

## Studies on the Cimicomorpha and Pentatomomorpha (Hemiptera: Heteroptera) of Khuzestan and the adjacent provinces of Iran

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**Abstract.** A list of 123 true bug species and subspecies of the families Tingidae (19 species), Nabidae (7 species), Anthocoridae (11 species, 1 subspecies), Aradidae (1 species), Lygaeidae *s. l.* (77 species, 1 subspecies), Piesmatidae (1 species), and Berytidae (4 species) from Khuzestan and the adjacent provinces in southern Iran is published. Eight species are recorded from Iran for the first time: Tingidae: *Agramma confusum* (Puton, 1879), *Agramma subnotatum* Péricart, 1981, *Tingis geniculata* (Fieber, 1844); Aradidae: *Aradus flavicornis* Dalman, 1827; Lygaeidae *s. l.*: *Artheneis turangae* Kerzhner, 1997, *Auchenodes conspersus* (Jakovlev, 1885), *Holcocranum diminutum diminutum* Horváth, 1898, and Piesmatidae: *Parapiesma rotundatum* (Horváth, 1906). One poorly known species, *Geocoris montandoniellus* Kiritshenko, 1915, is redescribed and compared with the most similar species.

**Key words.** Heteroptera, Anthocoridae, Aradidae, Berytidae, Lygaeidae *s. l.*, Nabidae, Piesmatidae, Tingidae, faunistics, new species, new records, Iran, Khuzestan

### Introduction

This paper is a continuation of the study of the relatively little known heteropteran fauna of Khuzestan province and related areas in the southwest of Iran. The previous two parts dealing with infraorders Nepomorpha, Gerromorpha, Leptopodomorpha and the family Miridae of Cimicomorpha were published by LINNAVUORI (2009, 2010). In this paper I contribute to the knowledge of the Iranian fauna by eight new distributional records.

The Khuzestan province (Fig. 1), total area 64,000 km<sup>2</sup>, is located in the southwest of Iran and borders the Basra province in Iraq in the west and the Persian Gulf in the south. In the north, east, and southeast it is surrounded by the provinces of Ilam, Lorestan, Chaharmahal & Bakhtiari, Kohgiluyeh & Boyerahmad, Fars, and Bushehr. Khuzestan is divided into two subregions: plains drained by the Karun, Karkheh and Jarahi rivers in the south and west, and southern part of the Zagros mountain range in the north and east of the province.



Fig. 1. Provinces of Iran. 1 – West Azerbaijan; 2 – East Azerbaijan; 3 – Ardabil; 4 – Gilan; 5 – Zanjan; 6 – Kurdistan; 7 – Kermanshah; 8 – Hamedan; 9 – Ghazvin; 10 – Mazandaran; 11 – Tehran; 12 – Qom; 13 – Markazi; 14 – Lorestan; 15 – Ilam; 16 – Khuzestan; 17 – Chaharmahal & Bakhtiari; 18 – Kohgiluyeh & Boyer-Ahmad; 19 – Esfahan; 20 – Semnan; 21 – Golestan; 22 – Khorasan; 23 – Yazd; 24 – Fars; 25 – Bushehr; 26 – Hormozgan; 27 – Kerman; 28 – Sistan & Baluchestan (after ALIPANAH & USTJUZHANIN 2005).

The vegetation of Khuzestan consists of the following six zones (DINARVAND 2003):

- 1. Vegetation of wetlands and tidal flats.** The main plant species are *Typha australis* and *Phragmites australis*. Other plants are e.g. *Ceratophyllum domesticum*, *Nitraria retusa* and *Scirpus lacustris*.
- 2. Vegetation of low and salty plains** with various dominant species of Chenopodiaceae. Typical plants are e.g. *Atriplex* spp., *Halocnemum strobilaceum*, *Medicago* spp., *Prosopis farcta*, *Salsola* and *Suaeda* spp.
- 3. Vegetation of hills and high grounds** with trees and shrubs. Characteristic species are e.g. *Centaurea* spp., *Echinops dichrous*, *Glycyrrhiza glabra*, *Populus euphratica*, *Prosopis koelziana*, *Teucrium polium*, *Trifolium* spp., *Zizyphus spina-christi*, and *Z. nummularis*.
- 4. Vegetation of sand dunes** with dominant species *Calligonum intertextum* and *Calotropis procera*. Other species are e.g. *Artemisia scoparia*, *Citrullus colocynthis*, *Cyperus conglomeratus*, *Plantago ovata*, *Stipagrostis* spp., and *Teucrium olivieranum*.
- 5. Vegetation of arid forests on southern slopes of Zagros Mts.** with plants such as *Quercus brantii*, *Cupressus sempervirens*, *Pistacia atlantica*, *P. kinjok*, *Amygdalus scoparia*, *Crataegus curvisepala*, *C. microphylla*, *Olea europea*, *Rosa canina*, *Salvia* spp., *Salix acmophylla*, and *Satureja khuzestanica*.
- 6. Vegetation of mountainside country pastures** with plants such as *Astragalus* spp., *Prangus* spp., *Daphne* spp., and *Tamarix* spp.

## Material and methods

This paper is mainly based on investigations made together with my wife Sakineh Linnavuori in 2006–2008. The main sampling effort was concentrated on Khuzestan, but we also visited the surrounding provinces of Ilam, Lorestan, Chaharmahal & Bakhtiari, Kohgiluyeh & Boyerahmad, Fars, and Bushehr. The collecting trips were also prolonged along the Iraqi border to Kermanshah, Kurdistan, East Azerbaijan and West Azerbaijan provinces. A few additional records based on material collected during my earlier trips are given as well.

The specimens are preserved in the Linnavuori collection (Raisio, Finland), the National Museums and Galleries of Wales (Cardiff, United Kingdom), and the College of Agriculture of the Gilan University (Rasht, Iran). When the exact number of specimens is not given, the following approximations are used: several = 5–10, many = 11–20, and numerous = more than 20 specimens. Most of the material was collected using light traps.

## Results

### Infraorder Cimicomorpha

#### Family Tingidae

##### Subfamily Cantacaderinae

#### *Cantacader quadricornis* (Lepeletier & Serville, 1829)

**Material examined.** FARS: Firuzabad, 4 specimens, 15.–16.vi.2008. KHUZESTAN: Abadan, 1 specimen, 10.–11.vi.2008; Andimeshk, 2 specimens, 5.–6.vi.2008; near Ramhormoz, 3 specimens, 7.–9.vi.2008; Sadde-e-Dez, 4 specimens, 6.–7.vi.2005. LORESTAN: near Khoran Abad, 1 specimen, 5.–6.vi.2005. MAZANDARAN: Chalus, 1 specimen, 5.–6.vi.2005.

**Comments.** In shores with *Phragmites* and *Tamarix*, and in gardens near rivers. Holomediterranean, extending to the Middle East.

##### Subfamily Tinginae

#### *Agramma (Agramma) confusum* (Puton, 1879)

**Material examined.** FARS: Tang-e-Bostanak, 1659 m a.s.l., 1 specimen, 8.–9.vi.1996.

**Comments.** In a mountain meadow. North Mediterranean, extending to Central Europe, Anatolia and Caucasus. **New for Iran.**

#### *Agramma (Agramma) subnotatum* Péricart, 1981

**Material examined.** FARS: Maharlu, many specimens, 14.–15.vi.2003.

**Comments.** On shore of a salty lake with *Phragmites*, *Juncus*, *Cyperus*, and grasses. Eremian. Known from Iraq and Saudi Arabia. **New for Iran.**

#### *Campylosteira heissi* Péricart, 1981

**Material examined.** KHUZESTAN: near Ahvaz, 1 specimen, 25.iv.–1.v.2007; Ahvaz – Ghazavieh, 1 specimen, 7.–8.vi.2005; Andimeshk, 1 specimen, 5.–6.v.2007; Bandar-e-Mahshar, 1 specimen, 12.–13.vi.2006; Lali, 1 specimen,

6.–7.vi.2005; near Ramhormoz, 4 specimens, 7.–9.vi.2008. **BUSHEHR**: Ab Pakhs, 3 specimens, 13.–14.vi.2008. **FARS**: Baba Arab 50 km SE of Jahrom, 2 specimens, 16.–17.viii.2003.

**Comments.** In gardens, fields and hilly steppes. Eremian, known from Spain, Saudi Arabia, Iran, Iraq, and Sudan.

*Catoplatus citrinus* Horváth, 1897

**Material examined.** **KURDESTAN**: Saqqez, 6 specimens, 13.–14.vi.2005.

**Comments.** In mountain steppes. Irano-Turanian.

*Copium teucryi teucryi* (Host, 1788)

**Material examined.** **FARS**: Estahban, 1710 m a.s.l., 1 specimen, 10.–11.vi.1996.

**Comments.** In mountain meadows. Recorded on *Crataegus*, *Prunus*, *Punica granatum*, and *Salix*. Holomediterranean, known from Central Europe, North Africa, Middle East, Central Asia, and China.

*Dictyla echii* (Schränk, 1782)

**Material examined.** **KURDESTAN**: near Suteh, 2 specimen, 13.vi.2005.

**Comments.** In mountain slopes with *Galium verum*, Asteraceae, Apiaceae, etc. Holopalaearctic.

*Dictyonota horvathi* (Kiritschenko, 1914)

**Material examined.** **KHUZESTAN**: Ghazavieh, 1 specimen, 7.–6.vi.2005; near Ramhormoz, 2 specimens, 7.–8.vi.2008.

**Comments.** On shores of a little river with rich vegetation such as *Phragmites* and *Tamarix*. Central Asian.

*Dictyonota opaca* (Linnavuori, 1965)

**Material examined.** **KHUZESTAN**: near Ahvaz, 1 specimen, 29.iv.–1.iii.2007.

**Comments.** On Chenopodiaceae. In date-palm gardens with a little brook. Eremian, known from Algeria, Iran, Iraq, Israel, Saudi Arabia, Yemen, and Turkmenistan.

