

HEMIPTERA (HETEROPTERA) FROM VARZEGHAN, NW IRAN: PENTATOMOMORPHA, NEPOMORPHA, GERROMORPHA, LEPTOPODOMORPHA

Somayeh Jafari*, **Ahmad Atamehr****
and **Hossein Lotfalizadeh*****

* Department of Plant Protection, Tabriz branch, Islamic Azad University, Tabriz, IRAN.

** Department of Plant Protection, Ardabil Branch, Islamic Azad University, Ardabil, IRAN.

*** Department of Plant Protection, Agricultural and Natural Resources Research Center of East Azarbaijan, Tabriz, IRAN.

[Jafari, S., Atamehr, A. & Lotfalizadeh, H. 2017. Hemiptera (Heteroptera) from Varzeghan, NW Iran: Pentatomomorpha, Nepomorpha, Gerromorpha, Leptopodomorpha. Munis Entomology & Zoology, 12 (1): 328-331]

ABSTRACT: In this project the fauna of 8 families dependent to infraorders Pentatomomorpha, Nepomorpha, Gerromorpha, Leptopodomorpha (Hemiptera: Heteroptera) including Pentatomoidae, Coreidae, Scutelleridae, Corixidae, Notonectidae, Gerridae, Hydrometridae, Saldidae we studied in Varzaqan and its vicinity, East-Azarbaijan province in the northwest of Iran. During 2011-2013 totally 24 species from 21 genera were identified.

KEY WORDS: Hemiptera, Heteroptera, Varzeghan, Iran

The true bugs (Hemiptera: Heteroptera) are aquatic, semi-aquatic and terrestrial species. Some terrestrials live in concealed habitats (e.g. beneath litter or bark, in the soil, etc.) (Anufriev et al., 1998). Corixidae feed on algae and small aquatic animals; all other water bugs, all bugs living on the surface of water (water striders) and at the shores (Saldidae, Ochteridae) are predacious. Most Pentatomomorpha are phytophagous, only some Lygaeidae and Pentatomidae secondarily became predacious (Anufriev et al., 1998). The terrestrial Heteroptera deposit eggs in plant tissues (Miridae, Nabidae, etc.) or lay them on the surface of plants and other objects (Reduviidae, all Pentatomomorpha) (Anufriev et al., 1998).

Varzeghan is a county which situated in East Azarbaijan province and jointed with Arasbaran protected area at the north west of Iran.

The fauna of Heteroptera from northwest of Iran was so far studied and published by Modarres (1987 & 1996), Farshbaf (2000), Sadeghi (2004), Sadaghian et al. (2004), Khalilzadeh et al. (2005), Askari et al. (2009), Gharaat et al. (2009), Hassanzadeh et al. (2009 a,b), Nateq Golestan et al. (2010), Havaskary et al. (2010, 2012), Nikdel et al. (2011). This research aimed to identification of recently collected Heteroptera from Varzeghan region.

MATERIAL AND METHOD

The terrestrial specimens were collected by sweeping net, light trap, aspirator. Samplings were made during 2011-2013. In aquatic collecting, nets were used to sweep the surface of the water. Identifications of the species were confirmed by Dr. P. Moulet (Museum Requiens, France). The examined material was deposited at the Entomology Laboratory of Tabriz Islamic Azad University.

RESULTS

In the current project 24 species from 22 genera and 8 families were collected and identified. All of the species are new for Varzeghan County. The list of species is given below.

Infraorder Pentatomomorpha**Family Coreidae Leach, 1815****Subfamily Coreinae Leach, 1815*****Centrocoris spiniger* (Fabricius, 1781)**

Material Examined: Astemal (4 specimens), 6 August 2011.

***Coreus marginatus marginatus* (Linnaeus, 1758)**

Material Examined: Sari Chaman (4 specimens), 20 June 2013; Gol Akhor (1 specimen), 5 June 2011; Joshin (2 specimens), 18 July 2013; Someh del (8 specimens), 18 May 2011.

***Syromastus rhombeus* (Linnaeus, 1767)**

Material Examined: Someh del (2 specimens), 18 May 2011.

Subfamily Pseudophloeinae Stål, 1868***Ceraleptus gracilicornis* (Herrish-Shaffer, 1833)**

Material Examined: Siah Kalan (1 specimen), 5 June 2012.

***Coriomeris scabricornis* (Panzer, 1809)**

Material Examined: Baker Abad (1 specimen), 18 July 2013.

Family Pentatomidae Leach, 1815**Subfamily Pentatominae Leach, 1815*****Carpocoris* (*Carpocoris*) *fuscispinus* (Boheman, 1849)**

Material examined: Gol Akhor (4 specimens), 5 June 2012; Marz Abad (2 specimens), 12 May 2013; Central Dizmar (1 specimen) 5 June 2012; Arazil (5 specimens), 5 August, 2011; Lilab (2 specimens), 1 July 2013.

