

**INTRODUCTION PENTATOMIDS BUGS  
(PENTATOMIDAE: PENTATOMINAE AND  
SCUTELLERINAE) FROM MASHHAD REGION  
AND URBAN (KHORASAN RAZAVI PROVINCE)  
AND THEIR DISTRIBUTION**

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**[Mehneh, A. H., Modarres Awal M. & Rahimi, M. 2010. Introduction Pentatomids bugs (Pentatomidae: Pentatominae and Scutellerinae) from Mashhad region and urban (Khorasan Razavi province) and their distribution. Munis Entomology & Zoology, 5, suppl.: 977-981]**

**ABSTRACT:** During this study, Heteroptera fauna belonging to the Pentatomidae family (subfamilies Pentatominae and Scutellerinae) were collected from Mashhad region, Khorasan Razavi province (NE Iran). Sampling area were different sites, especially weeds during 2008-2009. Totally 27 species from 16 genus were identified. Among them *Carpocoris coreanus* Distant, 1899, was the predominant species in studied areas. The species *Anthemina pusio* (Kolenati, 1846) was identified for the first time from Khorasan Razavi province.

**KEY WORDS:** Pentatominae, Scutellerinae, Khorasan Razavi, Mashhad.

Pentatomid bugs are the largest and the most widespread family in order Heteroptera. More than 100 species was reported from Iran. A number of species from this family are important agricultural pests (Kavar et al., 2006) and cause significant damage on various crops such as wheat and cotton. Pentatomids fauna in Khorasan Razavi province was studied by Linnavuori & Modarres Awal (1998, 1999) and Modarres awal (2008).

#### **MATERIAL AND METHOD**

Sampling was conducted using sweet net on the different hosts, especially weeds. In order to collect pentatomid bugs in Mashhad region sampling sites included Mashhad, Razaviyeh, Torogh, Field of Agricultural College (FAC), Chaheshk and Golmakan areas. Key traits were morphology and position of head, antennae, thorax, wings, especially pygophore and parameres in male genitalia. Some species have been identified and confirmed by Dr. D. A. Rider from North Dakota State University.

#### **RESULTS**

In total, 27 species of 16 genera from subfamilies Pentatominae and Scutellerinae were collected. List of the species is presented.

**Suborder Pentatomomorpha  
Family Pentatomidae Leach, 1815  
Subfamily Pentatominae Amyot and Serville, 1843**

***Acrosternum arabicum* Wagner, 1959**

**Material studied:** Mashhad (FAC): 2 specimens, May 2008. On alfalfa.

**Note:** In Iran, this species has been reported from Sistan and Balouchestan, Gilan, Golestan, Kerman, Khorasan Razavi, Khorasan Shomali, Mazandaran, Semnan, Tehran, Zanjan and Yazd provinces (Hoberlandt, 1995; Linnavuori, 2008).

***Acrosternum breviceps* (Jakovlev, 1889)**

**Material studied:** Golmakan: 1 specimen, June 2008; Mashhad (FAC): 1 specimen, March 2009; Mashhad (Razaviyeh): 2 specimens, June 2008. On alfalfa and grasses.

***Aelia acuminata* (Linnaeus, 1758)**

**Material studied:** Mashhad (FAC): 3 specimens, July 2008; Mashhad (Torogh): 2 specimens, August 2008. On wild gramineae.

**Note:** In Iran, this species has been reported from Ardabil, Azarbaijan, Esfahan, Fars, Gilan, Golestan, Kermanshah, Khorasan Razavi, Khorasan Shomali, Lorestan, Mazandaran, Tehran, Zanjan and Yazd provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Alloeoglypta pretiosa* Kiritshenko, 1952**

**Material studied:** Chaheshk: 1 specimen, August 2008; Mashhad: 2 specimens, April 2008; Mashhad (FAC): 3 specimens, July 2008; Mashhad (Torogh): 2 specimens, August 2008. On poplar and grasses.

***Antheminia lunulata* (Goeze, 1778)**

**Material studied:** Mashhad: 1 specimen, September 2008; Mashhad (FAC): 1 specimen, October 2008; Mashhad (Razaviyeh): 2 specimens, June 2008. On ground.

**Note:** In Iran, this species has been reported from Ardabil, Fars, Ghazvin, Gilan, Golestan, Kerman, Khorasan Razavi, Khorasan Shomali, Mazandaran, Semnan, Yazd and Zanjan provinces (Hoberlandt, 1995; Linnavuori, 2008).

