معالجة أسماك الخشني Liza abu المصابة بالطفيلي القشري الشيح Dermoergasilius varicoleus بأستعمال مستخلص الماء المغلي لنباتي الشيح Petroselinum crispum (Mill.) والمعدنوس

Petroselinum Artemisia herba-alba Dermoergasilius varicoleus Liza abu crispum %25 (%100)%35 %30 %33 %35 %15 %30 %25 **Abstract** The boiling water extract for two plants (Artemisia herba-alba and Petroselinum crispum) was used to treatment of fishes Liza abu which infected by crustacean parasite D. varicoleus by using dipping method for five minutes in a water bath. The boiling water extract for vegetative parts of A. herba-alba was effective in eradication of all parasites (100%) when used at a concentration of 25% without any effect on fishes. The boiling water extract for seeds of P. crispum was effective in eradication of 33% from parasites at a concentration of 30%, when used at a concentration of 35% all parasites (100%) were dead, but this extract caused disturbance for fish at a concentrations of 25% and 30% in treatment tank and caused the death of 15% of fishes treated at a concentration of 35% in recovery tank. L. abu Mugilidae (kuronuma & Abe, 1986) (AL-Asadiy *et al.*, 2001) (1996 (Mhaisen, 1993) .(Mhaisen,unpublished) Poecilostomatoida Dermoergasilus varicoleus Ergasilidae

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```
Khamees & Mhaisen (1995)
                            (1999
                                              :1998
                                                          )
                                                         (Mhaisen et al.,1999)
                                                               .(2000
                                                                             )
                 (Lin & Ho, 1998; Hogans, 1989)
                     )
            (
                                                                    Ergasilidae
            Khamees (1996)
                             (1986
                                              .(Tonguthai, 1997)
                           (1998)
                         Monogenea
                                                          (2002)
                                                                        (2001)
                                    (2002)
         Lernaea cyprinacea
                                                     Dermoergasilius varicoleus
       )
                (
30×30×75)
                                                               40×35×70) (
              .(
                    15×30×40)
                                         .Aerator
          Recovery tank
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Control tank

```
pH Meter
                                                  Conductivity
                                           /
                                                  PPT
                                                           : Richards (1954)
                0.64 \times
                                                    = (
                                                                )
                        1000
                                        O<sub>2</sub> Meter
Harborne (1982)
       1000
                                                        20
                                                                        200
              . (
                                                            Blender
                                      3000
                                                     Centrifuge
             200
                                         Stock Solution
   (%35 % 30 % 25 % 20
                              %15
                                    %10 % 5)
                                  50
                                          %5
```

D. varicoleus

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                      (
                           5)
                                        Dip Method
                                                      )
                                                                          (
                                                                        Control
                         A. herba-alba
                               13-8
                               .1.33
                                                   %33
                                       . 20
                                  .8.4
                                               8.6
                                                      0.90
                                                              (1)
            %15
                   %10
                          %5
%20
                                                              Caudal rami
            %25
                                                              %100
                                                                   30
```

A. herba-alb :(1)

D. varicoleus

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			%
	3 0 3 4	8 8 8 8	5 10 15
	2	8	20
%100	3 4	8 8	25

P. crispum

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12.5

13.5

. 20

P. crispum :(2)

D. varicoleus

			%
	4 2 1 0 2	8 6 6 5 4	5 10 15 20
20	3	5	25
%33			
	0 2	7 5	30
%100			
20	2 5	5 8	35

;

