FAUNA OF PLANT BUGS (HEMIPTERA: HETEROPTERA: MIRIDAE) FROM JOLFA AND VICINITY, NW IRAN

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ABSTRACT: The fauna of plant bugs (Hemiptera: Heteroptera: Miridae) from Jolfa county (East Azarbaijan province, Iran) and its vicinity is studied in this paper. Base on different sampling projects conducted during 2010-2012, totally 30 species from 18 genera and 5 subfamilies including Bryocorinae, Deraeocorinae, Mirinae, Orthotylinae, Phylinae were identified.

KEY WORDS: Heteroptera, Miridae, Fauna, Jolfa, Iran.

Heteroptera (Hemiptera) with more than 40,000 described species are part of the most successful radiation of nonholometabolous insects (Weirauch & Schuh 2011). Within the Heteroptera the plant bugs or Miridae constitute the largest family with more than 10,000 described species (Schuh 1995). It is expected that the family may contain twice as many species (Schaefer & Panizzi 2000). Plant bugs are commonly phytophagous, but some species are generalist predators of plant-feeding insects and mites and are associated with many common pests of ornamental trees and shrubs (Schuh & Slater 1995). Even though the mirids contain many economically important species, its taxonomy and systematic contains some problems. This is a result of the large number of included taxa and the uniformity of external morphology of many genera (Wyniger, 2004).

The fauna of Iranian Plant bugs (Hemiptera: Heteroptera: Miridae) studied rather well in some provinces by Linnavuori (1997, 1998, 2007, 2010), Linnavuori and Modarres Awal (1998) and Hosseini (2013) but Jolfa and its vicinity has been not deliberated so far. Thus the present research focused to determine of leaf bugs in this area. Jolfa is one of the most important border towns for the Islamic Republic of Iran where is situated between "Kiamaki" mountains and Aras river littorals in the East Azarbaijan province that is surrounded by Marand and Varzegan cities in the south, Khodafarin county in the east (East Azarbaijan Province), West Azarbaijaban Province in the west, Armenia and Azerbaijan counties in the north.

MATERIALS AND METHODS

The specimens of this research were collected through the years 2010-2012, mainly by sweeping of vegetation and light trapping. Collected materials were put in ethanol 70% for identification in suitable time. These data have also been included in this paper. Specific name, author and description date, locality and date of collection are provided. The system and nomenclature follow principally Aukema & Rieger (1999).
RESULTS

A total of 30 species in 18 genera of plant bugs (Hemiptera: Heteroptera: Miridae) are listed in this paper, which are given alphabetically in below.

Subfamily Bryocorinae

*Macrolophus pygmaeus* Rambur, 1839
Material examined: Kordasht (3 specimens), 13 May 2011.

Subfamily Deraeocorinae

*Deraeocoris lutescens* Schilling, 1837
Material examined: Jolfa grasslands (3 specimens), 1 June 2010.

*Deraeocoris punctulatus* Fallén, 1807
Material examined: Marand (5 specimens), 26 May 2010; Siah Rod (2 specimens), 30 May 2011; Nordoz (4 specimens), 10 June 2012.

*Deraeocoris serenus* Douglas & Scott, 1868
Material examined: Marand (2 specimens), 26 May 2010; Golan (3 specimens), 12 June 2012; Oshtobin (1 specimen), 7 July, 2011.

Subfamily Mirinae

*Adelphocoris lineolatus* Goeze, 1778
Material examined: Marand (45 specimens), 10 July 2010; Golan (21 specimens), 12 June 2012; Oshtobin (19 specimen), 7 July, 2011. Jolfa 25 August 2011 (25 specimens), 13 September 2010 (32 specimens); Nordoz (17 specimens), 10 June 2012; Misan (11specimens), 30 May 2011; Varzegan (14 specimens) 4 June 2010; Kordasht (22 specimens), 28 May 2011.

*Adelphocoris vandalicus* Rossi, 1790
Material examined: Siah Rod (10 specimens), 30 May 2011; Misan (3 specimens) 3 June 2012; Oshtobin (8 specimens), 7 July, 2011; Jolfa grasslands (4 specimens), 1 June 2010.

