

Coccinellini
(Coccinellidae, Coleoptera) ()

2004/10/05

2005/02/28

) Coccinellini ()
(Coleoptera Coccinellidae

10 .(2003 2001)

8

Anisosticta novemdecimpunctata (L.)

Hippodamia (Adonia) variegata (Goeze)

Oenopia conglobata (L.) (% 44.9) *H. variegata* (Goeze)

.(% 10.5) *Coccinella septempunctata* L. (% 27.7)

Coccinellini Coccinellidae :

**A contribution to study on tribe Coccinellini
(Coccinellidae, Coleoptera)
in south of Syria**

Nazir Khalil and Abdul Rahman Mourad

Department of Animal Biology-Faculty of Sciences-Damascus University

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ABSTRACT

A study for tribe Coccinellini (Coccinellidae, Coeloptera) was conducted in south of Syria. The objective of this study was to determine the species and their relative abundance. Members of this tribe important for biological control because they are primary predators on aphids. The adults Coccinellids were collected from agriculture and natural ecosystems from August 2001 the end of July 2003. The results revealed the presence of 10 species belonging to 8 genera. The investigation included their abundance and distribution in south of Syria. The species *Anisosticta novemdecimpunctata* (L.) was recorded in Syria for the first time. The Adonis ladybird, *Hippodamia (Adonia) variegata* (Goeze), was the commonest species. and the most abundant ones were *H. variegata* (Goeze) 44.9%, *Oenopia conglobata* (L.) 27.7% and *Coccinella septempunctata* L. 10.5%.

Key Word: Coccinellidae, Coccinellini, Natural Enemies, South of Syria.

.(1984)

) Coccinellini

(Coleoptera

Coccinellidae

.(Yurtsever, 2001)

Coccinella undecempunctata L.

.(Raimundo & van Harten, 2000)

(El- Hariri, 1971 El- Hariri, 1968)

Rechmany *et al.*, 1993)

(Almatni *et al.*, 2002 1999

(1993)

.(2004) ()

Coccinellini

(Habitats)

.2003)

2001

(

45

50

%70

7

1

(Binocular)

Iablokoff- Fürsch, 1979 Hodek, 1973 Dauguet, 1949)

(Majerus & Kearns, 1989 Raimundo & van Harten, 2000 Khnzorian, 1982

(Yaghmaee, 2003)

(Ruderting) Helmut Fürsch

Coccinellini

2002

8

Coccinellini

10

Anisosticta novemdecimpunctata (

(1)

L.)

Coccinellini

(1)

		*	%
<i>Adalia bipunctata</i> L.	12 10 -4 2	4	2.5
<i>Adalia decempunctata</i> (L.)	10 - 6	7	1.2
<i>Anisosticta novemdecimpunctata</i> (L.)	8	1	0.04
<i>Coccinella septempunctata</i> L.	12 - 2	35	10.5
<i>Coccinella undecimpunctata</i> L.	12 - 5	34	5.08
<i>Harmonia quadripunctata</i> (P.)	10 - 4 2	7	2.9
<i>Hippodamia (Adonia) variegata</i> (Goeze)	12 - 1	53	44.9
<i>Oenopia conglobata</i> (L.)	12 - 2	35	27.7
<i>Oenopia oncina</i> (Olivier)	6 5	4	0.29
<i>Propylea quatuordecimpunctata</i> L.	10 - 2	6	4.4

75

*

: *Adalia bipunctata* L.

-1

(1974) Gourreau

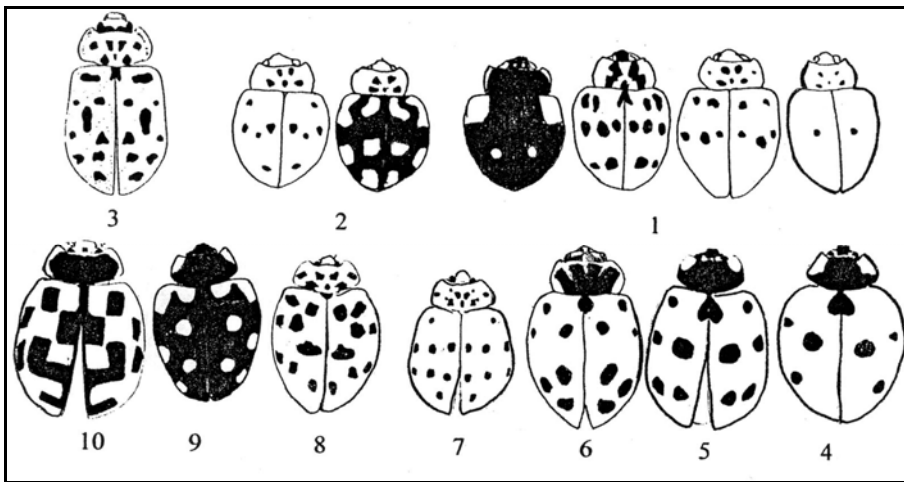
5.7 -3.5

-1

)