*Elasmotropis testacea selecta* (Horváth, 1891)

**Material examined.** **FARS**: Baba Arab 50 km SE of Jahrom, 2 specimens, 16.–17.vi.2003; Maharlou, 1 specimen, 16.–17.vi.2008; Zarqan Bamon Nat. Park, 1650 m a.s.l., 6 specimens, 13.–14.vi.1996.

**Comments.** In mountain steppes and gardens. Recorded on *Elasmotropis* spp. (Asteraceae). East-Eremian, known from Azerbaijan, Armenia, Georgia, Iran, Syria, Saudi Arabia, and Yemen.

*Galeatus scrophicus* Saunders, 1876

**Material examined.** **KHUZESTAN**: near Ahvaz, Karun river, 6 specimens, 10.–11.vi.2006; Bandar-e-Mahshar, 1 specimen, 12.–13.vi.2006.

**Comments.** On undergrowth in gardens. Recorded on Asteraceae, *Artemisia*, *Echinops spinosus*, etc. Palaeotropical (Ethiopian and Oriental Regions), extending to the Middle East, North Africa, Spain, Greece, South Russia, and Central Asia.

***Hyalochiton multiseriatus* (Reuter, 1888)**

**Material examined.** FARS: 15 km E of Sa'adatshahr, 1680 m a.s.l., 1 specimen, 6.–7.vi.1996.

**Comments.** In a mountain meadow. Recorded on *Phlomis fruticosa*. Syrio-Anatolian, known from Greece, Turkey, Armenia, Turkey, Iran, Iraq, Israel, and Syria.

***Monosteira lobulifera* Reuter, 1888**

**Material examined.** FARS: Takht-e-Jamsid, 2 specimens, 14.–15.vi.2002.

**Comments.** At light in parks. Recorded on Rosaceae, e.g. *Pyrus* spp., *Quercus*, *Salix*, and *Tamarix*. Pontomediterranean, known from Greece, Egypt, the Middle East and Central Asia.

***Monosteira unicostata* (Mulsant & Rey, 1852)**

**Material examined.** FARS: Dasht-e-Arzhan, 2 specimens, 16.–17.vi.2002; Fasa–Mianjangal, 1 specimen, 18.–19.vi.2006; 15 km E of Sarvestan, 4 specimens, 13.–16.vi.2003; Takht-e-Jamshid, 1 specimen, 14.–15.vi.2002; Zaqan Bamon Nat. Park, 1650 m a.s.l., 3 specimens, 13.–14.vi.1996. **KOHGILUYEH & BOYERAHMAD:** Samirun, 2 specimens, 11.–12.vi.2003. **WEST AZERBAIJAN:** Nushin Sar near Urumiye, 1 specimen, 25.–27.vi.2006.

**Comments.** Recorded e.g. on *Crataegus*, *Populus* and *Prunus*. Holomediterranean, extending to Central Asia and China.

***Tingis (Neolasiotropis) ottomana* Péricart & Önder, 1982**

**Material examined.** EAST AZERBAIJAN: Mjareh, 2 specimens, 21.–22.vii.1996. FARS: Zaqan Bamon National Park, 1650 m a.s.l., 1 specimen, 13.–14.vi.1996.

**Comments.** In mountain meadows. Irano-Turanian, known from Afghanistan, Iran and Turkey.

***Tingis (Tingis) auriculata* (A. Costa, 1847)**

**Material examined.** KURDESTAN: near Marivan, several specimens, 12.–13.vi.2005; 20 km NE of Marivan, several specimens, 24.–25.vi.2006. **WEST AZERBAIJAN:** near Agh Bolugh, 1 specimen, 19.vii.2004; near Sardasht, 2 specimens, 14.–15.vi.2005.

**Comments.** In hilly meadows with cultivated areas. Holomediterranean, extending to Middle Asia.

***Tingis (Tingis) brevicornis* (Horváth, 1902)**

**Material examined.** FARS: near Fasa, 1 specimen, 17.–19.vi.2008; Maharlu, 2 specimens, 17.–18.vi.2002, 14.–15.vi.2003.

**Comments.** At light in gardens. Central Asian.

***Tingis (Tingis) elongata* (Fieber, 1861)**

**Material examined.** FARS: Estahban, 1710 m a.s.l., 2 specimens, 10.–11.vi.1996; 15 km E of Sa'adatshahr, 1680 m a.s.l., 5 specimens, 6.–7.vi.1996.

**Comments.** In mountain meadows. Recorded on *Matricaria aurea*. South Mediterranean, known from (?)Spain, Montenegro, Serbia, North Africa, and the Middle East.

***Tingis (Tropidocheila) geniculata (Fieber, 1844)***

**Material examined.** FARS: Dasht-e-Arzan, 1 specimen, 16.–17.vi.2002.

**Comments.** In a little forest with rich undergrowth such as *Cyperus*, *Juncus*, Apiaceae, and Lamiaceae, close to a brook. Euro-Mediterranean, extending to Azerbaijan, Armenia, Georgia, and Turkey. **New for Iran.**

**Family Nabidae**  
Subfamily Nabinae

***Himacerus (Aptus) mirmicoides (O. Costa, 1834)***

**Material examined.** FARS: Tang-e-Bostanak, 1650 m a.s.l., 1 specimen, 8.–9.vi.1996.

**Comments.** In a hilly steppe. West-Palaeartic.

***Nabis (Aspilaspis) viridulus Spinola, 1837***

**Material examined.** Numerous specimens. KHUZESTAN: near Ahvaz, 29.iv.-1.v.2007; Ahvaz – Ghazavieh, 7.–8.vi.2005; Ahvaz – Jangieh, 11.–12.vi.2008; 11.–12.vi.2008; near Ahvaz, Karun River, 10.–11.vi.2008; Shadegan, 13.–14.vi.2008; Zeydoon, 26.–28.iv.2007, 26.–28.iv.2008. BUSHEHR: Ab Pakhs, 25.–26.iv.2007. FARS: Khaneh Kat, 16.–17.vi.2006. KERMAN: Sar Chesmeh, 2225 m a.s.l., 19.v.1996. KOHGIUYEH & BOYERAHMAD: Samirun, 11.–12.vi.2003. WEST AZERBAIJAN: Bitas 20 km S of Mahabad, 19.–20.vii.2007.

**Comments.** On *Tamarix*. Holomediterranean, extending to Central Asia and Afrotropical Region (Senegal, Sudan).

***Nabis (Halonabis) sareptanus Dohrn, 1862***

**Material examined.** Numerous specimens. KHUZESTAN: near Ahvaz, 29.iv.-1.v.2007; near Ahvaz, Karun River, 10.–11.vi.2008; Ahvaz – Ghazavieh, 7.–8.vi.2005. FARS: Maharlu, 16.–17.vi.2008. WEST AZERBAIJAN: Marangalu near Urmiyeh, 15.–17.vi.2004.

**Comments.** On *Suaeda*, *Atriplex* and *Artemisia* in deserts, semideserts and salt marshes. Irano-Turanian, extending from the Balkan Peninsula to Central Asia.

***Nabis (Nabis) palifer Seidenstücker, 1954***

**Material examined.** KHUZESTAN: Ahvaz – Ghazavieh, 3 specimens, 7.–8.vi.2005; Andimeshk – Tangvan, 3 specimens, 9.–10.vi.2006; near Lali, 1 specimen, 6.–7.vi.2008; near Ramhormoz, 1 specimen, 7.–9.vi.2008. FARS: Estahban, 1710 m a.s.l., 1 specimen, 10.–11.vi.1996; Fasa – Mianjangan, 1 specimen, 18.–19.vi.2006; Maharlu, 2 specimens, 15.–16.vi.2006. ZANJAN: Gilandesh 15 km NW of Gilvan, 2 specimens, 26.–27.vi.2004.

**Comments.** In moist habitats with Juncaceae and Cyperaceae. Irano-Turanian, extending from the Balkan Peninsula and the Middle East to Central Asia and the Oriental Region.

***Nabis (Nabis) pseudoferus orientarius Remane, 1962***

**Material examined.** KHUZESTAN: Zeydoon, 1 specimen, 26.–28.iv.2007. BUSHEHR: Bandar-e-Genaveh. 1 specimen, 23.–24.iv.2007. FARS: Dasht-e-Arzan, several specimens, 16.–17.vi.2002; Khaneh Kat, 1 specimen, 16.–17.vi.2006; Khaneh Zenyān, 2 specimens, 13.–14.vi.2003; Maharlu, 1 specimen, 15.–16.vi.2006. ILAM: Ilam, 1 specimen,

8.–9.vi.2005. **KERMAN**: Caravanseray-e-Farhadi, 1 specimen, 20.v.1996; Sar Chesmeh, 2225 m a.s.l., 1 specimen, 19.v.1996. **KERMANSHAH**: Chaharzarbarolya, 2 specimens, 22.–23.vi.2006. **KOHLGILUYEH & BOYERAHMAD**: Tang Sorkh 35 km SE of Yasuj, 2 specimens, 18.–19.vi.2003. **KURDESTAN**: Marivan, 2 specimens, 24.–25.vi.2006; 20 km NE of Marivan, 1 specimen, 22.–25.vi.2006; near Sanandai, 1 specimen, 11.–12.vi.2005. **ZANJAN**: Gilankesh 35 km NW of Gilvan, 2 specimens, 20.–22.vi.2004. **WEST AZERBAIJAN**: near Agh Balegh, 1 specimen, 19.vii.2004; Bitas 20 km S. of Mahabad, 1 specimen, 19.–20.vii.2004; Marangalu near Urmiyeh, 2 specimens, 15.–17.vii.2004; Nushin Sar near Urmiyeh, 4 specimens, 25.–26.vi.2006.

**Comments.** In hilly meadows, on shores of rivers with grasses and *Phragmites*, in salt marshes on shores of lakes, and on undergrowth in edges of mountain forests. Anatolian; known from the Middle East (Turkey, Cyprus, Iraq, Iran, and Lebanon).