***Dolycoris baccarum* (Linnaeus, 1758)**

Someh del (8 specimens), 18 May 2011; Central Dizmar (6 specimens) 5 June 2012; Lilab (5 specimens), 1 July 2013.

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

Material examined: Azomdel (2 specimens) 12 May 2012; Joshin (5 specimens), 1 June 2013; Dizmar (3 specimens), 25 July 2013.

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

Material Examined: Joshin (3 specimens), 1 June 2013.

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

Material Examined: Central Dizmar (2 specimens) 5 June 2012; Sari Chaman (4 specimens), 20 June 2013.

***Sciocoris* (*Sciocoris*) *sulcatus* Fieber, 1851**

Material Examined: Sina (6 specimens), 5 June 2012.

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

Material Examined: Sina (9 specimens) 5 June 2012; Gol Akhor (6 specimens), 5 June 2012; Marz Abad (3 specimens), 12 May 2013; Central Dizmar (2 specimens) 5 June 2012; Arazil (12 specimens), 5 August, 2011.

***Graphosoma lineatum lineatum* (Linnaeus, 1758)**

Material Examined: Lilab (2 specimens), 1 July 2013.

Family Scutelleridae Leach, 1815**Subfamily Eurygastrinae Amyot & Serville, 1843**

***Eurygaster integriceps* Puton, 1881**

Material Examined: Lilab (9 specimens), 1 July 2013; Sina (Many specimens) 5 June 2012; Gol Akhor (12 specimens), 5 June 2012; Marz Abad (3 specimens), 12 May 2013; Central Dizmar (8 specimens) 5 June 2012; Arazil (9 specimens), 5 August, 2011.

Subfamily Odontotarsinae Mulsant & Rey, 1866***Odontotarsus purpureolineatus* (Rossi, 1790)**

Material Examined: Dizmar (2 specimens) 5 June 2012.

Infraorder Nepomorpha Popov, 1968**Family Corixidae (Leach, 1815)****Subfamily Corixinae Leach, 1815*****Corixa* sp.**

Material examind: Dashly chay Stream (3 specimens), 15 June 2013.

***Sigara (Eremocorixa) iranica* (Lindberg, 1964)**

Material Examined: Vardin Pond (3 specimens), 4 June 2013; Andergan River (2 specimens), 4 June 2013; Dizaj River (11 specimens), 25 June 2013; Dashiy chay Stream (6 specimens), 1 July 2013.

***Sigara (Vermicorixa) lateralis* (Leach, 1817)**

Material Examined: Dizaj Pond (1 specimen), 25 June 2013.

***Sigara (Pseudovermicorixa) nigrilineata nigrolineata* (Fieber, 1848)**

Material Examined: Dizaj Pond (24 specimens), 25 June 2013; Kheiradin Pond (15 specimens), 26 June 2013; Dashly chay Stream (15 specimens), 7 July 2013; lalalu Pond (4 specimens), 6 September 2013; Kasin Pond (41 specimens), 27 septanber 2013.

Family Notonectidae (Latreille, 1802)**Subfamily Notonectinae Latreill, 1802*****Notonecta viridis* (Delcourt, 1909)**

Material Examined: Dashly chay Stream (7 specimens), 25 June 2013; Astemal River (8 specimens), 13 September 2013; Dizaj Pond (2 specimens), 7 October 2013.

Inferaorder Gerromorpha Popov, 1971**Family Gerridae (Leach, 1815)*****Gerris (Gerris) costae fiebri* (Stichel, 1938)**

Material Examined: Arzil River (3 specimens), 25 June 2013; Dashly chay Stream (1 specimen), 7 July 2013; Lalalu Pond (2 specimens), 6 September 2013.

***Gerris (Gerris) thoracicus* (Schummel, 1832)**

Material examind: Varzaqun River (2 specimens), 4 June 2013; Lalalu Pond (2 specimens), 6 September 2013; Dizaj Pond (3 specimens), 29 September 2013.

Family Hydrometridae (Billberg, 1820)**Subfamily Hydrometrinae Billberg, 1820*****Hydrometra stagnorum* (Linnaeus, 1758)**

Material Examined: Arzil River (1 specimen), 25 June 2013; Andargan River (1 specimen), 25 June 2013; Dashly chay Pond (1 specimen), 15 July 2013.

Infera order Leptopodomorpha Popov, 1971**Family Saldidae (Amyot & Selville, 1843)**

Subfamily Saldinae Amyot & Selvil, 1843***Saldula arenicola* (Scholtz, 1874)**

Material Examined: Around the Andargan basin. (1 specimen), 25 June 2013; Dashly chay Stream (1 specimen), 25 June 2013.

We are indebted to Dr. Reza Farshbaf (Department of Plant Protection, Tabriz University) for his invaluable helps and editing of this manuscript. The authors are grateful to Dr. P. Moulet (Museum Requien, France) and Mr. Mohammad Havaskary (Tehran central Young Researchers Club, Islamic Azad University) for confirmation of materials.

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