150

.(1



Coccinellini

(1)

.(Harde, 1999)

Holarctic

*Urtica dioica**Carduus* spp..(Yurtsever, 2001) *Cirsium* spp.*Chenbopodium alum*

.(1968) El-hariri

. (Majerus, 1994)

()

.(2)

: *Adalia decempunctata* (L.)**-2**

10

. 5 -3.5

.(2-1)

7 5

Palaerctic

.(Harde, 1999)

.(Majerus, 1994)

.(2)

Aphis pomi

(1968) El-hariri

.(Allawi, 1989)

: *Anisosticta novemdecimpunctata* (L.)**-3**

. 4.1 -3

19

7 -6

9

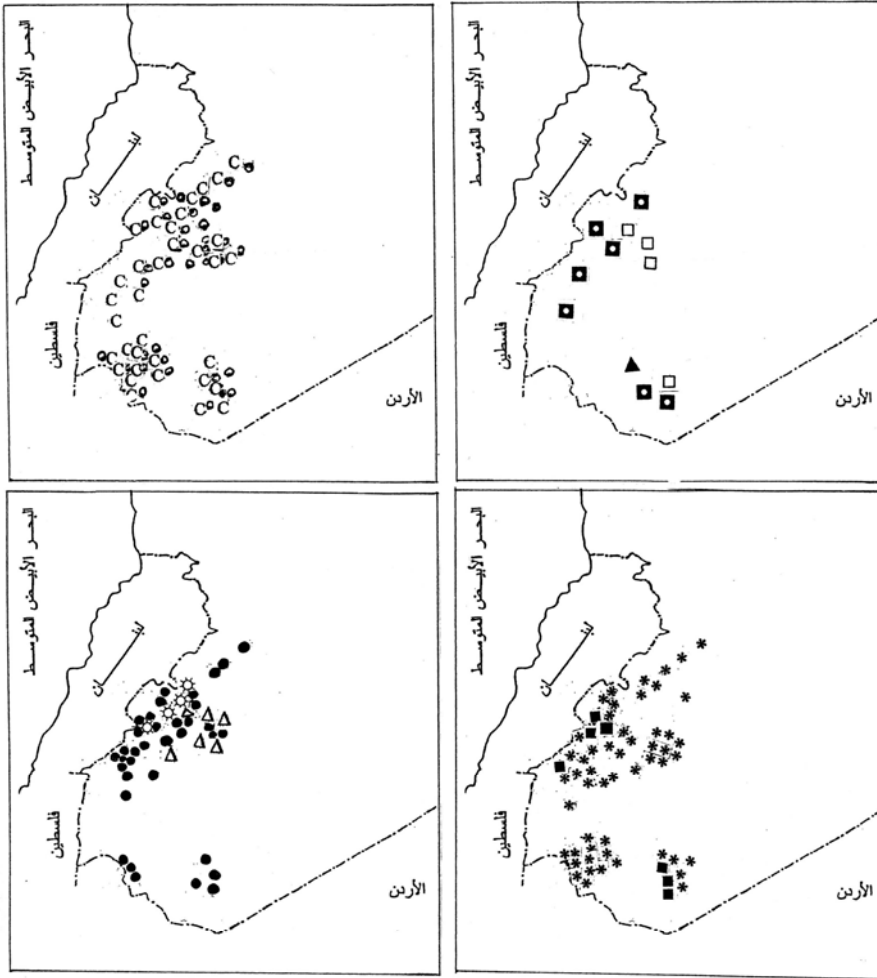
.(3-1)

.(Harde, 1999)

.(Yurtsever, 2001)

.(Majerus & Kearns, 1989) *Typha**Phragmites*

.(2)



، *A. novemdecimpunctata* ▲ ، *A. decempunctata* ◻ ، *A. bipunctata* ◻
 ، *H. quadripunctata* ■ ، *C. undecimpunctata* ○ ، *C. septempunctata* ○
P. quatuordecimpunctata △ ، *O. oncina* ☆ ، *O. conglobata* ● ، *H. variegata* *

Coccinellini

(2)

: *Coccinella septempunctata* L.**-4**

3

. 8 -5.2

.(4-1)

.(Harde, 1999)

.(Iablokoff-Khnzorian, 1982)

Palaerctic

.(Yurtsever, 2001)

.(Majerus, 1994)

250

.(1968) El-hariri

) () :

() ())

.(2) () ()

:

Inula sp.*Foeniculum* sp.