### *Nabis (Nabis) punctatus punctatus* A. Costa, 1847

**Material examined.** Numerous specimens. **KHUZESTAN**: Bagh Malek, 9.–11.v.2007; Behbahan, 19.–20.vi.2006; Lali, 6.–8.v.2006; Zeydoon, 26.–28.iv.2007. **FARS**: Baba Arab 50 km SE of Jahrom, 16.–17.vi.2008; Bavan near Nur Abad, 20.–21.vi.2003; Estahban, 1710 m a.s.l., 10.–11.vi.1996; Fasa, 17.–19.vi.2008; Fasa–Mianjangal, 18.–19.vi.2006; Kamfiruz, 15.–16.vi.2002; Khaneh Kat, 16.–17.vi.2006; Khaneh – Zenyan, 13.–14.vi.2003; Maharlu, 17.–18.vi.2002, 15.–16.vi.2006; 15 km E of Sarvestan, 15.–16.vi.2003; 10 m W of Shiraz, 16.–17.vi.2002; Shul Sangar, 17.–18.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002; Tang-e-Bostanak, 1650 m a.s.l., 8.–9.vi.1996. **ILAM**: near Eyvan, 9.–10.vi.2005. **KERMAN**: Sar Chesmeh, 2225 m a.s.l., 19.v.1996. **KERMANSHAH**: Chaharzarbarolya, 22.–23.vi.2006; near Javanrud, 10.–11.vi.2003. **KOHLGILUYEH & BOYERAHMAD**: Madvan near Yasuj, 11.–12.vi.2003; Samirun, 11.–12.vi.2003; Tang Sorkh 35 km SE of Yasuj, 18.–19.vi.2003; Wazag SE of Jahrom, 18.vi.2003. **KURDESTAN**: near Marivan, 12.–13.vi.2005, 24.–25.vi.2006; 20 km NE of Marivan, 24.–25.vi.2006; Sanandai, 11.–12.vi.2005. **WEST AZERBAIJAN**: Marangalu near Urmiyeh, 15.–17.vii.2004; Nushin Sar near Urmiyeh, 25.–28.vi.2006.

**Comments.** In meadows, shores of lakes, gardens, and mountains. European, extending to the Middle East.

### *Nabis (Tropiconabis) capsiformis* Germar, 1838

**Material examined.** Numerous specimens. **KHUZESTAN**: Ahvaz – Jangieh, 11.–12.v.2007; near Andimeshk, 5.–6.v.2007; Andimeshk – Tangvan, 9.–10.vi.2008; Shadegan, 13.–14.vi.2006, 26.–28.iv.2008; Zeydoon, 26.–28.iv.2008. **FARS**: Estahban, 1710 m a.s.l., 10.–11.vi.1996; near Fasa, 17.–19.vi.2008; Maharlu, 17.–18.vi.2002; Takht-e-Jamshid, 14.–15.vi.2002; Tang-e-Bostanak, 1650 m a.s.l., 8.–9.vi.1996. **KERMAN**: Rayen Kheyrabad, 2300 m a.s.l., 21.v.1996; Sar Chesmeh, 2225 m a.s.l., 19.v.1996. **KERMANSHAH**: Chaharzarbarolya, 20.–23.vi.2006. **KOHLGILUYEH & BOYERAHMAD**: Samirun, 11.–12.vi.2003. **WEST AZERBAIJAN**: Bitas 20 km S of Mahabad, 19.–29.vi.2004.

**Comments.** On shrubs and herbaceous plants in deserts, meadows and fields. Pantropical, extending to the Mediterranean subregion and Middle East and Central Asia.

## Family Anthocoridae

### Subfamily Anthocorinae

#### Tribe Anthocorini

### *Anthocoris minki minki* Dohrn, 1860

**Material examined.** **FARS**: Shiraz, 3 specimens, 1999, S. Falamarzi leg.; Zaqan, Bamon National Park, 1650 m a.s.l., 2 specimens, 13.–14.vi.1996. **KERMANSHAH**: Charzarbarolya, 1 specimen, 22.–23.vi.2006. **WEST AZERBAIJAN**: Bitas 29 km S of Mahabad, 1 specimen, 19.–20.vii.2004.

**Comments.** On *Populus* spp. European.

***Anthocoris minki pistaciae* Wagner, 1957**

**Material examined.** FARS: Fasa–Mianjangal, 2 specimens, 18.–19.vi.2006; Firuzabad, 1 specimen, 15.–16.vi.2008; Kamfiruz, 2 specimens, 15.–16.vi.2002; Sarvestan, 1 specimen, 10.vi.1996; 15 km E of Sarvestan, 1 specimen, vi.2003; 10 km W of Shiraz, 1 specimen, 16.–17.vi.2002; Zarqan Bamon National Park, 1650 m a.s.l., several specimens, 13.–14.vi.1996. ILAM: Ilam, 1 specimen, 21.–22.vi.2006. KERMANSHAH: Charzabarolya, 3 specimens; 22.–23.vi.2006. KURDESTAN: near Marivan, 1 specimen, 16.–17.vii.2005; near Sanandai, 1 specimen, 11.–12.vi.2005.

**Comments.** Recorded on *Pistacia* spp. According to PÉRICART (1972: 137–139) ssp. *pistaciae* differs from the nominate form in smaller size, length 2.8–3.2 mm (nominate form 3.0–3.6 mm), paler colouring and shinier appearance. No intermediates were found in the studied Iranian material. Pontomediterranean-Central Asian, extending to China. Also known from Morocco and Tunisia.

***Anthocoris pilosus* (Jakovlev, 1877)**

**Material examined.** FARS: Dasht-e-Arzan, 2 specimens, 12.–13.vi.2003.

**Comments.** In shore of a brook with *Cyperus*, *Juncus*, *Typha*, and Lamiaceae. Found on *Salix* and herbaceous plants. Euro-Siberian.

***Temnostethus (Ectemnus) reduvinus parilis* (Horváth, 1891)**

**Material examined.** KURDESTAN: near Sanandai, 1 specimen, 11.–12.vi.2005.

**Comments.** On riverside with *Populus* and *Salix*. Known from Armenia, Azerbaijan and Iran.

## Tribe Oriini

***Orius (Dimorphella) albidipennis* (Reuter, 1884)**

**Material examined.** FARS: Firuzabad, 1 specimen, 15.–16.vi.2008; Kamfiruz, 3 specimens, 15.–16.vi.2002; 15 km E of Sa'adatshahr, 1610 m a.s.l., 2 specimens, 6.–7.vi.1996. KHORASAN: near Ferdows, 1 specimen, 19.iv.1994.

**Comments.** On undergrowth in gardens. Found on Asteraceae and *Tamarix*. Eremian. Known from Spain, North Africa, Saudi Arabia, the Middle East, tropical Africa (Cape Verde Islands, Ethiopia, Nigeria), and Pakistan.

***Orius (Heterorius) horvathi* (Reuter, 1884)**

**Material examined.** FARS: Dasht-e-Arzan, 1 specimen, 12.–13.vi.2003; Tang-e-Bostanak, 1650 m a.s.l., 2 specimens, 8.–9.vi.1996; Zarqan Bamon National Park, 1650 m a.s.l., 1 specimen, 13.–14.vi.1996.

**Comments.** In hilly steppes, along shores of a brook. Euro-Siberian.

***Orius (Heterorius) laticollis discolor* (Reuter, 1884)**

**Material examined.** Several specimens: FARS: Firuzabad, 15.–16.vi.2008; Maharlou, 14.–15.vi.2003, 16.–17.vi.2008; 10 km W of Shiraz, 16.–17.vi.2002; Shul-Sangar, 17.–18.vi.2003; Tang-e-Bostanak, 1610 m a.s.l., 8.–9.vi.1996. KERMANSHAH: Chaharzarolya, 22.–23.vi.2006. KURDESTAN: near Marivan, 12.–13.vi.2005; near Sanandai, 11.–12.vi.2005. WEST AZERBAIJAN: Bitas 20 km S of Mahabad, 19.–20.iii.2004; Nushin Sar near Urmiyeh, 15.–17.vi.2005, 23.–26.vi.2006.



**Comments.** In gardens, in shore of a salt lake, along rivers and on mountain slopes. Ponto-Mediterranean, known from Spain, North Africa, Middle East, and Central Asia.

*Orius (Heterorius) vicinus* (Ribaut, 1923)

**Material examined.** Several specimens: **FARS:** Bavan near Nur Abad, 20.–21.vi.2008; Dasht-e-Arzan, 16.–17.viii.2002; near Fasa, 17.–19.vi.2008; Maharlu, 14.–15.vi.2003; Tang-e-Bostanak, 1650 m a.s.l., 8.–9.vi.1996. **KOHLILUYEH & BOYERAHMAD:** Madvan near Yasuj, 11.–12.vi.2003. **WEST AZERBAIJAN:** Nushin Sar, 15.–17.vi.2005; 25 km S of Urumiyeh, 17.vi.2005.

**Comments.** In gardens, shores of lake and hilly meadows. Recorded on trees such as *Tilia*, *Salix*, *Quercus* and herbaceous plants such as *Chenopodium*, *Heracleum* and *Mentha*. European-North Mediterranean, extending from Central Asia to China and Mongolia.

*Orius (Orius) niger* (Wolff, 1811)

**Material examined.** **FARS:** near Fars, 17.–19.vi.2004. Shiraz, 4 specimens, 1999, S. Falamarzi leg.; Shul-Sangar, 1 specimen, 17.–18.vi.2003. **KURDESTAN:** Marivan, 1 specimen, 24.–25.vi.2006. **WEST AZERBAIJAN:** Bitas 2 km S of Mahabad, 1 specimen, 19.–20.vii.2004.

**Comments.** On undergrowth in gardens. Holopalaeartic.

Subfamily Lyctocorinae  
Tribe Cardiastethini

*Amphiareus obscuriceps* (Poppius, 1909)

**Material examined.** **WEST AZERBAIJAN:** 25 km S of Urumiyeh, 1 specimen, 17.vi.2005.

**Comments.** On shore vegetation of Lake Urumiyeh with *Alhagi* and *Juncus*. Probably of East-Palaeartic origin, adventive species in Europe and North America.

