

Cydia funebrana (Trlit) (Lepidoptera-Tortricidae)

(3) (2) (1)

2008 2004 *Cydia funebrana*

2008

84

74

44

, : *Ascogaster quadridentatus* (-)

Goniozus, *Bracon* sp., *Eupelmus* sp., *Monodontomerus* sp., *Pentalitomastix pyralis*

: (-) sp.

Chalcidae

Chalcidoidea

Pteromalus sp.

Ichneumonidea Chalcidoidea *Cydia funebrana* :

. - -

Biological study of red plum moth, *Cydia funebrana* Tr. (Lepidoptera-Tortricidae) and preliminary survey for its parasitoid on almond in Mid-Syria

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ABSTRACT

Cydia funebrana is the most important pests on almond and apple fruit, caused damage to fruits and fall down before ripen but the most important damage became in stores, In Syria, almond plantations are locations mainly in central area, This study was done in almond orchards during 2004 – 2008, we found: *C. funebrana* had two generations in a year, but in 2008 had a third generation that entered in diapauses in late time of the year. The flying graph study showed that first peak was in late May (diapaused larvae), second in first days of July (first generation), However a third peak was noted in mid-August (second generation) in 2008. First, second and third generations lasted for 84, 74 and 44 days, respectively. parasitismstages: one Parasitoid belongs Chalcidoidea egg-larvae parasitoid, *Ascogaster quadridentatus*, five Parasitoid from larvae parasitoid, *Bracon* sp., *Eupelmus* sp., *Pentalitomastix pyralis*, *Monodontomus* sp., and fifth one *Goniozus* sp., and two Parasitoid from larvae-pupa parasitoid, and one parasitoid from pupa parasitoid, it's *Pteromalus* sp.

Key words: *Cydia funebrana* Chalcidoidea Ichneumonidea, Egg-larvae parasitoid, Larvae-pupa parasitoid.

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2009) MT / 75985 / FAO
 57,2
 64,2 %89
 .(2010) 76 %77

.*Cydia funebrana* Tr. (Lepidoptera-Tortricidae)

prunus spinosa, *p.avium*, *p.cerasus*,
 Pluciennik *et al.*, 1999; Kostrovsky,) *p.armeniacap.domestica*, *p.insititia*,
 .(Kostrovsky, 1914; Bovey, 1966) *p.persica* (1914
 Pospelov, 1914;)*Mulus domestica*
C.funebrana (Radetsky, 1913

Molinari) %50
 (*et al.*, 1997; Muratovich and Batinica, 1972

.(Muratovich and Batinica, 1972; Pluciennik *et al.*, 1999)

Batinica and Muratovic, 1972;)
 Molinari *et al.*, 1997;) (Stamenkovic*et al.*, 1984
 (Kozłowski, 1994) (Molinari,1995
 (Vernon, 1971) ()

Batinica and)

(Muratovic, 1972; Bugiani *et al.*, 2000

()

(Charmillot *et al.*, 1979; Molinari *et al.*, 1997; Molinari, 1995)

(-)

%50

Eurytoma amygdali End

()

:

: -1

: -2

40×40×60

:

.(1971) Vernon

-

(200)

.(1994) Kozlowski

-

30

.

-

75 50) 15
(375 25) 10 (

.(pluciennik *et al.*, 1999)

-

(-)

.(4500)

- (-)

-

-

(200)

.SPSS

:

-1

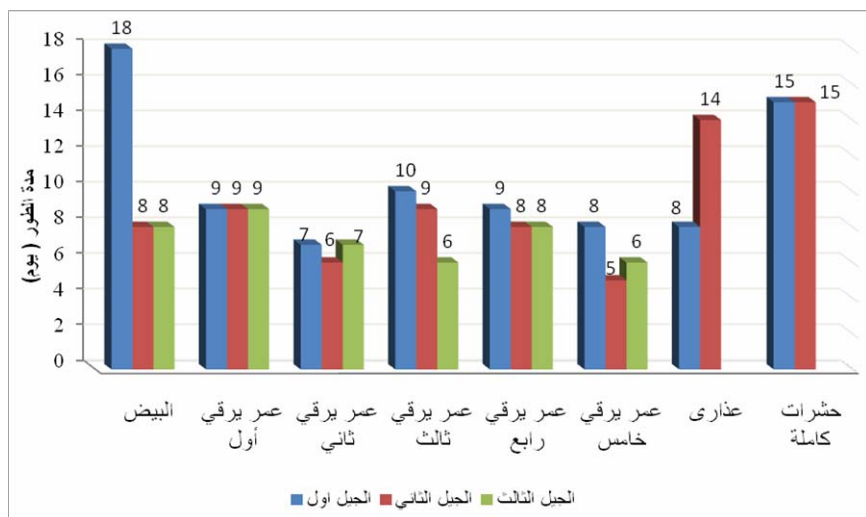
(1

(2002)

Raulader

0.6±0.02

	(1966) Bovey							
		(0.7-0.6)						
	0.3 ±0.04							(2)
			1.99±0.2					
Bugiani	(1972) Batinica	Muratovich				(2000)		
	0.5±0.03							(3)
			5.45±0.23					
	0.79±0.035							(4)
			9.2±0.3					
	1.17±0.062							(5)
			14±0.67					
	1.57±0.12							(6)
			18.8±1.2					
			6.5±0.09					(7)
						9.3±0.94		
	6 -6.5		(1966)Bovey					
	12.7±1.4		8.5±0.89					(8)
			(1963) Baker					
			15 -10					
			:					-2
	/20 2004	/15						(1)
	.2008	/6 2007	/10 2006	/12 2005				
	:							(2)



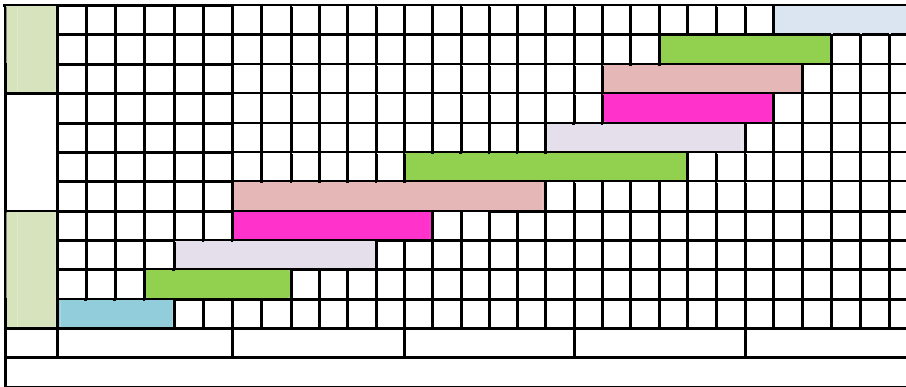
(1)

44 74 84 -

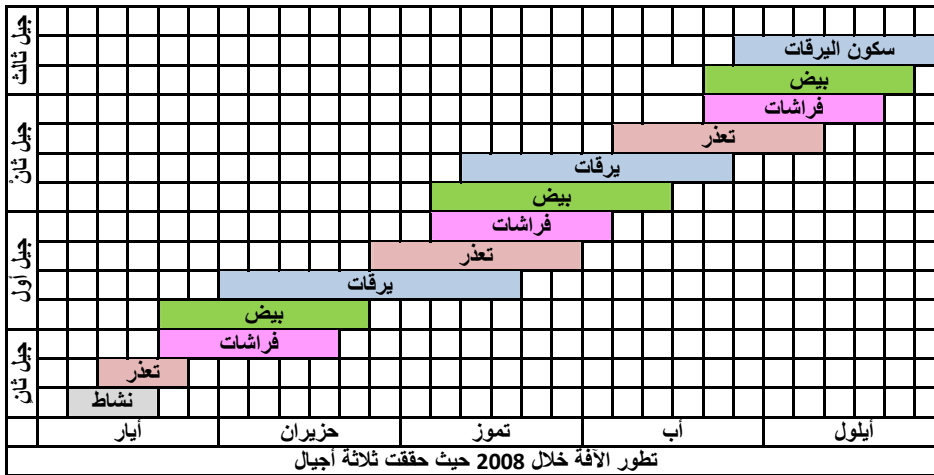
25 1200 18) (%48 : - (3
:(%40

		/ /	
8	10	9 ± 0.21	
11	13	12 ± 0.294	
6	9	7.5 ± 0.34	
5	8	6 ± 0.29	
4	6	5 ± 0.29	
5	7	6.1 ± 0.275	
5	7	5.7 ± 0.213	
9	15	12.7 ± 0.625	
2	4	2.9 ± 0.23	
3	5	3.6 ± 0.22	