())

)

.(

: *Coccinella undecempunctata* L.**11****-5**

. 6.5

5

)

.(5-1) (

(1997)

.(Raimundo & van Harten, 2000)

)

() : .(1997)

) (
) (
.(2) (-

(Iablokoff-Khnzorian, 1982;

.Majerus, 1994)

Apiaceae

Daucus sp.

(*Lathyrus*

) Fabaceae

Chenopodiacea

.(Majerus, 1994)

:

()
.()

: *Harmonia quadripunctata* (P.) -6

. 6 -5.5

.(6-1)

8

) .(Harde, 1999)

.(2) (

.(Harde, 1999) .

Aphis pomi

.(Allawi, 1989)

: *Hippodamia (Adonia) variegata* (Goeze) -7

. 6.4 - 3

13 - 3

.(7-1) ()

Palaearctic

.(Raimundo *et al*, 2000)

.(Harde, 1999)

() :

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(

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.(2) (

.(Majerus *et al.*, 1997)

.(Yurtsever, 2001)

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Hypericum triquetrifolium

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(

.(

: *Oenopia conglobata* (L.)

-8

8

. 5 -3.5

.(8-1)

.(Harde, 1999)

.(Allawi, 1989)

.(Iablokoff- Khnзорian, 1982)

()

:

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(

) (.(2) (

.(Harde, 1999) *Prunus*

:

) (

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: *Oenopia oncina* (Olivier) -9

6

.(9-1)

.(Iablokoff- Khnzorian, 1982)

.(2) ()

: *Propylea quatuordecimpunctata* L. 14 -10

7 . 5.2 -3.5

.(10-1)

Palaearctic

.2000

.(Iablokoff- Khnzorian, 1982)

.(2) ()

.(Iablokoff-Khnzorian, 1982)

)

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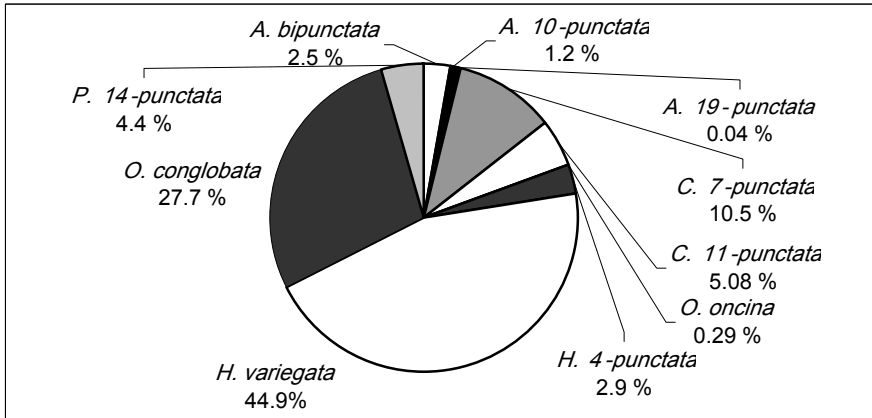
Relative abundance

H. variegata

C. septempunctata L. *O. conglobata* (L.) (Goeze)
(1)

H. variegata

(3)



Coccinellini

(3)

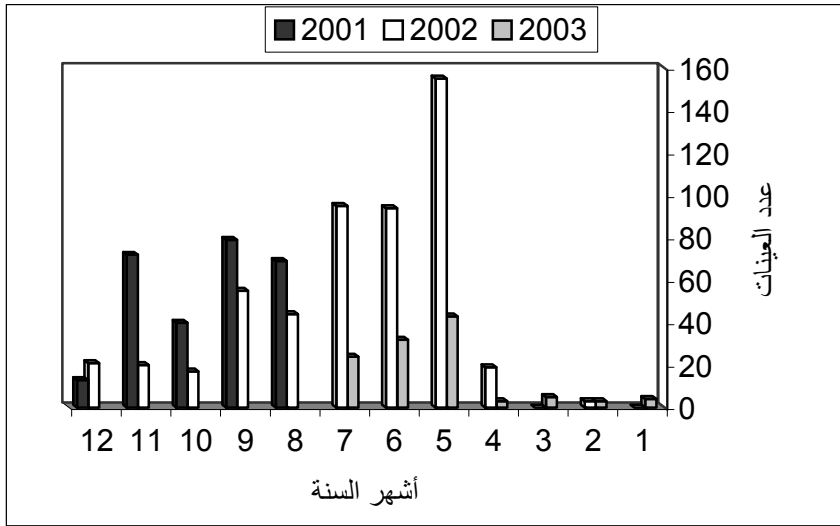
H. variegata

H. variegata

2003

2002

.(4)



