

Artemisia herba alba

Culex quinquefasciatus

على *Matricaria chamomilla*

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الملخص

LC ₅₀	<i>Culex quinquefasciatus</i>	<i>Matricaria chamomilla</i>	<i>Artemisia herba alba</i>
0.301mg/l	1.517mg/l	0.507mg/l	1.854mg/l
		LC ₅₀	24
			24
()			

Matricaria chamomilla *Artemisia herba alba* :
Culex quinquefasciatus.

Cx. quinquefasciatus

.(Goddard *et al.*, 2003 and Zinser *et al.*, 2004)

(Ijumba *et et al.*, 2002)

.(Van Der Hoek *et al.*, 2003)

(Rift Valley Fever)

Sun *et al.*, 2001; Singh *et al.*,
 2002; Sivagnanaame & Kalyanasundaram, 2004; Obomanu *et al.*, 2006; Singh *et al.*, 2006 and
 Mohan & Ramaswamy, 2007.

Artemisia herba alba

Culex

Matricaria chamomilla
quinquefasciatus

26±1° C) *Cx. quinquefasciatus* LC₅₀ 95% . 30 0.301mg/l 1.517mg/l .(75±5% R.H 200

0.507mg/l 1.854mg/l LC₅₀ . 24 24 30

Cx. quinquefasciatus (1) 24

-1
-2
-3

(8-6) .(5-1)
(13-12) (11-9)
(17-14)

(18)
(19)

(2) (5-1) (1): (malformation)
(1) (19-18) (6) (17-14) (5) (13-12) (4) (11-9) (3) (8-6)

%36.33 57.33
Awad & Mulla (1984)

Cyromazine *Cx. quinquefasciatus*
) Kelany *et al.* (1991) .

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Musca domestica L.

.Neem Seed Kernel aqueous extract

(19-1)



-3



-2



-1



-6



-5



-4



-9



-8



-7



+

-12



-11



+

-10



S

+

-15



S

-14



+

-13



-18



S

-17



S

-16



-20



-19

(a-e)



-3



-2



-1



-6



-5



-4

()

:(5-1)



-3



-2



-1



-5



-4

(2)

. % 37.22 43.88
(2) .() % 94.3

A. herba alba (1.854 mg/l) LC50
M. chamomilla (0.507mg/l) LC50
(5-1 2)

Mohammed (1993)
4% % *Spodoptera littoralis* *Peganum harmala*
Pushpalatha & Muthukrishnan (1995)
Syzygium jambolanum *Nerium oleander* *Vitex negundo*
PE *Anopheles stephensi* *Cx. quinquefasciatus*
S jambolanum *N . oleander* 1 : 1 *V. negundo* 1 : 3 (PA)
El-hag *et al.* (1999) .

Azadirachta *Cx. pipiens*
A.indica . *Dyzygium aromaticum* *Rhazya Stricta* *indica*
800 %3.3
Curcuma longa Dimetry & El-Hawary (1995)
Aphis carccivora

:
% 0 1.3 -1
% 5.9 3.8 -2
% 1.5 2.5 -3
4
%1.5 1.3 -4
%10 2.5 -5
(10-6 2)

cerebral, :

) . Giurca *et al.*(1977)
(

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Cx. quinquefasciatus

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ABSTRACT

Effect of the LC₅₀ of *Artemisia herba alba* and *Matricaria chamomilla* on Morphological Features of 3rd Larval Instar and Pupa of *Culex quinquefasciatus***Areej Abdelkareem Al-Khalaf**

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Failure to find out promising new compounds of insecticides has led many researchers back to biodiscovery studies in the search for new and economically viable alternatives. The present work was conducted by exposed 3rd larval instar of *Culex quinquefasciatus* to different concentrations from the two plant extracts; *Artemisia herba alba* and *Matricaria chamomilla* to evaluate their efficacy by determined LC₅₀ after a period of exposure for 24 hours following the standard World Health Organization (WHO) insecticide susceptibility methodology. The results indicated that *M. chamomilla* was more effective than *A. herba alba* on both larval and pupal stages after 24 hours. Several effects such as; blocking of metamorphosis and ecdysis, inhibition of adults' emergence, morphogenetic malformations were recorded in larvae, pupae and adults stages. Such malformation and gross morphological features changes were quite similar to those reported for certain insect growth regulators.

Key words: Effect, LC₅₀, *Artemisia herba alba*, *Matricaria chamomilla*, morphological features, Larvae, Pupae, *Culex quinquefasciatus*.

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