Tribe Xylocorini

*Xylocoris (Proxylocoris) confusus* Carayon, 1972

**Material examined.** Many specimens: **KHUZESTAN:** Ahvaz – Ghazavieh, 7.–8.vi.2005; Ahvaz – Jangieh, 11.–12.vi.2006; near Ahvaz, Karun river, 10.–11.vi.2006; Andimeshk – Tangvan, 9.–10.vi.2006; near Lali, 6.–8.v.2007; near Ramhormoz, 7.–9.vi.2008. **FARS:** Firuzabad, 14.–15.vi.2008; Tang-e-Bostanak, 1650 m a.s.l., 8.–9.vi.1996. **KERMANSHAH:** near Javanrud, 10.–11.vi.2005.

**Comments.** Recorded on *Panicum turgidum*. Eremian (North Africa, Saudi Arabia, Yemen, Iran), extending to tropical Africa.

*Xylocoris (Proxylocoris) galactinus* (Fieber, 1836)

**Material examined.** **KHUZESTAN:** near Ramhormoz, 1 specimen, 7.–8.vi.2008; Shadegan, 1 specimen, 9.–10.vi.2008.

**Comments.** Near a little river and marsh with e.g. *Phragmites* and *Tamarix*. Holopalaeartic, also known from Canada and U.S.A.

**Infraorder Pentatomomorpha****Family Aradidae**

## Subfamily Aradinae

***Aradus (Aradus) flavicornis* Dalman, 1823**

**Material examined.** KHUZESTAN: Abadan, 1 specimen, 10.–11.vi.2008. FARS: Farrahsband, 1 specimen, 14.–15.vi.2008.

**Comments.** In date-palm gardens. Holomediterranean, extending to Central Asia, the Eremian subregion and Afrotropical Region. **New for Iran.**

**Family Lygaeidae *sensu lato***

## Subfamily Lygaeinae

***Apterola (Apterola) lownii* (Saunders, 1876)**

**Material examined.** FARS: 15 km E of Sa'adatshahr, 1680 m a.s.l., 1 female, 6.–7.vi.1996.

**Comments.** Recorded on *Anchusa aggregata* and *Artemisia herba-alba*. Syrio-Anatolian, extending from Bulgaria and Macedonia to the Middle East and Central Asia.

***Arocatus longiceps* Stål, 1872**

**Material examined.** FARS: Tang-e-Bostanak, 1650 m a.s.l., 7 specimens, 8.–9.vi.1996.

**Comments.** In mountain meadows. Recorded on *Acer*, *Carpinus*, *Castanea*, and *Tilia*. Ponto-Mediterranean, extending to Central Europe and the Middle East.

***Cosmopleurus fulvipes* (Dallas, 1852)**

**Material examined.** KERMAN: Caravanseray-e-Farhadi, 5 specimens, 20.v.1996; Rayen Kheyraabad, 2300 m a.s.l., 1 specimen, 21.v.1996.

**Comments.** On desert plants in sandy habitats. Eremian, extending from North Africa to Spain, Malta, Croatia, the Middle East, tropical Africa, and Pakistan.

***Lygaeosoma sardeum sardeum* Spinola, 1837**

**Material examined.** FARS: Kamfiruz, 2 specimens, 15.–16.vi.2002, 15 km E of Sa'adatshahr, 1 specimen, 6.–7.vi.1998; Zaqan Bamon National Park, 1659 m a.s.l., 2 specimens, 13.–14.vi.1996.

**Comments.** In meadows with *Cladonia*, *Polytrichum*, *Rhacomitrium*, and *Sedum*. Holomediterranean, extending to Central Europe, the Middle East, Central Asia, and Mongolia.

***Lygaeus creticus* Lucas, 1854**

**Material examined.** FARS: Dasht-e-Arzhan, 1 specimen, 12.–13.vi.2003. KERMAN: Caravanseray-e-Farhadi, numerous specimens, 20.v.1996.

**Comments.** On *Nerium oleander* and *Sorbus cretica*. Ponto-Mediterranean, extending to the Middle East and Afghanistan.

*Lygaeus equestris* (Linnaeus, 1758)

**Material examined.** **FARS:** Takht-e-Jamshid, 2 specimens, 14.–15.vi.2002. **KERMAN:** Rayan Kheyraabad, 2300 m a.s.l., 1 specimen, 21.v.1996. **LORESTAN:** near Khoram Abad, 3 specimens, 5.–6.vi.2005.

**Comments.** Known on *Cannabis*, *Cynanchum vincetoxicum*, *Gossypium*, *Sinapis*, etc. Holo-palaearctic, extending to Pakistan and NW India.

*Spilostethus pandurus* (Scopoli, 1763)

**Material examined.** **FARS:** 10 km S of Deh Bid, 2000 m a.s.l., 1 specimen, 14.vi.1996; Estahban, 1710 m a.s.l., 2 specimens, 10.–11.vi.1996. **KERMAN:** Caravanseray-e-Farhadi, 1 specimen, 20.v.1996; Rayen Kheyraabad, 2300 m a.s.l., 8 specimens, 21.v.1996.

**Comments.** In gardens. Holomediterranean and Palaetropical.

*Spilostethus saxatilis* (Scopoli, 1763)

**Material examined.** **FARS:** Fasa – Mianjangan, 1 specimen, 18.–19.vi.2006; Zarqan Bamon National Park, 1650 m a.s.l., 1 specimen, 13.–14.vi.1996.

**Comments.** In hilly steppes. Holomediterranean, extending to Central Europe, the Middle East and Central Asia.

## Subfamily Orsillinae

## Tribe Nysiini

*Nysius cymoides* (Spinola, 1837)

**Material examined.** Numerous specimens: **KHUZESTAN:** near Ahvaz, 20.iv.–1.v.2007; near Ahvaz, Ghazavieh, 7.–8.vi.2005; near Ahvaz, Karun River, 10.–11.vi.2006; Andimeshk, 5.–6.vi.2008; Andimeshk – Tangvan, 9.–10.vi.2006; Bagh Malek, 9.–11.v.2007; Dezful, 6.–7.vi.2005; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008. **BUSHEHR:** Ab Pakhs, 13.–14.vi.2008. **FARS:** Baba Arab 30 km SE of Jahrom, 16.–17.vi.2003; Farrahsband, 14.–15.vi.2008; Fasa – Mianjangan, 18.–19.vi.2006; near Fasa, 17.–19.vi.2008; Firuzabad, 15.–16.vi.2008; Kamfiruz, 15.–16.vi.2002; Maharlu, 17.–18.vi.2002, 14.–15.vi.2003, 15.–16.vi.2006; Mokhah near Ghotb Abad, 17.vi.2003; near Nur Abad, 21.–22.vi.2008; 15 km E of Sarvestan, 15.–16.vi.2003; 15 km N of Shiraz, 14.vi.2002; 10 km W of Shiraz, 16.–17.vi.2002; Shul Sangar, 17.–18.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002; Tang-e-Bostanak, 1650 m a.s.l., 8.–9.vi.1998. **KERMAN:** Rayan Kheyraabad, 2300 m a.s.l., 21.v.1998. **KOHGILUYEH & BOYERAHMAD:** Samirun, 11.–12.vi.2003; Tang Sorkh 35 km SE of Yasuj, 18.–19.vi.2003; Vazag SE of Yahrom, 18.vi.2003. **KURDESTAN:** near Marivan, 12.–13.vi.2005. **LORESTAN:** near Borujerd, 4.–5.vi.2008; near Khoran Abad, 5.–6.vi.2005. **WEST AZERBAIJAN:** Bitas 20 km S of Mahabad, 19.–20.vii.2004.

**Comments.** On plants in fields and desert habitats. Holomediterranean, extending to Central Europe, Central Asia and northern parts of the Sudanese subregion.

*Nysius ericae ericae* (Schilling, 1829)

**Material examined.** Many specimens: **KHUZESTAN:** Ahvaz – Ghazavieh, 7.–8.vi.2005; near Ahvaz, Karun river, 10.–11.vi.2006; near Andimeshk, 5.–6.v.2007; Andimeshk – Tangvan, 9.–10.vi.2006; Behbahan, 27.–28.iv.2007; Dezful, 6.–7.vi.2005; Lali, 6.–8.v.2007, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Sardasht, 11.–12.vi.2008; Shadegan, 20.–21.iv.2007. **BUSHEHR:** Ab Pakhs, 25.–26.iv.2004; Bandar-e-Genaveh, 23.–24.iv.2007. **FARS:** Khaneh Kat, 16.–17.vi.2006; Maharlu, 15.–16.vi.2006. **ILAM:** near Eyvan, 9.–10.vi.2005.

**KERMAN:** Raviz Shahabieh, alt. 1800 m, 24.v.1996. **KURDESTAN:** Marivan, 24.–25.vi.2002. **WEST AZERBAIJAN:** Marangalu near Urmiyeh, 15.–17.vii.2004.

**Comments.** In gardens and steppes on different Asteraceae, Fabaceae and Chenopodiaceae. Holopalaeartic, extending to tropical Africa.