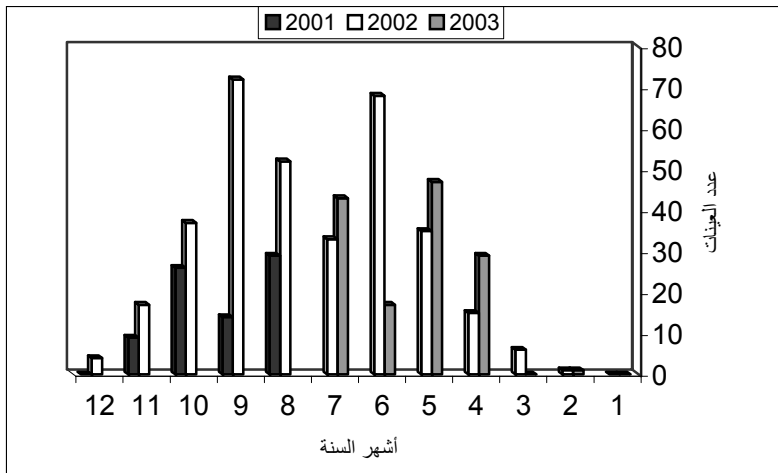
H. variegata (4)

O. conglobata

2002

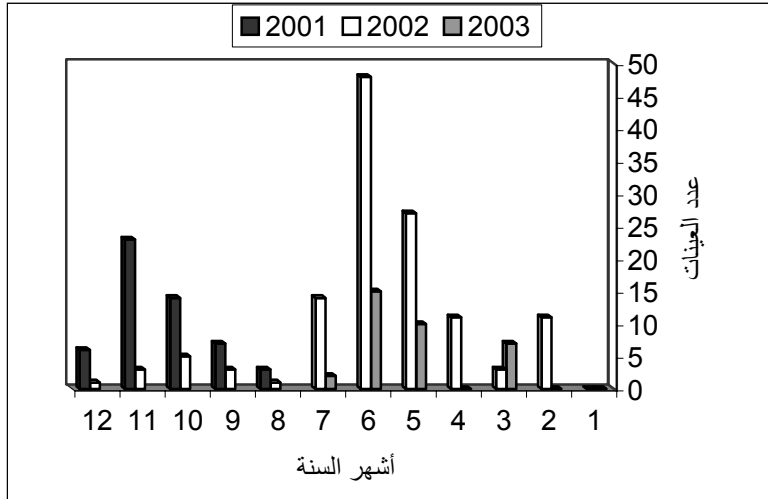
2003 2002

(5)



O. conglobata (5)

2002 *C. septempunctata* 2002 2001
 (2002) Almatni *et al.*
 .(6)



C. septempunctata (6)

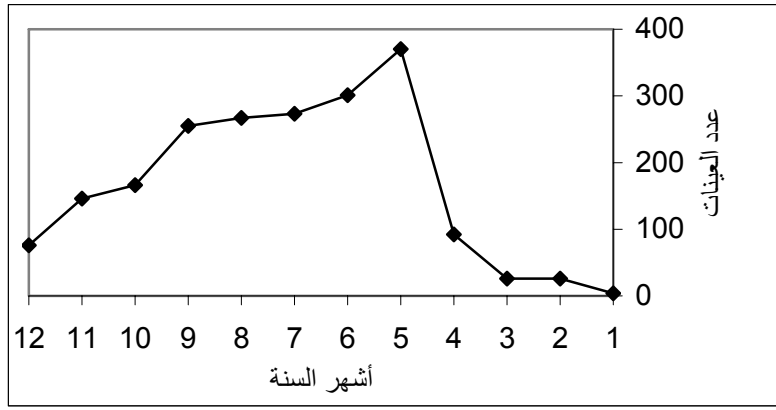
A. decimpunctata *A. bipunctata* *O. oncina* *A. novemdecimpunctata*
 (2001) Yurtsever
A. bipunctata *Coccinula quatuordecimpustulatus*

)

(

(1973) Hodek .(7)

30



Coccinellini

(7)

.(Iperti, 1999)

