

COREOIDEA (HEMIPTERA: HETEROPTERA) OF ARAS FREE ZONE AND VICINITY, NW IRAN

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ABSTRACT: Survey of Coreoidea fauna along southern side of Aras River in the Aras free zone (East Azarbaijan province, North West of Iran) was conducted during 2011-2014. A total of 27 species belonging to 4 families including Alydidae, Coreidae, Rhopalidae, Stenocephalidae were identified.

KEY WORDS: Hemiptera, Heteroptera, Coreoidea, Fauna, Aras Free Zone, Iran.

The fauna of Iranian Coreoidea is studied by Askari et al. (2010), Khaganinia et al. (2010a,b, 2011), Hoberlandt (1985, 1989), Hoberlandt & Švihla (1990a,b), Hosseini & Linnavuori (2002), Linnavuori & Modarres (1998), Heiss (2002), Dolling (2006), Linnavuori (2007), Farshbaf (2000), Hassanzadeh et al. (2009a,b), Havaskary (2012), Havaskary et al. (2010), Modarres Awal (1996a,b, 1997a,b), but the Aras free zone is not studied so far.

Aras Free Zone with an area of 51,000 hectares including three parts of Jolfa, Nardoos and Khodafarin is located in northwest of Iran at the border neighboring Nakhchivan Autonomous Republic, Armenia and Azerbaijan countries. This reserve is adjoined with Arasbaran region in Khodafarin town (Fig. 1). Arasbaran protected area contains mountains up to 2,200 meters (altitude between 250 and 2 887 meters above sea level), high alpine meadows, semi-arid steppes, meadows and forests, rivers and springs.

MATERIAL AND METHOD

The specimens were collected by sweeping net, light trap and directly with forceps from the various locations of Aras Free Zone and its neighborhood (East Azarbaijan Province, North west Iran). Collected materials were put in ethanol 70% for identification in suitable time. Specific name, author and description date, locality and date of collection are provided. The system and nomenclature follow principally Aukema & Rieger (2006).

RESULTS

In the current study totally 27 species of 4 families were determined from Aras free Zone and its adjacent area.

Family Alydidae Amyot & Serville, 1843 **Subfamily Alydinae Amyot & Serville, 1843** ***Camptopus lateralis* (Germar, 1817)**

Material Examined: Golibaglo of Khodafarin (4 specimens) 22 May 2012; Oshtobin (4 specimens), 1 July 2011; Marand (5 specimens), Eshgali ojagi of Khodafarin (4 specimens), 10 July 2013; Golan (2 specimens), 12 June 2012; Oshtobin (3 specimens), 7 July, 2011.

Jolfa (7 specimen), 25 August 2011; Nordoz (7 specimens), ; Misan (2 specimen) 3 June 2012; 10 June 2012; Kordasht (5 specimens), 28 May 2011.

***Camptopus tragacanthae* (Kolenati, 1845)**

Material Examined: Oshtobin (1 specimen), 1 July 2011.

Family Coreidae Leach, 1815

Subfamily Coreinae Leach, 1815

***Centrocoris spiniger* (Fabricius, 1781)**

Material examined: Marand (2 specimens), Eshgali ojagi of Khodafarin (2 specimens), 10 July 2013; Misan (3 specimens) 3 June 2012; Kordasht (2 specimens), 28 May 2011. Misan (2 specimen) 3 June 2012; 10 June 2012; Parsabad (4 specimens), 22 May 2011.

***Centrocoris volxemi* (Puton, 1878)**

Material examined: Oshtobin (1 specimen), 7 July, 2011.

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

Material Examined: Marand (10 specimens), 2 August 2014; Alamdar (7 specimens), 5 June 2011; Scent Stepanus Church grasslands (2 specimens), 18 June 2013; Kordasht (8 specimens), 13 May 2011. Golibaglo of Khodafarin (5 specimens) 22 May 2012; Oshtobin (3 specimens), 1 July 2011; Golan (7 specimens), 12 June 2012; Jolfa (3 specimens), 25 August 2011; Nordoz (7 specimens), ; Parsabad (2 specimens) 6 June 2012; 10 June 2012; Kordasht (2 specimens), 28 May 2011.

***Enoplops disciger* (Kolenati, 1845)**

Material examined: Jananlo of Khodafarin (1 specimen), 6 August 2011; Golan (2 specimens), 12 June 2012; Khodafarin (1 specimen), Near of Scent Stepanus Church (1 specimen), 15 June 2013.

***Haploprocta pustulifera* (Stål, 1860)**

Material Examined: Misan (1 specimen) 3 June 2012; Oshtobin (2 specimens), 1 July 2011; Marand (2 specimens), 10 July 2013; Khodafarin (1 specimen), Near of Scent Stepanus Church (1 specimen), 15 June 2013.

***Phyllomorpha lacerata* Herrich-Schaeffer, 1835**

Material examined: Eshgali ojagi of Khodafarin (1 specimens); Oshtobin (1 specimen), 1 July 2011; Siah Rod (2specimens), 30 May 2011; Misan (1 specimen) 3 June 2012; Eshgali ojagi of Khodafarin (2 specimens), 7 July, 2011; Jolfa grasslands (2 specimens), 1 June 2013.

***Spathocera lobata* (Herrich-Schaeffer, 1840)**

Material examined: Aynalo forests of Khodafarin (2 specimens), 20 May 2013; 12 June 2012; Oshtobin (1 specimen), 7 June, 2011.