*Charagochilus gyllenhali* Fabricius, 1807
Material examined: Near of Scent Stepanus Church (4 specimens) 18 June 2010.

*Eurystylus bellevoyei* Reuter, 1879
Material Examined: Marand (3 specimens), 26 May 2010.

*Lygus gemellatus* Herrich-Schaeffer, 1835
Material Examined: Siahrod (7 specimens), 2 July 2012; Golan (6 specimens), 1 June 2012; Alamdar (3 specimens), 5 June 2011.

*Lygus pratensis* Linnaeus, 1758
Material Examined: Alamdar (12 specimens), 5 June 2011; Near of Scent Stepanus Church (7 specimens) 18 June 2010; Kordasht (5 specimens), 13 May 2011.

*Lygus rugulipennis* Poppius, 1911
Material Examined: Siah Rod (8 specimens), 30 May 2011; Oshtobin (6 specimens), 7 July, 2011.

*Orthops frenatus* Horváth, 1894
Material Examined: Marand (5 specimens), 10 July 2010; Haras (4 specimens) 4 June 2012.

*Orthops kalmii* Linnaeus, 1758
Material Examined: Kordasht (7 specimens), 13 May 2011; Haras (2 specimens) 4 June 2012.

*Orthops pilosulus* Jakovlev, 1877
Material Examined: Oshtobin (3 specimens), 7 July, 2011.

*Phytocoris varipes* Boheman, 1852
Material Examined: Alamdar (12 specimens), 5 June 2011.

*Polymerus brevicornis* Reuter, 1879
Material Examined: Near of Scent Stepanus Church (9 specimens) 18 June 2010; Marand (8 specimens), 26 May 2010; Siah Rod (11 specimens), 30 May 2011.

*Polymerus cognatus* Fieber, 1858
Material Examined: Siahrod (4 specimens), 2 July 2012; Misan (7 specimens), 30 May 2011.
Polymerus vulneratus Panzer, 1806
Material Examined: Jolfa grasslands (6 specimens), 1 June 2010; Golan (8 specimens), 1 June 2012.

Stenodema calcarata Fallén, 1807
Material Examined: Nordoz (2 specimens), 10 June 2012.

Stenodema turanica Reuter, 1904
Material Examined: Misan (15 specimens), 30 May 2011; Kordasht (6 specimens), 13 May 2011; Marand (9 specimens), 20 May 2012; Oshtobin (10 specimen), 7 July, 2011.

Trigonotylus pulchellus Hahn, 1834
Material Examined: Kordasht (2 specimens), 28 May 2011.

Subfamily Orthotylinae

Blepharidopterus diaphanus Kirschbaum, 1856
Material Examined: Golan (2 specimens), 1 June 2012.

Orthotylus flavosparsus (C. R. Sahlberg, 1841)
Material Examined: Varzegan (4 specimens) 4 June 2010; Oshtobin (19 specimen), 7 July, 2011.

Orthotylus minutus Jakovlev, 1877
Material Examined: Siahrod (3 specimens), 2 July 2012; Near of Scent Stepanus Church (5 specimens) 18 June 2010.

Subfamily Phylinae

Campylomma diversicorne Reuter, 1878
Material Examined: Oshtobin (5 specimens), 7 July, 2011; Near of Scent Stepanus Church (4 specimens) 18 June 2010.

Campylomma verbasci Meyer-Dür, 1843
Material Examined: Misan (2 specimens), 30 May 2011; Jolfa grasslands (4 specimens), 1 June 2010.

Oncotylus setulosus Herrich-Schaeffer, 1837
Material Examined: Near of Scent Stepanus Church (3 specimens) 18 June 2010.

Oncotylus viridiflavus longipes Wagner, 1954
Material Examined: Golan (3 specimens) 2 June 2011.

Pilophorus confusus Kirschbaum, 1856
Material examined: Kordasht (2 specimens), 28 May 2011.

Plagiognathus bipunctatus Reuter, 1883
Material Examined: Oshtobin (3 specimens), 7 July, 2011.

Tuponia elegans Jakovlev, 1881
Material Examined: Jolfa grasslands (2 specimens), 1 June 2010.

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LITERATURE CITED