***Antheminia pusio* (Kolenati, 1846)**

**Material studied:** Mashhad (FAC): 2 specimens, May 2008. On grasses.

***Apodiphus amygdali* (Germar, 1817)**

**Material studied:** Chaheshk: 2 specimens, June 2008; Golmakan: 1 specimen, September 2008. On poplar.

***Apodiphus integriceps* Horváth, 1888**

**Material studied:** Mashhad (Torogh): 2 specimens, August 2008. On pine.

**Note:** In Iran, this species has been reported from Ghazvin, Hormozgan, Khorasan Junoubi, Khorasan Razavi, Kerman, Kermanshah and Tehran provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linna- vuori, 2008).

***Brachynema germari* (Kolenati, 1846)**

**Material studied:** Golmakan: 2 specimens, June 2008; Mashhad: 2 specimens, September 2008; Mashhad (Torogh): 1 specimen, July 2008. On grasses.

***Carpocoris coreanus* Distant, 1899**

**Material studied:** Golmakan: 4 specimens, May 2008; 1 specimen March 2009; Mashhad: 2 specimens, April 2008; 1 specimen, July 2008; Mashhad (FAC): 3 specimens, May 2008; 2 specimens, July 2008; 2 specimens, February 2009; Mashhad (Torogh): 2 specimens, April 2008; 3 specimens, August 2008. on alfalfa and grasses.

**Note:** *Carpocoris coreanus* Distant, 1899 is the predominant species in collected areas. The diagnostic trait of species, pygophore and paramere drawing is presented in figure 1.

***Chroantha ornata* (Herrich-Schaeffer, 1842)**

**Material studied:** Chaheshk: 4 specimens, October 2008; 2 specimens, February 2009; Mashhad (Torogh): 2 specimens, August 2008. On grasses and ground.

**Note:** In Iran, this species has been reported from Sistan and Balouchestan, East Azarbaijan, Fars, Ghazvin, Gilan, Hormozgan, Kerman, Khorasan Razavi, Khorasan Shomali, Markazi, Mazandaran, Semnan, Tehran, Yazd and Zanjan provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Cnephosa flavomarginata* Jakovlev, 1880**

**Material studied:** Mashhad: 1 specimen, April 2008; Mashhad (FAC): 1 specimen, July 2008. On ground.

***Codophila maculicollis* (Dallas, 1851)**

**Material studied:** Golmakan: 2 specimens, June 2008. On grasses.

**Note:** In Iran, this species has been reported from Sistan and Balouchestan, Fars, Kerman, Khorasan Razavi, and Khuzestan provinces (Hoberlandt, 1995; Modarres Awal, 1997).

***Codophila varia* (Fabricius, 1787)**

**Material studied:** Chaheshk: 2 specimens, August 2008; Mashhad: 3 specimens, May 2008; 1 specimen, July 2008; Mashhad (FAC): 2 specimens, July 2008. On grasses.

**Note:** In Iran, this species has been reported from Ardabil, East Azarbaijan, Fars, Gilan, Golestan, Khorasan Razavi, Khorasan Shomali, Mazandaran, Semnan, Tehran and Zanjan provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Dolycoris penicillatus* Horváth, 1904**

**Material studied:** Golmakan: 2 specimens, May 2008; Mashhad (FAC): 1 specimen, May 2008; 2 specimens, March 2009; Mashhad (Razaviyeh): 2 specimens, August 2008; 1 specimen, September 2008. On poa, grasses and wheat.

**Note:** In Iran, this species has been reported from Ardabil, Boushehr, East Azarbaijan, Esfahan, Fars, Ghazvin, Hormozgan, Kerman, Kermanshah, Khorasan Razavi, Khorasan Shomali, Kohkilouye and Boyer Ahmad, Khuzestan, Lorestan, Markazi, Semnan, Sistan and Balouchestan, Tehran and Yazd provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Eurydema ornata* (Linnaeus, 1758)**

**Material studied:** Chaheshk: 1 specimen, June 2008; Mashhad: 1 specimen, July 2008; Mashhad (FAC): 2 specimens, May 2008. On grasses and ground.

**Note:** In Iran, this species has been reported from Ardabil, Azarbaijan, Sistan and Balouchestan, Esfahan, Gilan, Golestan, Kerman, Kermanshah, Khorasan Razavi, Khorasan Shomali, Khuzestan, Lorestan, Mazandaran, Tehran and Zanjan provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Eurydema ventralis* (Kolenati, 1846)**

**Material studied:** Mashhad: 2 specimens, September 2008; Mashhad (FAC): 1 specimen, July 2008. On wild crucifereae family plants.