Pluciennik (1979) Charmillot (1999)



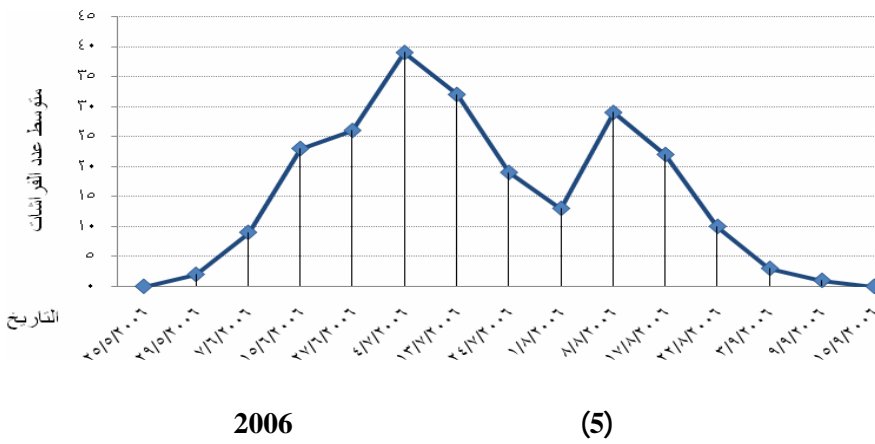
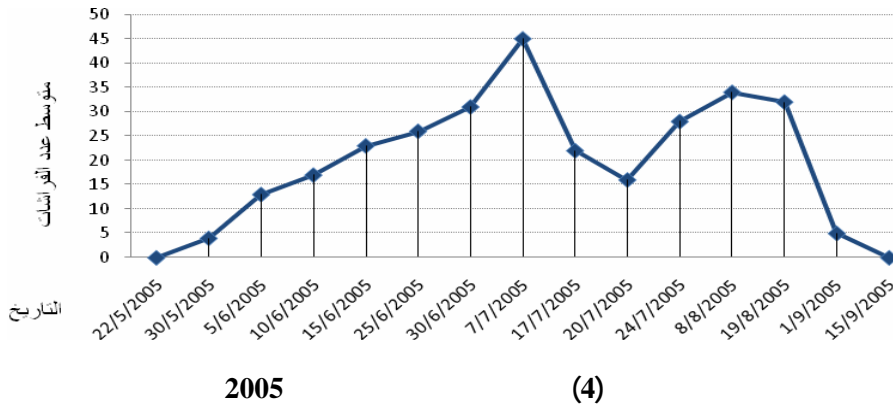
(2)