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

Material examined: **Material Examined:** Aynalo forests of Khodafarin (2 specimens), 20 May 2013; 12 June 2012; Eshgali ojagi of Khodafarin (6 specimens); Oshtobin (1 specimen), 1 July 2011; Siahrod (2 specimens), 2 July 2012; Golan (5 specimens), 1 June 2012.

***Gonocerus acuteangulatus* (Goeze, 1778)**

Material Examined: Marand (2 specimens), 10 July 2013.

***Ceraleptus gracilicornis* (Herrish-Shaffer, 1833)**

Material Examined: Haras (3 specimens) 4 June 2012.

***Coriomeris affinis* (Herrich-Schaeffer, 1839)**

Material Examined: Parsabad (1 specimen), 8 May 2011; Haras (2 specimens) 4 June 2012; Oshtobin (1 specimen), 1 July 2011; Siah Rod (3 specimens), 5 May 2014; Alamdar (1 specimen), 5 June 2011; Marand (2 specimens), 26 May 2013.

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

Material Examined: Khodafarin (1 specimen), 12 August 2013.

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

Material Examined: Mardanagum (1specimen), 30 June 2014.

Family Rhopalidae Amyot & Serville, 1843

Subfamily Rhopalinae Amyot & Serville, 1843

***Agraphopus lethierryi* Stål, 1872**

Material Examined: Misan (1specimen), 3 July 2011.

***Chorosoma schillingi* (Schilling, 1829)**

Material Examined: Marzabad (1 specimen); Siah Rod (1 specimen), 30 May 2011; Jolfa grasslands (2 specimens), 1 July 2013; Aynalo forests of Khodafarin (1 specimen), 5 June 2012.

***Brachycarenum tigrinus* (Schilling, 1829)**

Material Examined: Jolfa grasslands (2 specimens), 1 July 2013; Misan (1 specimen), 3 July 2011. (2 specimens), 5 June 2012; Marzabad (3 specimens); Siah Rod (1 specimen), 30 May 2011; Aynalo forests of Khodafarin (2 specimens), 5 June 2012.

***Corizus fenestella fenestella* Horváth, 1917**

Material Examined: Golan (2 specimens), 1 June 2012.

***Corizus hyoscyami hyoscyami* (Linnaeus, 1758)**

Material Examined: Aynalo forests of Khodafarin (4 specimens), 20 August 2013; Kiamaki (6 specimens), 15 June 2012. Golibaglo of Khodafarin (8 specimens) 22 May 2012; Marand (5 specimens), Eshgali ojagi of Khodafarin (5 specimens), 10 July 2013; Golan (5 specimens), 12 June 2012; Oshtobin (5 specimens), 7 July, 2011. Jolfa (1 specimen), 25 August 2011; Nordoz (7 specimens), ; Misan (6specimen) 3 June 2012; 10 June 2012; Kordasht (5 specimens), 28 May 2014.

***Liorhysus hyalinus* (Fabricius, 1794)**

Material Examined: Kordasht (3 specimens), 28 May 2011; Golibaglo of Khodafarin (4 specimens) 22 May 2012; Marand (7 specimens), Eshgali ojagi of Khodafarin (8 specimens), 10 July 2013; Golan (5 specimens), 2 June 2014; Oshtobin (4 specimens), 7 July, 2011. Jolfa (1 specimen), 25 August 2011.

***Maccevetus caucasicus* (Kolenati, 1845)**

Material Examined: Kordasht (2 specimens), 13 May 2011; Misan (1 specimen), 30 May 2011; Marand (5 specimens), 20 May 2012; Oshtobin (3 specimen), 7 July, 2011.

***Rhopalus (Rhopalus) parumpunctatus* Schilling, 1829**

Material Examined: Ayanlo forests grasslands (2 specimens) 4 June 2013; Oshtobin (1 specimen), 7 July, 2011; Kordasht (3 specimens), 28 May 2011; Golibaglo of Khodafarin (4 specimens) 22 May 2012; Marand (5 specimens), Eshgali ojagi of Khodafarin (3 specimens), 10 July 2013; Golan (7 specimens), 12 June 2012; Oshtobin (5 specimens), 7 July 2011. Jolfa (1 specimen), 25 August 2011.

***Stictopleurus pictus* (Fieber, 1861)**

Material Examined: Ayanlo forest grasslands (1 specimen) 4 June 2013; Near of Scent Stepanus Church (2 specimens) 18 June 2013.

***Stictopleurus punctatonervosus* (Goeze, 1778)**

Material Examined: Jolfa (1 specimen) 25 August 2011.

Family Stenocephalidae Dallas, 1852***Dicranocephalus agilis* (Scopoli, 1763)**

Material examined: Aynalo grasslands (2 specimens), 3 May 2011; Jolfa grasslands (2 specimens), 1 June 2013. Eshgali ojagi of Khodafarin (2 specimens), 10 July 2013; Golan (3 specimens), 12 June 2012; Oshtobin (1 specimen), 7 July, 2011. Jolfa (1 specimen), 25 August 2011.

***Dicranocephalus setulosus* (Ferrari, 1874)**

Material examined: Kordasht (specimen), 13 May 2011.

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Figure 1. Map of Aras Free Zone limited area in Jolfa, Nordoz and Khodafarin counties (green portions) at the border of Autonomous Republic of Nakhchivan, Armenia and Azarbaijan countries with Islamic Republic of Iran.