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**(Heteroptera: Anthocoridae) Anthocorinae**

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**Anthocorinae**

**Anthocorinae**

*Orius niger* Wolf.

*Anthocoris pilosus* (Jakovlev) *O. horvathi* (Reuter) *O. minutus* (L.)

*Acyrtosiphon* *Aphis craccivora* Koch. *Thrips tabaci* Lind.

*O.* *Tetranychus urticae* Koch. *pisum* Har.

*Schizaphis* *Haplothrips tritici* Kur. *niger*

*Sitobium avenae* F. *graminum* Rond.

*O. niger*

*O. niger*

**Anthocorinae**

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*A. nemorum* *O. niger* *O. minutus*

*A. confusus* (Reut.) *A. nemoralis* (Fab.) (L.)

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palerctic

E-mail: mafa1013@yahoo.com

*Orius* spp.

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*Orius*

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*O. niger*

*O. niger*

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*O. minutus*

Anthocorinae

*O. minutus*

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Anthocorinae

Anthocorinae

Anthocorinae

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*Orius* spp.

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*Orius*

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1. *Thrips tabaci* Lindeman

2. *Panonychus almi* Koch

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2 . Hoyer's chloral -hydrate

3 . Paramere

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1 . Nesbitt's solution

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*Anthocoris pilosus* .....( : )

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*Orius* .....( )

*niger*

**Anthocorinae**

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*O. minutus*.....( : )

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*O. horvathi*.....( : )

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SQRT

(x+0/5)

Mstatc SPSS SAS

EXCEL

*O. minutus* *O. niger*

*A. pilosus* *O. horvathi*

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*O. niger*

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8 . Conical process

9 . Tooth

10 . Flagellum

1 . Hierarchical split plot design

2 . Callus

3 . Clavus

4 . Corium

5 . Embolium

6 . Cuneus

7 . Hemelytron

*O. niger*

*O. niger*

*O. minutus*

*A. pilosus*

*Aphis Acyrthosiphon pisum*

*Macrosiphum Trioaphis trifolii* (L.) *craccivora*

*Macrosiphum* sp.

*Myzus persicae* (Sulz.) *euphorbiae* Thom.

*Aphis* spp. *Aulacorthum* spp.

*O. niger*

*A. pilosus* *O. horvathi* *O. minutus*  
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*O. niger*

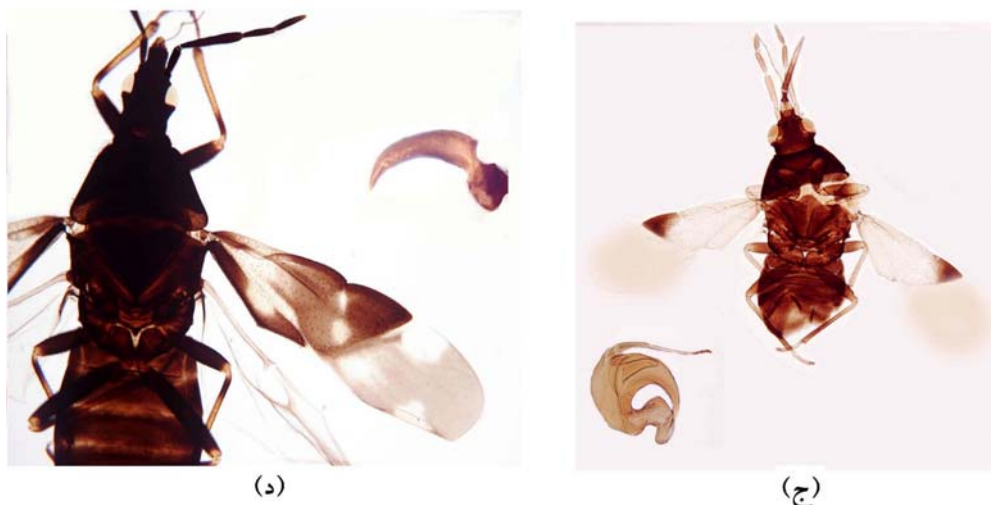
*A. pilosus*

*O. minutus*

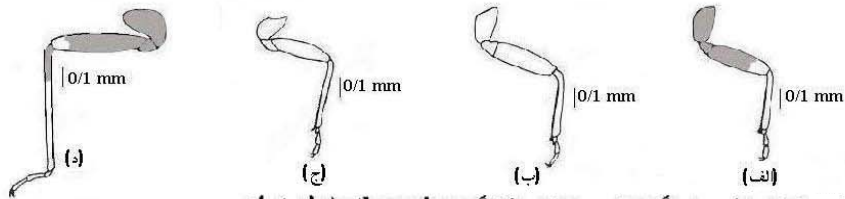
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*O. horvathi*

