227 pp . (in Arabic) .
- Narain , A. S. and P. N. Srivastava .1989 . Anemia in the fresh water teleost , *Heteropneustes fossilis* under the stress of environmental pollution . *Bull. Environ. Contam. Toxicol.* , 43 : 627 – 634 .
- Nilsson , S. and S. Holmgren 1986 . Fish physiology : Recent advances , *Croom Helm Ltd.* , *London* , 196pp.
- Salih, A.A. 2005 . Acute Toxicity of three type of Refinery Products to Mosquito Fish *Gambusia affinis*. Abstracted ,The First Scientific conference to rehabilitation of marshes of South Iraq. *The Iraqi journal of aquaculture* 1(5) : 225-236 .
- World Health organization (WHO) . 1990 . *Environmental health criteria 95* , *Fenvalerate* , *Genev* . pp: 264

**ACTIVITY OF THE PESTICIDE SUMCIDIN ON THE COPEPODS
Lernea cypranace AND *Tetrahymena corlissi* INFECTING OF *Cyprinus
carpio* AND *Gambusia affinis* FISHES.**

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ABSTRACT

The effecting of the pesticides sumcidin was tested as a control for the copepod *L. cypranacea* and the protozoa parasitic *T. corlissi* living in the fish *Gambusia affinis* and larva of *Cyprinus carpio* .

The concentration used were (0.001, 0.005, 0.001, 0.1, 0.5 and 1.0) mg/L for (6 , 12 , 24 , 48 and 72) hours, the results showed that the concentration 0.01 mg/L have a significant effect on the activity of the larval stages and the protozoa parasite *T. corlissi* . No sign of pathological effect on the *G. affinis* and the larvae of *C. Carpio* before 24 hr. but the effect was significant after this time. Changes was clear in liver, muscle and blood of the fish in concentrations (0.1 , 0.5 and 1) mg\L hence these concentrations Sumcidin as lethal for the fish and the larva stage .

Keywords : Pesticide Sumcidin , Copepods *Lernea* , common carp fish , *Gambusia* fish .