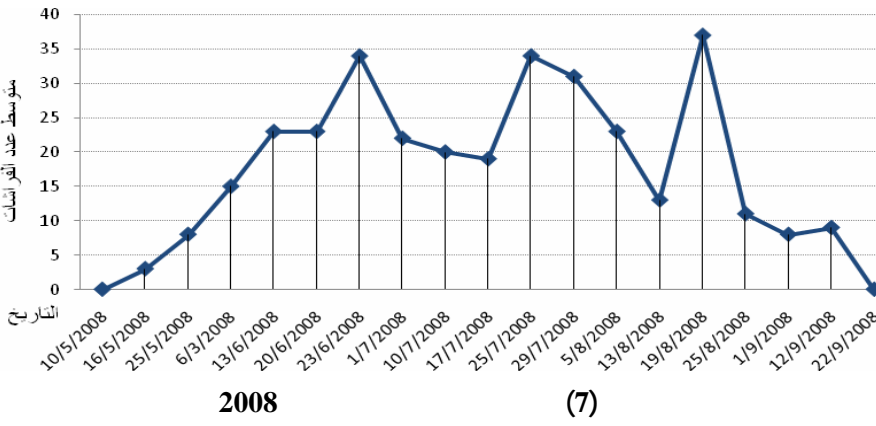
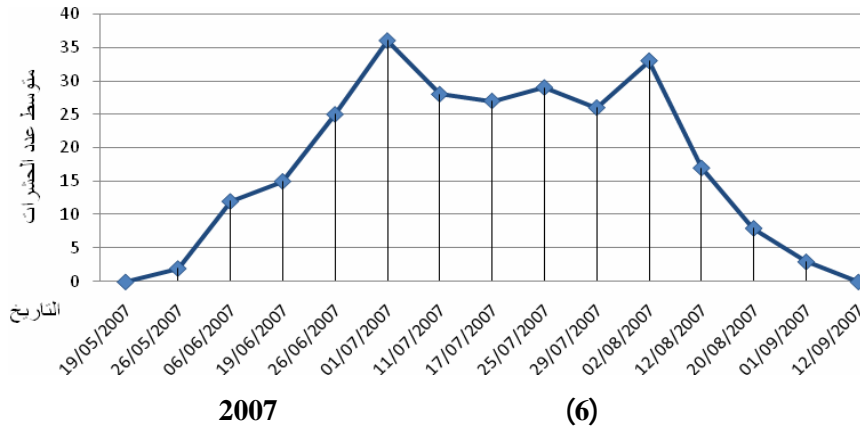


(3)

(1994) Kozlowski

: (4)





Year	Value 1	Value 2	Value 3	Value 4
2004	23	8	30	16
2005	7	30	25	19
2006	8	4	29	25
2007	2	1	26	
2008				

(1979) Charmillot

(1975) Viggiani (1995) Molinari

(5

Guillumé

: •

(Hymenoptera Braconidae) : Ascogaster quadridentatus

(-)

%2

C.pomonella

C.funebrana

(1997) Charmillot

%12

%5

: •

Chalcidoidea Encyrtidae) : Pentalitomastix pyralis :

(Hymenoptera

(%52)

12

0.2

(7-5)

(12)

:(Hymenoptera Bethylidae) *Goniozus* sp. :

0.5

%13

(1984) Green

:(Hymenoptera Ichneumonidae) *Eupalamus* sp :

0,5

9

%2

2007 -2006

:(Hymenoptera Braconidae) *Bracon* sp :

()

4

2

38

17

16

%11

13

(1961) Talilskii

:(Hymenoptera Chalcidae) *Monodontomerus* sp :

12

4

2

%4

%15

: - •

:(Hymenoptera Chalcidae)

:

2

-

6

()

%4

2007

250

Chalcididea)

:
:(Hymenoptera

2
9 -

(H)
%1

: •







(Hymenoptera Pteromalidae) *Pteromalus* sp

()

3
(-)

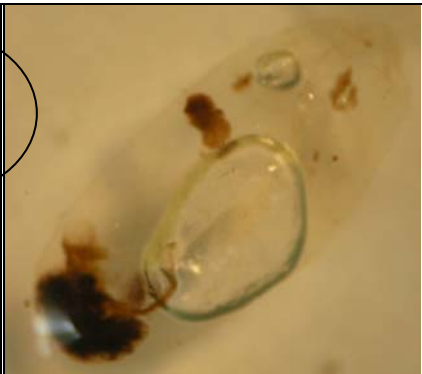
(1992) Greathead Greathead
.Tortricidae

Pteromalus

 <p>16.08.2008 10:23</p>	
<i>Ascogaster quadridentatus</i>	<i>Pentalitomastix pyralis</i>
	 <p>17.08</p>
<i>Goniozus sp</i>	<i>Goniozus sp</i>
	 <p>28.08.2009</p>
<i>Eupalamus sp</i>	<i>Bracon sp</i>



Bracon sp



Bracon sp



Monodontomerus sp



Chalcididae



Chalcididea



Pteromalus sp

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