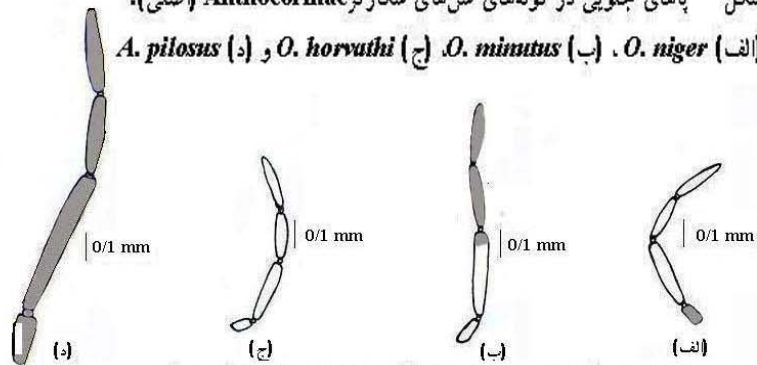
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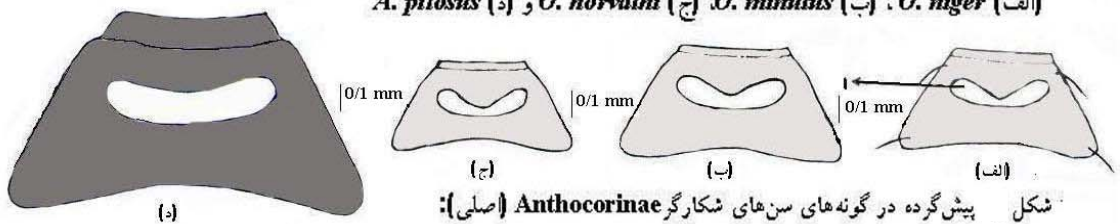
*A. pilosus* ( ) *O. horvathi* ( ) *O. minutus* ( ) *O. niger* ( )



شکل پاهای جلویی در گونه‌های سن‌های شکارگر Anthocorinae (اصلی):  
 (الف) *O. niger*، (ب) *O. minutus*، (ج) *O. horvathi* و (د) *A. pilosus*

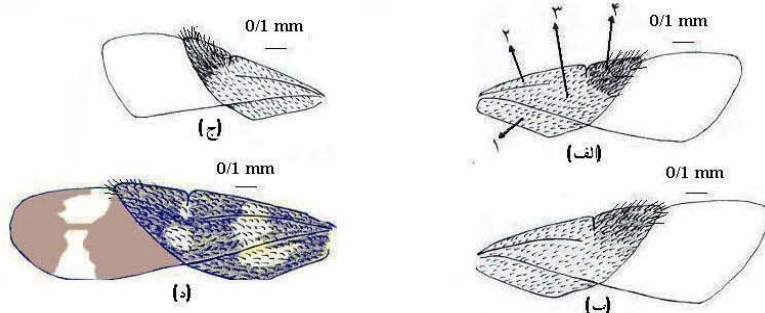


شکل شاخک در گونه‌های سن‌های شکارگر Anthocorinae (اصلی):  
 (الف) *O. niger*، (ب) *O. minutus*، (ج) *O. horvathi* و (د) *A. pilosus*



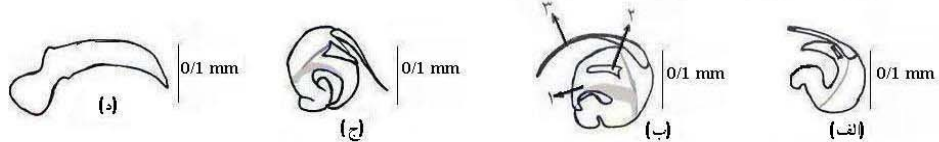
شکل پیش‌گرده در گونه‌های سن‌های شکارگر Anthocorinae (اصلی):  
 (الف) *O. niger*، (ب) *O. minutus*، (ج) *O. horvathi* و (د) *A. pilosus*

1- بینه



شکل نیم‌بالپوش در گونه‌های سن‌های شکارگر Anthocorinae (اصلی):  
 (الف) *O. niger*، (ب) *O. minutus*، (ج) *O. horvathi* و (د) *A. pilosus*