```
:
                                                                          -1
                                        D. varicoleus
                                                                          -2
       )
                                                                     .( 1
                                                                          -3
    )
     .(
                                          )
                                             Ergasilidae
                  D. varicoleus
P. crispum
                     A. herb – alba
                 D. varicoleus
  (
               2
                 1)
                         %25
       %35
                               %30 %25
                                                  %35
                                                             .(Harborne, 1982)
     A. herba-alba
                                                        Glycosides
      Thugon
                                     Santonin
                          ; 1988
    .( 1996
                                                        ) Misin
             Alkaloids
                                                       AL-Khazraji (1991)
            Coumarins
                                   Taninis
                                                           Saponin
                                                                    .Flavinoids
                                                       (1999)
12
       %20
                          Echinococus granulosus
           in vivo
                                                     in vitro
```

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Hymenolipes nana (2001).(2000) (Pieris rapae (2002).%65 D. varicoleus (2001)Harborne (1984) Apiin Myristicin Apiol ;Chakravarty, 1976) Coumarin Bergaphen ; AL-Rawi &Chakravarty, 1988; 1988 ;1978 .(1996 ;1978 ;Chakravarty, 1976) Insecticide (1988 Duijn (1973) %35 %30 %25 Subcutaneous %1 Cardiac activity %10 . (Chakravarty, 1976) Intravenous %35 %35 %30 %25 (1986)%7

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.(2001)
                           Cyprinus carpio
                              99 :
                                            (
                                                   )
                                                  .(2001)
                              .Phaseolus aureus Robx.
                                                                      115:
    Lernaea cyprinacea L.
                                                   .(2002)
                                                               84:
                                                  .(1999)
93:
                                                        .(2002)
                   .Cyprinus carpio
                                               90:
                                                                     )
                                                        .(1998)
           141:
                         .(1996)
                                      135:
    Artemisia herba-alba (L.)
                                                      .(2001)
     . Pieris rapae (L.) Lepidoptera : Pieridae
                                              68:
                                                .(1988)
                                                            477:
          Artemisia herba-alba
                                                        .(2000)
:
                                            Hymenolepis nana
                                                                         98
                                                      .(2000)
                                 (
                  133:
                                        )
            Mugilidae
                                                          .(1998)
                   136:
                            266:
                                                           .(1986)
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- Al- Asadiy, Y. D.; Mhaisen, F.T. & Dauod, H.A. M.(2001). Food and feeding habits of the Mugilid fish *Liza abu* (Heckel) in a fish farm at Babylon province, mid Iraq. Ibn Al-Haitham J. Pure Appl. Sci., 14(4c): 1-8.
- Al-Khazraji, S.M. (1991). Biopharmacological study of *Artemisia herba-alba*. M. Sc. Thesis. Coll. Phar., Baghdad Univ. : 124 pp.
- Al-Rawi, A. & Chakravarty, H. L. (1988). Medicinal plants of Iraq, 2nd end., Ministry of Agriculture & Irrigation, Baghdad: 109 pp.
- Chakravarty, H.L. (1976). Plant wealth of Iraq: A dictionary of economic plants, Vol. 1. Ministry of Agriculture and Agrarian Reform., Baghdad: 505pp.
- Duijn, Van, Jnr. C.(1973). Diseases of fishes, 3rd ed., Iliffe Books, London: 372pp.
- Harborne, J.B. (1982). Introduction to ecological biochemistry. Acad. Press, New York: 210pp.
- Harborne, J.B. (1984). Phytochemical methods. A guide to modern techniques of plant analysis. Chapman and Hall.. 2nd. Ed. New York: 288pp.
- Hogans, W.E. (1989). Mortality of cultured Atlantic salmon, *Salmo salar* L. Parr caused by an infection of *Ergasilus labracis* (Copepoda: poecilostomatoida) in the lower Saint John river, New Brunswick, Canada. J. Fish Dis., 12: 529-531.
- Khamees, N.R. (1996). Ecology and biological studies of some copepods (Family Ergasilides) infesting gills of the mugilid fish, *Liza abu* from Basrah. Ph.D. Thesis, Coll. Agr., Univ. Basrah: 92pp.
- Khamees, N.R. & Mhaisen, F.T.(1995). Two copepod crustaceans as additional species to the parasitic fauna of fishes of Iraq. Basrah. J. Sci., 13(1): 49-56.
- Kuronuma, K. & Abe, Y. (1986). Fishes of the Arabian Gulf. K. I. S. R., Kuwait : 356pp.
- Lin, C.L. & Ho, J.S. (1998). Two new species of ergasilid copepods parasitic on fishes cultured in brackish water in Taiwan. Proc. Biol. Soc. Wash., 111 (1): 15-27.
- Mhaisen, F.T. (1993). The role of wild fishes in fish farms of Iraq from parasitological & pathological points of view. Iraqi J. Vet. Med., 17: 126-136.

2009 : (17) المجلد (2) مجلة جامعة بابل / العلوم الصرفة والتطبيقية / العدد

- Mhaisen, F.T.(Unpublished). Index- catalogue of parasites and disease agents of fishes of Iraq.
- Mhaisen , F.T.; AL- Saadi, A.A.J. & Al-Shammàa, A.A.(1999). Some observations on fish parasites of Habbaniya Lake. Ibn Al-Haitham J. Pure Appl. Sci., 12(1): 62-67
- Richards, L.A. (Ed.)(1954). Diagnosis and improvement of saline and alkali soils. U. S. Dept. Agr., Hand book No. 60: 160pp.
- Tonguthai, K. (1997). Control of fresh water fish parasite: a Southeast Asian perspective. Inter. J. Parasitol., 27(10): 1185-1191.