### *Nysius graminicola graminicola* (Kolenati, 1845)

**Material examined.** Numerous specimens. **KHUZESTAN:** Abadan, 21.–22.iv.2007, 10.–11.vi.2008; near Ahvaz, 29.iv–1.v.2007; Ahvaz – Ghazavieh, 7.–8.vi.2005; Ahvaz – Jangieh, 11.–12.vi.2006; near Ahvaz, Karun river, 10.–11.vi.2008; Andimeshk, 5.–6.vi.2008; Andimeshk – Tangvan, 9.–10.vi.2006; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–8.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Shadegan, 13.–14.vi.2006, 20.–21.iv.2007. **BUSHEHR:** Ab Pakhs, 25.–26.iv.2007; near Bandar-e-Genaveh, 23.–24.iv.2007. **ESFAHAN:** Shahreza – Semirom, 11.vi.2003. **FARS:** Dasht-e-Arzan, 16.–17.vi.2003; Estahban, 1710 m a.s.l., 10.–11.vi. 1998; Farrahsband, 14.–15.vi.2008; Fasa – Mianjangan, 18.–19.vi.2006; Firuzabad, 15.–16.v.2008; Maharlu, 14.–15.vi.2003; Pol-e-Khan, 15.vi.2002; 13 km E of Sarvestan, 15.–16.vi.2003; Takht-e-Jamshid, 14.–15.vi.2002; Tang-e-Bostabak, 1650 m a.s.l., 8.–9.vi.1998; Zarqan Bamon National Park, 1650 m a.s.l., 13.–14.vi.1998. **ESFAHAN:** Shahreza – Semirom, 11.vi.2003. **ILAM:** near Eyvan, 9.–10.vi.2005. **KOHLUYEH & BOYERAHMAD:** Tang Sorkh 35 km SE of Yasuj, 18.–19.vi.2003; Samirum, 11.–12.vi.2003. **KURDESTAN:** Marivan, 24.–25.vi.2008. **WEST AZERBAIJAN:** Marangalu near Urmiyeh, 15.–17.vii.2004. **ZANJAN:** Gilvan, 11.–13.x.2000; Pircham, 7.–8.x.2000.

**Comments.** In fields and steppes. Holomediterranean extending to Central Asia.

## Tribe Orsillini

### *Camptocoris longicornis* (Puton, 1874)

**Material examined.** **KHUZESTAN:** Ahvaz – Ghazavieh, 2 specimens, 7.–8.vi.2005; **FARS:** Abbar, 1 specimen, 29.ix.–8.x.2000; Baba Arab, 50 km SE of Jahrom, 16.–17.vi.2005; Jilan Keshe, 1 specimen, 8.–13.x.2000; Khaneh Kat, 2 specimens, 16.–17.vi.2008.

**Comments.** On Poaceae (*Aristida*). Eremian.

### *Camptocoris typus* (Distant, 1918)

**Material examined.** **KHUZESTAN:** near Ahvaz, 1 specimen, 29.iv–1.v.2007; near Ahvaz, Karun river, 2 specimens, 10.–11.vi.2008. **BUSHEHR:** Ab Pakhs, 2 specimens, 25.–26.ix.2007; Lali, 1 specimen, 6.–7.vi.2008; **FARS:** Estahban, 1710 m a.s.l., 2 specimens, 10.–11.vi.1996; 15 km E of Sa'adatshahr, 1600 m a.s.l., 1 specimen, 5.–7.vi.1996; 15 km E of Sarvestan, 1 specimen, 15.–16.vi.2003.

**Comments.** In gardens. Known from the Ethiopian Region, Saudi Arabia, Yemen, Iraq, Iran, and India.

### *Orsillus maculatus* (Fieber, 1861)

**Material examined.** **FARS:** Takht-e-Jamshid, 1 specimen, 14.–15.vi.2002.

**Comments.** At light in a park with *Cupressus*. Recorded on *Cupressus sempervirens*, *Juniperus phoenicea* and *Pinus halepensis*. North Mediterranean, extending to Libya and the Middle East. In Iran known only from Gilan (LINNAVUORI 2007).

### *Ortholomus carinatus* (Lindberg, 1932)

**Material examined.** **FARS:** 15 km S of Deh Bid, 200 m a.s.l., 2 specimens, 14.vi.1998.

**Comments.** In hilly steppes. Holomediterranean, extending to North Africa, Turkey, Iraq, and Iran.

#### Subfamily Cyminae

##### *Cymus clavicularis* (Fallén, 1807)

**Material examined.** **ESFAHAN:** Shahreza – Semirom, 1 specimen, 11.vi.2003. **FARS:** Estahban, 1710 m a.s.l., 3 specimens, 10.–11.vi.1996; Maharlu, 5 specimens, 14.–15.vi.2003; Tang-e-Bostanak, 4 specimens, 8.–9.vi.1996.

**Comments.** Recorded on Juncaceae, Cyperaceae, Caryophyllaceae, and Polygonaceae. Euro-Siberian, extending to North Africa, the Middle East and Central Asia.

##### *Cymus gracilicornis* Vidal, 1940

**Material examined.** **KHUZESTAN:** near Ahvaz, 1 specimen, 29.iv.–1.v.2007; near Ahvaz, Karun river, 3 specimens, 10.–11.vi.2006; Bagh Malek, 2 specimens, 9.–11.v.2002; Bandar-e-Mahshar, 1 specimen, 12.–13.vi.2006; Dezful, 1 specimen, 6.–7.vi.2005; near Ramhormoz, 3 specimens, 7.–9.vi.2008; Shadegan, 3 specimens, 20.–21.iv.2007; Zeydoon, 8 specimens, 26.–28.iv.2007. **BUSHEHR:** Ab Pakhs, 1 specimen, 25.–26.iv.2007; near Bandar-e-Genaveh, 3 specimens, 23.–24.iv.2007. **FARS:** Maharlu, many specimens, 16.–17.iv.2005.

**Comments.** At light in shores of rivers with Cyperaceae and Juncaceae and closely located gardens and marshes. Eremian, known in North Africa, the Middle East and the Sudanese subregion from the Cape Verde Islands to Sudan.

##### *Cymus melanocephalus* Fieber, 1861

**Material examined.** **WEST AZERBAIJAN:** 25 km S of Urumiyeh, many specimens, 13.vi.2005. **FARS:** Dasht-e-Arzhan, 2 specimens, 12.–13.vi.2003; Tang-e-Bostanak, 1650 m a.s.l., 20 specimens, 8.–9.vi.1996. **KOHLUYEH & BOYERAHMAD:** Vazag SE of Yahrom, 1 specimen, 18.vi.2003. **KURDESTAN:** 20 km NE of Marivan, 1 specimen, 24.–26.vi.2008.

**Comments.** On Cyperaceae and Juncaceae in marshes and moist meadows. West-Palaeartic, extending to the Middle East, Tajikistan and Kirgizia.

#### Subfamily Blissinae

##### *Ischnodemus caspius* Jakovlev, 1871

**Material examined.** **KHUZESTAN:** Abadan, 5 specimens, 10.–11.vi.2008; Zeydoon, many specimens, 26.–28.iv.2007. **ILAM:** Ilam, 1 specimen, 2.–3.v.2007.

**Comments.** Recorded on *Typha latifolia*. Irano-Turanian, extending from Bulgaria and Greece to Egypt and the middle Asia.

#### Subfamily Henestarinae

##### *Engistus exsanguis exsanguis* Stål, 1872

**Material examined.** **KHUZESTAN:** near Ahvaz, 2 specimens, 29.iv.–v.2007; near Ahvaz Karun river, 2 specimens, 10.–11.vi.2006; Andimeshk – Tangvan, 1 specimen, 9.–10.vi.2006; Lali, 4 specimens, 6.–7.vi.2008; Shadegan, 1 specimen, 9.–10.vi.2008; Zeydoon, 1 specimen, 26.–28.iv.2008. **FARS:** Baba Arab 50 km SE of Jahrom, 1 specimen, 16.–17.vi.2003; Khaneh Kat, 1 specimen, 16.–17.vi.2008; Maharlu, 1 specimen, 16.vi.2006. **KERMAN:** Kerman,

1 specimen, 22.–23.v.1996. **KHORASAN:** Parvand 60 km W of Sabzevar, 3 specimens, 18.–19.vi.2005. **YAZD:** Ashkazar, 3 specimens, 18.–24.v.1996.

**Comments.** On halophytes such as *Haloxylon*, *Salsola* and *Zygophyllum*. Eremian, extending to the Mediterranean and Sudanese subregions and to West Pakistan.

***Henestaris halophilus* (Burmeister, 1835)**

**Material examined.** **FARS:** Maharlu, many specimens, 14.–15.vi.2003. **WEST AZERBAIJAN:** Marangalu near Urmiyeh, 1 specimen, 13.–17.vii.2004.

**Comments.** Recorded e.g. on *Glycyrrhiza*, *Limonium caspium*, *Obione*, *Artemisia*, and *Puccinellia*. South-Palaeartic, extending from Central and South Europe to China.

Subfamily Geocorinae

***Geocoris (Geocoris) acuticeps* Signoret, 1881**

**Material examined.** **KERMAN:** Shahdad Hemmat-Abad, 250 m a.s.l., 1 specimen, 21.vi.1996.

**Comments.** East-Eremian, extending from Egypt and Lebanon to Greece, Malta, Central Asia, and Sudan.

***Geocoris (Geocoris) ater* (Fabricius, 1787)**

**Material examined.** **FARS:** 10 km S of Deh Bid, 2000 m a.s.l., 2 specimens, 19.vi.1996; Tang-e-Bostanak, 1650 m a.s.l., 1 specimen of var. *albipennis*, 8.–9.vi.1996. **WEST AZERBAIJAN:** near Agh Bologh, 1 specimen of var. *albipennis*, 19.vii.2004.

**Comments.** In hilly steppes. Euro-Siberian.

***Geocoris (Geocoris) fedtschenkoi* Reuter, 1885**

(Figs. 6, 7B–G)

**Material examined.** **KHUZESTAN:** near Ahvaz Karun river, 1 specimen, 10.–11.vi.2006.

**Comments.** In shore of a river with halophytes. Eremian, known from North Africa, Saudi Arabia and the Middle East.

***Geocoris (Geocoris) montandoniellus* Kiritschenko, 1915**

(Figs. 2–5)

*Ophthalmicus luridus* (misidentification): **FERRARI** (1874): 153; **MONTANDON** (1913): 249.

*Geocoris montandoniellus* Kiritschenko, 1915: 92 (as a new name for *G. luridus* sensu **Ferrari** (1874)); Kiritschenko (1924): 14 (duplicate proposal of the new name).

**Type material examined.** **HOLOTYPE:** 1 ♀, Persia, G. Doria (Coll. Museo Civico di Storia Naturale “Giacomo Doria”, Genoa, Italy).