1- کلاوس، 2- امبولیوم، 3- کوریوم و 4- کوننوس



شکل پارامر در گونه‌های سن‌های شکارگر Anthocorinae (اصلی):  
 (الف) *O. niger*، (ب) *O. minutus*، (ج) *O. horvathi* و (د) *A. pilosus*

1 قسمت مخروطی پارامر، 2- دندان و 3- نازک

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<i>A. pilosus</i>	<i>O. horvathi</i>	<i>O. minutus</i>	<i>O. niger</i>
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*O. minutus* ( ) | | *O. niger*

*O. minutus*

( ) *O. horvathi* *O. minutus*

*A. pilosus* *O. horvathi* ( ) *A. pilosus*

( ) *O. niger*

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*O. horvathi* *O. minutus* *O. niger*

*O. niger* ( ) *A. pilosus*

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*O. niger*

( ) *A. pilosus* *O. horvathi* *O. minutus*

*O. niger* ( ) *O. niger*

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*O. niger* ( )

( ) *O. niger*

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*O. niger* ( )

( ) *niger*

*O. niger*

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*O. niger*

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		<i>A. pilosus</i>	<i>O. horvathi</i>	<i>O. minutus</i>	<i>O. niger</i>	
/ a	j	/ bc	/ c	/ d	/ de	/ d
/ bc	/ ef	/ b	/ a	/ a	/ b	/ a
/ d	/ gh	/ gh	/ ab	/ b	/ b	/ b
/ e	/ i	/ i	/ bc	/ c	/ bc	/ c
/ ab	ij	/ c	/ c	/ d	/ de	/ de
/ ab	/ a	/ bc	/ a	/ ab	/ ab	/ ab
/ de	/ de	fg	/ ab	/ c	/ a	/ b
f	/ f	/ hi	/ c	/ d	/ c	/ cd
bc		a				/ e
/ cd		/ ab				/ e
/ bc	/ k	/ ef	/ c	e	e	/ h
/ c	/ gh	/ cd	/ ab	/ ab	/ c	/ ab
c	gh	/ g	/ ab	/ b	/ bc	/ bc
/ e	/ i	/ ij	/ bc	/ c	/ c	/ d
/ bc	jk	/ ef	/ c	e	e	/ h
/ bc	/ cd	/ d	/ ab	/ b	/ bc	/ b
/ de	cd	/ g	/ a	/ c	/ b	/ c
/ f	/ gh	/ i	/ c	/ d	/ cd	/ de
/ cd		/ b				/ f
/ d		/ bc				/ f
/ c	/ k	/ a	/ c	e	e	/ h
/ cd	/ hi	f	/ ab	/ b	/ c	/ cd
d	/ gh	/ gh	/ a	/ bc	/ bc	/ cd
/ e	ij	ij	/ c	/ c	/ cd	/ de
/ c	/ jk	/ g	/ d	e	e	/ h
/ cd	/ de	/ ef	/ bc	/ bc	/ cd	d
/ de	d	/ gh	/ b	/ c	/ bc	/ cd
/ f	/ gh	/ ij	/ c	e	/ d	/ f
/ cd		/ e				/ f
/ cd		/ ef				/ g



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<i>A. pilosus</i>	<i>O. horvathi</i>	<i>O. minutus</i>	<i>O. niger</i>
/ bc	/ ab	/ d	/ cd
/ ab	/ a	/ a	/ a
/ ab	/ bc	/ d	d
/ a	/ ab	/ a	/ a
			/ h
			/ cd
, bc	, bc	, d	d
/ ab	/ ab	/ bc	b
, bc	, bcd	, cd	, de
/ ab	/ ab	/ abc	/ bc
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/ ab	/ bc	, d	, g
		/ bc	/ cd
/ bc	/ bc	, d	, g
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*O. minutus* ( ) *O. niger*

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( ) *O. tristicolor*

*A. pilosus* ( )

*A. pilosus* ( )

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( ) *O. minutus*

*A. pilosus* ( )

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) *A. pilosus*  
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*Orius*

*O. horvathi* ( )  
*O. horvathi*

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*O. insidiosus* ( )  
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*O. minutus* *O. niger* *O. horvathi*

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*O. horvathi*

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*O. niger*

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*O. tricolor* ( )

*O. laevigatus* (Fieber) *O. minutus*

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*A. pilosus* *O. horvathi*

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*Orius* ( ) ( )  
spp.

*O. minutus* *O. niger*

*O. minutus* *O. niger*

*A. pilosus* *O. horvathi*

*O. niger*

*O. niger*

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*Orius niger* Wolff  
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(Homoptera)  
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