***Eysarcoris ventralis* (Westwood, 1837)**

**Material studied:** Mashhad: 2 specimens, October 2008; Mashhad (FAC): 1 specimen, May 2008; Mashhad (Razaviyeh): 1 specimen, June 2008; 4 specimens, August 2008; Mashhad (Torogh): 2 specimens, July 2008; 1 specimen, August 2008. On grasses.

**Note:** In Iran, this species has been reported from Ardabil, Sistan and Balouchestan, Fars, Gilan, Golestan, Kerman, Khorasan Razavi, Khorasan Shomali, Khuzestan, Lorestan, Markazi, Mazandaran, Semnan, Tehran, Yazd and Zanjan provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Holcostethus capitatus* (Jakovlev, 1889)**

**Material studied:** Mashhad: 2 specimens, July 2008. On grasses.

***Mustha spinulosa* (Lefebvre, 1831)**

**Material studied:** Mashhad: 1 specimen, April 2008. On ground.

**Note:** In Iran, this species has been reported from Azarbaijan, Fars, Gilan, Golestan, Khorasan Razavi, Khorasan Shomali, Mazandaran, Semnan and Tehran provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Nezara viridula* (Linnaeus, 1758)**

**Material studied:** Chaheshk: 1 specimen, August 2008; Golmakan: 1 specimen, September 2008. On grasses.

**Note:** In Iran this species has been reported from Ardabil, Fars, Gilan, Golestan, Mazandaran, Kerman, Khorasan, Kordestan, Khuzestan and Zanjan provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Palomena prasina* (Linnaeus, 1761)**

**Material studied:** Mashhad (Torogh): 2 specimens, July 2008. On grasses.

***Pausias martini* (Puton, 1890)**

**Material studied:** Mashhad (FAC): 2 specimens, October 2008. On ground.

**Note:** In Iran, this species has been reported from Ardabil, Esfahan, Fars, Gilan, Kerman, Khorasan, Kordestan, Semnan and Tehran provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Rhaphigaster brevispina* Horvath, 1889**

**Material studied:** Chaheshk: 1 specimen, August 2008; Mashhad: 2 specimens, September 2008; 1 specimen, February 2009. On grasses and ground.

**Note:** In Iran, this species has been reported from Ardabil, Fars, Gilan, Khorasan Razavi and Tehran provinces (Linnavuori, 2008; Modarres Awal, 2008).

***Stagonomus amoenus* (Brullé, 1832)**

**Material studied:** Golmakan: 2 specimens, May 2008. On ground.

**Subfamily Scutellerinae Leach, 1815*****Graphosoma lineatum* (Linnaeus, 1758)**

**Material studied:** Golmakan; 1 specimen, June 2008; Mashhad: 2 specimen, July 2008. On ground.

**Note:** In Iran, this species has been reported from East Azarbaijan, Ghazvin, Gilan, Golestan, Khorasan Razavi, Khorasan Shomali, Mazandaran, Tehran and Zanjan provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

***Graphosoma semipunctatum* (Fabricius, 1775)**

**Material studied:** Chaheshk: 1 specimen, June 2008; Mashhad (FAC): 1 specimen, May 2008. On grasses.

**Note:** In Iran, this species has been reported from Azarbaijan, Fars, Gilan, Kerman, Khorasan Razavi, Semnan and Tehran provinces (Hoberlandt, 1995; Modarres Awal, 1997; Linnavuori, 2008).

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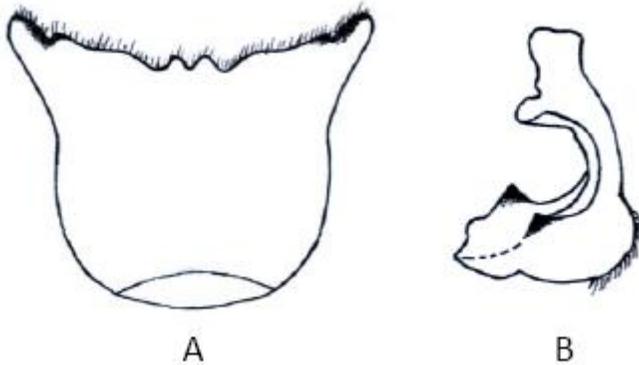


Figure1. *Carpocoris coreanus* Distant, 1899: A- Pygophore, B- Right paramere