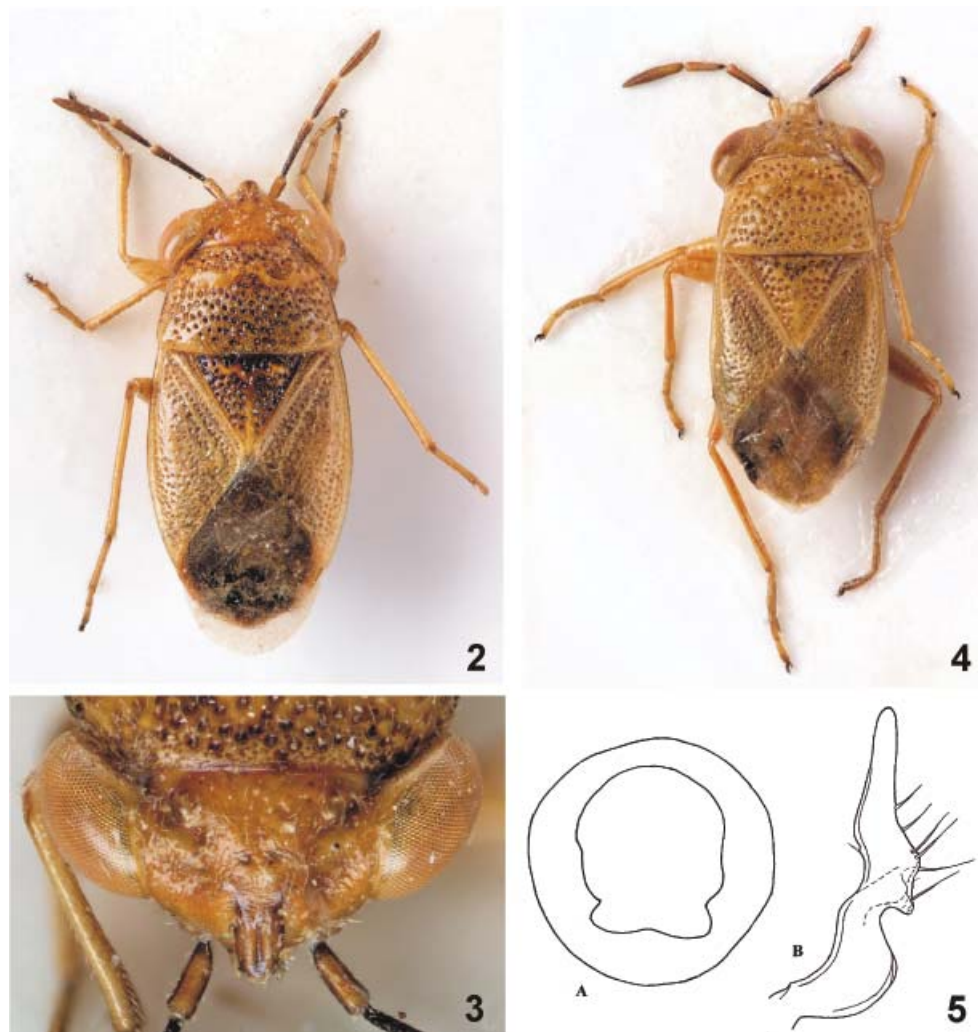
**Additional material examined.** **FARS:** 10 km S of Deh Bid, 2000 m a.s.l., 1 ♂ (macropterous), 1 ♂ (brachypterous), 1 ♀, 14.vi.1996.

**Redescription.** Length: ♂♂ 3.0–3.25 mm, ♀ 3.5 mm.

**Colouration.** Shiny. Yellow-brown. Eyes pale greyish with reddish tinge. Antennomere 1 in female yellow, laterally darkened, other segments blackish, extreme apex of antennomeres

2 and 3 whitish; antennomeres 2 and 3 in male broadly yellow-brown. Rostrum dark brown. Punctures of pronotum and scutellum dark. Membranes of hemelytra pale. Dorsum of abdomen blackish, paratergites pale. Venter in ♂ blackish, laterally pale, in ♀ paler. Legs pale.

**Structure.** Body in ♂ 2.5–2.9 times, in ♀ 2.6 times as long as basal width of pronotum. Head and anterior part of pronotum with short pale hairs. Head 1.05–1.14 (♂) or 1.03 (♀) times as broad as basal width of pronotum, 2.5–2.6 times as broad as long in middle; ocular index 2.32–2.57 (♂), 2.82 (♀). Antennae with short pale hairs; proportions between antennomeres 11: 25 : 20 : 30 (♂), 15 : 28 : 21 : 29 (♀); antennomere 2 (♂♀) 0.33 times as long as basal



Figs. 2–5. *Geocoris montandoniellus* Kiritshenko, 1915. 2 – general habitus, female; 3 – dorsal view of head and apical part of pronotum of female; 4 – general habitus, male; 5 – male genitalia (A – pygophore; B – paramere).



Fig. 6. *Geocoris fedtschenkoi* Reuter, 1885, female.

width of pronotum. Rostrum extending to middle coxae. Pronotum ( $\text{♂♀}$ ) 1.53–1.75 times as broad as long, lateral margins slightly insinuated; disk, excluding calli and basal margin, densely and coarsely punctate. Scutellum 1.1–1.2 times as long as broad, densely and strongly punctate with T-shaped impunctate area. Puncturing on hemelytra finer, clavus with a row of punctures; corium, excluding lateral margins, densely punctate; membranes of brachypterous form extending to apex of tergite VI. Ventral surface of thorax densely punctate; abdominal venter covered with dense pale hairs. Male genitalia: pygophore and paramere as in Fig. 5 A–B.

**Differential diagnosis.** A revision of the genus *Geocoris* Fallén, 1814 from the former USSR and Mongolia was published by KERZHNER (1979). *Geocoris montandoniellus* is apparently closely related to *G. limbatellus* (Horváth, 1895) (Fig. 7A) from Central Asia. *Geocoris limbatellus* is somewhat bigger, length 3.5–3.7 mm, generally with dark areas on dorsum and brachypterous; pronotum with very sparse large punctures. Other pale-coloured related species differ in the following characters: *Geocoris pattakumensis* Kiritshenko, 1914 (Central Asia) has totally pale antennae, sparser puncturing on pronotum and scutellum, and corium basally largely impunctate. *Geocoris fedtschenkoi* Reuter, 1885 (Figs. 6, 7B–G) (Eremian, extending from North Africa

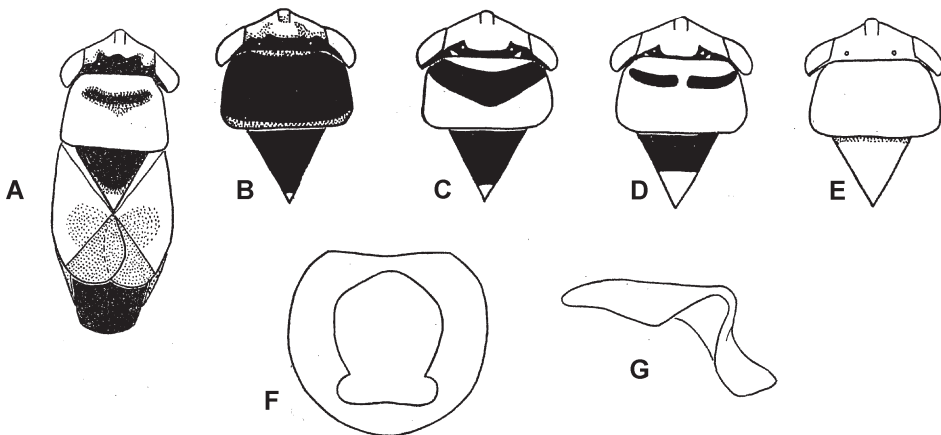


Fig. 7. A – *Geocoris limbatellus* (Horváth, 1885); B – *G. fedtschenkoi* Reuter, 1885; B–E – variability of colouring of head, pronotum and scutellum; F – pygophore; G – paramere (after KERZHNER 1979).



to Central Asia) resembles *G. montandoniellus* in colouration, but it is bigger, length 3.5–4.2 mm, has finer and sparser puncturing on pronotum and scutellum, corium with two puncture rows along claval suture, mesocorium with a few fine punctures only apically, and a row of punctures along radius. Colouration of *G. fedtschenkoi* is also variable as in Fig. 7B–E, and male genitalia (Fig. 7F–G) are different. *Geocoris phaeopterus* (Germar, 1838) (Fig. 8A–E) (Saharo-Sindien, extending from the Mediterranean area to tropical Africa, the Middle East and Pakistan), 3.2–4.0 mm long, is pale-coloured, and differs in the finer and very dense puncturing and corium with two rows of punctures along claval suture, otherwise being largely impunctate; and with the unique pronotal middle carina.

**Comments.** Collected in a mountain meadow. Endemic to Iran.

*Geocoris (Geocoris) pallidipennis pallidipennis* (A. Costa, 1843)

**Material examined.** KHUZESTAN: Lali, 4 specimens, 6.–7.vi.2008. FARS: Takht-e-Jamshid, 14.–15.vi.1996. KERMAN: Shahdad Hammat-Abad, 250 m a.s.l., 1 specimen, 21.vi.1996.

**Comments.** In hilly slopes and valleys near the source of the Karun river. Holomediterranean, extending to Central Asia.

*Geocoris (Geocoris) phaeopterus* (Germar, 1838)

(Fig. 8)

**Material examined.** KHUZESTAN: Ahvaz near Karun river, 2 specimens, 10.–11.vi.2006; near Andimeshk, 1 specimen, 5.–6.v.2007; Andimeshk – Tangvan, 3 specimens, 9.–10.vi.2006; Lali, 5 specimens, 6.–7.vi.2008. FARS: 10 km S of Deh Bid, 2000 m a.s.l., 14.vi.1996; Maharlu, 2 specimens, 15.–16.vi.2006. KERMAN: Shahdad Hemmat-Abad, 250 m a.s.l., 1 specimen, 21.v.1996. WEST AZERBAIJAN: Kitkeh 50 km S of Mahabad, 1 specimen, 19.–20.vii.2004.

**Comments.** In fields and steppes on *Pulicaria* and *Tamarix*. Eremian, also widely distributed in tropical Africa and Pakistan.