*C. undecimpunctata**C. septempunctata*

(1986) Klausnitzer & Klausnitzer

A. decimpunctata

.(1999) Iperti

O. conglobata *H. variegata*

.(2)

(2 - 50)

Coccinellini

REFERENCES

- .1999 .
 .40 - 29 .(9) (21)
 .2004 .
 .85 - 65 .(19) .()
 757 . .1997 .
 .1993 .
 .(33)
 .1984 .
 .82 -77 :2
- Allawi, T. F. (1989). A list of predaceous Coccinellids collected in Jordan. *Dirasat*. v. 16, n. 7, 23- 26.
- Almatni, W., Mahmalji, M. Z., and Al-rouz, H. (2002). A preliminary study of some natural enemies of woolly apple aphid *Eriosoma lanigerum* (Hausmann) (Homoptera: Aphididae) in Sweida, Syria. *Damascus University Journal For The Agricultural Sciences*. Vol. 18, No. 1, 117- 129.
- Dauguet, P. (1949). *Les coccinellini de France*. editions de l'entomologiste, Paris, 46 p., 40 Pl.
- El- Hariri, G. (1968). A list of recoded Syrian insects and acari. Faculty of Agriculture, University of Aleppo. Al-Chark printing press. 160 pp.
- El- Hariri, G. (1971). A list of recorded insect fauna of Syria. Part 2. Faculty of Agriculture, University of Aleppo, Aleppo, Syria. 306 pp.
- Fürsch, H. (1979). Insects of Saudi Arabia. Coleoptera: Fam. Coccinellidae. *Fauna of Saudi Arabia* 1, 235- 248.
- Gourreau, J. M. (1974). Contribution à l'Etude de la fauna de France: Systematique de la Tribu des Scymnini (Coccinellidea). *Annales de Zoologie, Ecologie Animale*. Institut National De La Recherche Agronomique. Paris. 223 pp.
- Harde, K. W. (1999). A field guide in colour to Beetles. Blitz editions. Prague. 333 pp.

- Hodek, I. (1973). *Biology of coccinellidae with Keys for identification of larvae by co-authors*. Academia, publishing House of the Czechoslovak Academy of Sciences, Prague. 260 pp.
- Iablokoff- Khnzorian, S. M. (1982). *Les Coccinelles. Coléopteres- Coccinellidae. Tribu Coccinellini des régions Palearctique et Orientale*. Société nouvelles des éditions boubée 11, place Saint-Michel. Paris. 568 pp.
- Iperti, G. (1999). Biodiversity of predaceous coccinellidae in relation to bioindication and economic importance. *Agriculture, Ecosystems and Environment* 74, 323- 342.
- Klausnitzer, B. & Klausnitzer, H. (1986). *Marienkäfer: Coccinellidae. 3., überarbeitete Auflage –Wittenberg Lutherstadt: Ziemsen. Die neue Brehm-Bücherei ; 104 S.*
- Majerus, M.E.N. (1994). *Ladybirds*. Haper Collins. London. UK. 367pp.
- Majerus, M.E.N. & Kearns, P. (1989). *Ladybirds. (No. 10 Naturalists` Handbooks Series) Richmond Publishing Co. Ltd. Slough, England. 103 pp.*
- Majerus, M. E. N., Majerus, T. M. O., Bertrand, D. and Walker, L. E. (1997). The geographic distributions of Ladybirds (Coleoptera: Coccinellidae) in Britain(1984-1994). *Entomologist`s Monthly Magazine*. Vol. 133, 181 – 203.
- Rechmany, N., Miller, R. H., Traboulsi, A. F & Kfoury, L. (1993). The Russian Wheat Aphid, *Diuraphis noxia* (Kurdjumov) (Homoptera: Aphididae), and its Natural Enemies in Northern Syria. *Arab J. Pl. Prot.* 11 (2), 92 – 99.
- Raimundo, A. C. & van Harten, A. (2000). An annotated checklist of the Coccinellidae (Insecta: Coleoptera) of Yemen. *Fauna of Arabia* 18, 211- 243.
- Yurtsever, S. (2001). A preliminary study on the Ladybirds (Coeleoptera: Coccinellidae) of Edirne in Nort-Western Turkey. *Turk. J. Zool.* 25, 71- 75.
- Yaghmaee, F. (2003). Some Coccinellid Scale and Aphid Predators (Coleoptera, Subfamily Chilocorinae) Prevalent in North East, Khorasan of Iran. *Arab J. Pl. Prot.* 21, 60- 62.

(Ruderting) Helmut Fürsch