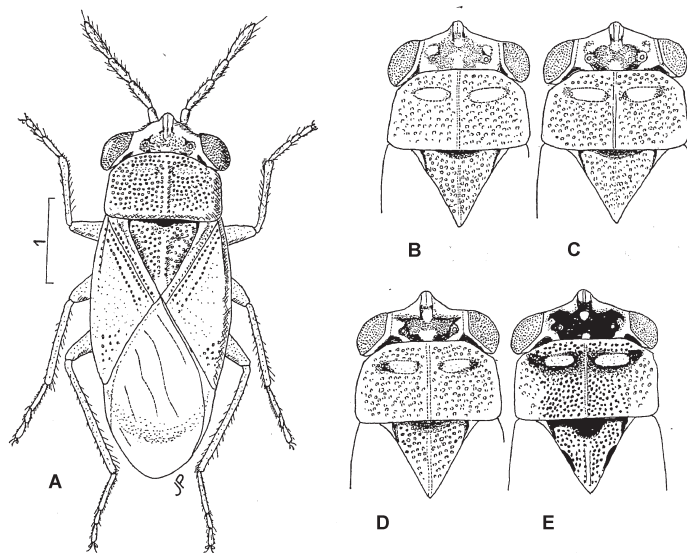


Fig. 8. *Geocoris phaeopterus* (Germar, 1838): A – male; B–E – variability of head, pronotum and scutellum (after PÉRICART 1999).

***Geocoris (Geocoris) pubescens (Jakovlev, 1871)***

**Material examined.** FARS: Dasht-e-Arzan, 1 specimen, 12.–13.vi.2003; 10 km S of Deh Bid, 2000 m a.s.l., 2 specimens, 14.vi.1996; Kamfiruz, 1 specimen, 15.–16.v.2002; Maharlou, 5 specimens, 14.–15.vi.2003; Mokhar near Ghotb Abad, 3 specimens, 12.vi.2003. KERMAN: Shahdad Hammat-Abad, 250 m a.s.l., 1 specimen, 21.v.1996.

**Comments.** On Salsolaceae and Poaceae. Eremian, known from North Africa, East Mediterranean subregion, the Middle East including Saudi Arabia and Yemen, Sudan, and Cape Verde Islands.

***Geocoris (Piocoris) erythrocephalus (Lepelletier & Serville, 1825)***

**Material examined.** FARS: Dasht-e-Arzan, 1 specimen, 12.–13.vi.2003; 10 km S of Deh Bid, 1 specimen, 2000 m a.s.l., 14.vi.1996. KERMAN: Sar Chesmeh, 2225 m a.s.l., 3 specimens, 19.v.1996.

**Comments.** In hilly steppes with Lamiaceae, Fabaceae and Boraginaceae. Holomediterranean, extending to Central Europe and the Middle East.

***Geocoris (Piocoris) luridus luridus (Fieber, 1844)***

**Material examined.** KHUZESTAN: Ahvaz – Ghazavieh, 1 specimen, 7.–8.vi.2005. ESFAHAN: Salafjegen – Deliman, 1 specimen, 9.vi.2003. FARS: Khaneh Kat, 2 specimens, 16.–17.vi.2006; Khaneh Zenyan, 1 specimen, 13.–14.vi.2003.

**Comments.** On *Tamarix*. Eremian, extending from North Africa to the Middle East, Central Asia, Ethiopia, and Sudan.

***Geocoris (Piocoris) quercicola Linnavuori, 1962***

**Material examined.** FARS: Fasa – Mianjangal, 2 specimens, 18.–19.vi.2006. KERMAN: Raviz Shahabieh, 1800 m a.s.l., 1 specimen, 24.v.1996.

**Comments.** On *Quercus*. Known from Iran, Iraq, Israel, and Jordan.

## Subfamily Artheneinae

***Artheneidea tenuicornis Kiritshenko, 1914***

**Material examined.** GOLESTAN: Alagol, 1 specimen, 12.–13.vii.2007. KERMAN: Sar Khesmeh, 2225 m a.s.l., 3 specimens, 19.v.1996.

**Comments.** On *Tamarix* and Zygophyllaceae. Eremian, extending from North Africa to Saudi Arabia, the Middle East, Central Asia, Mongolia, China, and Sudan.

***Artheneis aegyptiaca Lindberg, 1939***

**Material examined.** KHUZESTAN: Ahvaz – Ghazavieh, 1 specimen, 7.–8.vi.2005; Ahvaz – Jangieh, 1 specimen, 11.–12.vi.2006; Shadegan, 1 specimen, 13.–14.vi.2006.

**Comments.** On *Tamarix*. Eremian, known from Libya, Egypt, the Arabian Peninsula, Israel, Iran, and Sudan.

***Artheneis balcanica (Kormilev, 1938)***

**Material examined.** KHUZESTAN: Dezful, 2 specimens, 6.–7.vi.2005. FARS: Pol-e-Khan, 1 specimen, 13.vi.2002. KERMAN: Sar Chesmeh, 2225 m a.s.l., 7 specimens, 19.v.1996.

**Comments.** On *Tamarix*. Caspian, extending from the Balkan Peninsula to Central Asia.

***Artheneis deserticola* Kerzhner, 1997**

**Material examined.** KHUZESTAN: Ahvaz – Jangieh, 1 specimen, 11.–12.vi.2006. BUSHEHR: Ab Pakhs, 2 specimens, 25.–26.iv.2007. WEST AZERBAIJAN: Nushin Sar near Urumiyeh, 1 specimen, 25.–27.vi.2006.

**Comments.** On *Tamarix*. Known from Iran, Iraq, Kazakhstan, Turkmenistan, and Uzbekistan.

***Artheneis hyrcanica* (Kolenati, 1845)**

**Material examined.** KHUZESTAN: near Ahvaz, 1 specimen, 29.iv.–1.v.2002; Ahvaz – Jangieh, 2 specimens, 11.–12.vi.2006; Dezful, 6.–7.vi.2005; Lali, 1 specimen, 6.–7.vi.2008. KERMAN: Rayiz Shahabieh, 1800 m a.s.l., 2 specimens, 24.v.1996.

**Comments.** Recorded on *Salix*. Caucasus, recorded from Greece, Turkey, Georgia, Armenia, Azerbaijan, Iran, Iraq, and Syria.

***Artheneis turangae* Kerzhner, 1997**

**Material examined.** Many specimens: KHUZESTAN: Abadan, 21.–22.iv.2007; Ahvaz – Ghazavieh, 7.vi.2005; Ahvaz – Jangieh, 11.–12.vi.2006; Andimeshk – Tangvan, 9.–10.viii.2006; Dezful, 6.–7.vi.2005; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Shadegan, 20.–21.iv.2007; Zeydoon, 26.–28.iv.2007. FARS: Pol-e-Khan, 15.vi.2002.

**Comments.** Recorded on *Populus*. Known from Iraq and Turkmenistan. **New for Iran.**

***Artheneis wagneri* Ribes, 1972**

**Material examined.** KHUZESTAN: near Lali, 1 specimen, 6.–8.iii.2007. KERMAN: Sar Chesmeh, 2225 m a.s.l., 1 specimen, 19.v.1996.

**Comments.** On *Tamarix*. Ponto-Mediterranean, also known from Spain.

***Holcocranum diminutum diminutum* Horváth, 1898**

**Material examined.** KHUZESTAN: near Ramhormoz, 2 specimens, 7.–9.vi.2008.

**Comments.** In shore of a little river with rich vegetation with *Tamarix* and *Phragmites*. Central Asian, extending from Egypt and northern Sudan to Central Asia and Mongolia. **New for Iran.**

***Holcocranum saturejae* (Kolenati, 1845)**

**Material examined.** KHUZESTAN: Dezful, 1 specimen, 6.–7.vi.2005; Sardasht, 1 specimen, 11.–12.vi.2008; Zeydoon, 2 specimens, 28.iv.2008. FARS: Khaneh Kat, 2 specimens, 16.–17.vi.2006; Maharlu, several specimens, 16.–17.vi.2008.

**Comments.** In shore of a little river with *Tamarix*. At light in a garden near a salt lake. Known on Lamiaceae, *Salix*, *Typha* and *Phragmites*. Holomediterranean, extending to Central Asia and tropical Africa. Also known from North America. From Iran recorded for the first time by LINNAVUORI (2004).

## Subfamily Pachygronthinae

***Cymophyes ochroleuca* Fieber, 1870**

**Material examined.** Numerous specimens: **FARS:** Maharlu, 14.–15.vi.2003; Mokkeh near Ghotb Abad, 17.vi.2003; 13 km E of Sarvestan, 14.–16.vi.2003.

**Comments.** On Poaceae, e.g. *Aeluropus litoralis* and *Panicum turgidum*. East-Mediterranean, known from Greece, Cyprus, Egypt, Libya, Syria, Yemen, Saudi Arabia, Israel, Iraq, Iran, and Turkey.

## Subfamily Heterogastrinae

***Heterogaster affinis* (Herrich-Schaeffer, 1835)**

**Material examined.** **FARS:** Estahban, 1710 m a.s.l., 15 specimens, 10.–11.vi.1996. **KERMAN:** Raviz Shahabieh, 1800 m a.s.l., 1 specimen, 24.v.1996.

**Comments.** Known on Lamiaceae, *Acinos arvensis*, *Chenopodium vulgare*, *Teucrium* sp., and *Thymus* sp. Euromediterranean-Turanian.

## Subfamily Oxycareninae

***Auchenodes conspersus* (Jakovlev, 1885)**

**Material examined.** **FARS:** Estahban, 1710 m a.s.l., 1 specimen, 10.–11.vi.1996; 15 km E of Sa'adatshahr, 1680 m a.s.l., 7 specimens, 6.–7.vi.1996.

**Comments.** In hilly steppes. Central Asian. **New for Iran.**

***Auchenodes utu* Linnavuori, 1984**

**Material examined.** **FARS:** Estahban, 1710 m a.s.l., 3 specimens, 10.–11.vi.1996; 15 km E of Sa'adatshahr, 1680 m a.s.l., 4 specimens, 6.–7.vi.1996; Zanjan Bamon National Park, 1650 m a.s.l., 1 specimen, 13.–14.vi.1996. **KHORASAN:** Can Chiroc 50 km S of Tabas, 1 specimen, 18.v.1996.

**Comments.** On xerophytes in dry hill slopes. Known from Iran, Iraq and Saudi Arabia. Possibly conspecific with *A. peyerimhoffi* Royer, 1914, known from Iran and Sinai (PÉRICART 1999: 107).

***Leptodemus bicolor* Lindberg, 1924**

**Material examined.** **FARS:** 10 km S of Deh Bid, 2000 m a.s.l., 1 specimen, 14.vi.1996.

**Comments.** Recorded on Poaceae: *Avena*, *Panicum turgidum*, *Phragmites*. Known from Greece, Italy, the Middle East and Central Asia.

***Leptodemus minutus* (Jakovlev, 1874)**

**Material examined.** **KHUZESTAN:** near Ahvaz, 1 specimen, 29.iv.–1.v.2007. **FARS:** 10 km S of Deh Bid, 2000 m a.s.l., 1 specimen, 14.vi.1996. **KERMAN:** Raviz Shahabieh, 1800 m a.s.l., 1 specimen, 21.v.1996.

**Comments.** In hilly steppes. Recorded on *Plantago indica* and Poaceae, especially *Aristida scoparia*. Known from South Europe, the Middle East, Central Asia, and Sudan.

***Macroplox fasciata fasciata* (Herrich-Schaeffer, 1835)**

**Material examined.** BUSHEHR: near Bandar-e-Genaveh, 1 specimen, 23.–24.iv.2007.

**Comments.** In hilly steppes on Cistaceae. Holomediterranean.

***Macroplox fasciata blancae* Hoberlandt, 1943**

**Material examined.** FARS: Estahban, 1719 m a.s.l., 1 specimen, 10.–11.vi.1996; Zarqan Bamon National Park, 1650 m a.s.l., 1 specimen, 13.–14.vi.1996.

**Comments.** In hilly steppes. Known from Iran, Iraq and Turkmenistan.

***Macropternella inermis* (Fieber, 1851)**

**Material examined.** FARS: Mokhah near Ghotb Abad, 1 specimen, 17.vi.2003.

**Comments.** Recorded on Poaceae. Eremian, extending to the Balkan Peninsula, the Middle East, Central Asia, Sudan, and Ethiopia.

***Microplax interrupta* (Fieber, 1837)**

**Material examined.** FARS: Sarvestan, 2 specimens, 10.vi.1996; Tang-e-Bostanak, 1619 m a.s.l., 1 specimen, 8.–9.vi.1996.

**Comments.** In hilly steppes, found on Asteraceae. Holomediterranean, extending to Central Europe, the Middle East, Central Asia, and India.

***Oxycarenus (Euoxycarenus) pallens* (Herrich-Schaeffer, 1850)**

**Material examined.** ESFAHAN: Shahreza – Semirom, 6 specimens, 11.vi.2003. FARS: 19 km S of Seh Bid, 2000 m a.s.l., 6 specimens, 14.vi.1996; Kamfiruz, 1 specimen, 15.–16.vi.2002; Pol-e-Khan, 1 specimen, 15.vi.2002; 15 km E of Sa'adatshahr, 1880 m a.s.l., 5 specimens, 6.–7.vi.1996; Zarqan Bamon National Park, 1650 m a.s.l., 2 specimens, 13.–14.vi.1996; Takht-e-Jamshid, 2 specimens, 14.–15.vi.2002. KOHGILUYEH & BOYERAHMAD: Samirun, 6 specimens, 11.–12.vi.2003. KURDESTAN: Saqqez, 1 specimen, 13.–14.vi.2005; near Suteh, 1 specimen, 13.vi.2005. LORESTAN: near Khoram Abad, 2 specimens, 5.–6.vi.2005. WEST AZERBAIJAN: Bilas 20 km S of Mahabad, 1 specimen, 19.–20.vii.2004; Marangalu near Urumiyeh, 1 specimen, 15.–17.vii.2004; Nushin Shahr, 6 specimens, 15.–17.vi.2005.

**Comments.** In mountain steppes on Asteraceae such as *Centaurea*. Holomediterranean, extending to Middle East and Central Asia, India, and Sudan.

Subfamily Rhyparochrominae

Tribe Antillocorini

***Tropistethus lanternae* Linnavuori, 1960**

**Material examined.** KERMANSHAH: near Javanrud, 4 specimens, 10.–11.vi.2005. KURDESTAN: Marivan, many specimens, 12.–13.vi.2005.

**Comments.** At light in hills. Ponto-Mediterranean, extending to Central Asia.

Tribe Drymini

***Scolopostethus decoratus* (Hahn, 1833)**

**Material examined.** KHUZESTAN: Andimeshk – Tangvan, 3 specimens, 9.–10.vi.2006; Bagh Malek, 1 specimen,

9.–11.v.2007; Dezful, 1 specimen, 6.–7.vi.2005; Zeydoon, 2 specimens, 26.–28.iv.2007. **FARS**: near Nur Abad, 1 specimen, 21.–22.v.2008.

**Comments.** In deciduous forests. West-Palaeartic, extending to the Middle East and Central Asia.

#### Tribe Gonianotini

##### *Emblethis ciliatus* Horváth, 1875

**Material examined.** **FARS**: 10 km S of Deh Bid, 2000 m a.s.l., 3 specimens, 14.vi.1996. **KERMAN**: Raviz Shahabieh, 1800 m a.s.l., 1 specimen, 24.vi.1996.

**Comments.** In mountain steppes. Holo-Palaeartic, extending to Sahara.

##### *Emblethis denticollis* Horváth, 1878

**Material examined.** **WEST AZERBAIJAN**: Marangalu near Urmiyeh, 7 specimens, 15.–17.vii.2004.

**Comments.** In hilly steppes and gardens. Holopalaeartic.

##### *Emblethis gracilicornis* Puton, 1883

**Material examined.** **KHUZESTAN**: Zeydoon, 1 specimen, 26.–28.iv.2007. **KERMAN**: Shahdad Hammat-Abad, 250 m a.s.l., 2 specimens, 21.v.1996.

**Comments.** In hilly steppes. Widely distributed in the Eremian subregion and extending to the Sudanese one.

##### *Hyalocoris pilicornis* Jakovlev, 1874

**Material examined.** **KERMAN**: Shahdad Hammat-Abad, 250 m a.s.l., several specimens, 21.v.1996. **KHORASAN**: Parvand 60 km W of Sabzevar, 3 specimens, 18.–19.vi.2008. **WEST AZERBAIJAN**: Nushin Sar near Urmiyeh, 1 specimen, 25.–26.vii.2008.

**Comments.** In dry hilly steppes. Extending from southern Russia to the Middle East and Central Asia. Also known from Chad and Niger.

##### *Ischnopeza persica* Jakovlev, 1907

**Material examined.** **FARS**: 15 km E of Sa'adatshahr, 1680 m a.s.l., 1 specimen, 6.–7.viii.1996.

**Comments.** In a mountain steppe. Endemic.

#### Tribe Lethaeini

##### *Camptocera glaberrima* (Walker, 1872)

**Material examined.** Numerous specimens. **KHUZESTAN**: Ahvaz – Jangieh, 11.–12.vi.2006; Ahvaz, Karun river, 10.–11.vi.2006; Andimeshk – Tangvan, 9.–10.vi.2006; Bandar-e-Mahshar, 1.–13.vi.2006; Dezful, 6.–7.vi.2005; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Sardasht, 11.–12.vi.2008; Shadegan, 13.–14.vi.2006. **BUSHEHR**: Ab Pakhs, 13.–14.vi.2008. **FARS**: Baba Arab 30 km SE of Jahrom, 16.–17.vi.2003; Farrahsband, 14.–15.vi.2008; near Fasa, 17.–19.vi.2008; Fasa – Mianjangan, 18.–19.vi.2006; Firuzabad, 15.–16.vi.2008; Kamfiruz, 15.–16.vi.2002; Maharlu, 17.–18.vi.2002, 14.–18.vi.2003; 15 km E of Sarvestan, 15.–16.vi.2003; 15 km N of Shiraz, 14.vi.2002; 10 km W of Shiraz, 16.–17.vi.2002; Tang-e-Jamshid, 14.–15.vi.2002. **ILAM**: near Eyvan, 9.–10.vi.2005. **KURDESTAN**: near Marivan, 12.–13.vi.2005; near Sanandai, 11.–12.vi.2005. **WEST AZERBAIJAN**: Bitas 20 m S of Mahabad, 19.–20.vii.2004; Marangalu near Urmiyeh, 15.–17.viii.2004; Nushin Sar near Urmiyeh, 25.–26.vi.2006.

**Comments.** At light trap in steppes and gardens. Eremian, extending to South Europe, the Middle East, Central Asia, the Sudanese Subregion, South India, and Indo-China.

***Lethaeus fulvovarius* Puton, 1884**

**Material examined.** Numerous specimens. **KHUZESTAN:** Ahvaz – Ghazavieh, 7.–8.vi.2005; Ahvaz – Jangieh, 11.–12.vi.2006; near Ahvaz Karun river, 10.–11.vi. 2006; Andimeshk, 5.–6.vi.2008; Bandar-e-Mashahar, 12.–13.vi.2006; Dezful, 6.–7.vi.2005; near Fasa, 17.–19.vi.2008; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sadde-e-Dez, 6.–7.vi.2005; Sardasht, 11.–12.vi.2008; Shadegan, 9.–10.vi.2008. **BUSHEHR:** Ab Pakhs, 23.–26.iv.2007; near Bandar-e-Genaveh, 23.–24.iv.2007. **FARS:** Baba Arab 50 km SE of Jahrom, 16.–17.vi.2003; Bavan near Nur Abad, 20.–21.vi.2008; Estahban, 1710 m a.s.l., 10.–11.vi.1996; Farrahsband, 14.–15.vi.2008; Fasa – Mianjangan, 18.–19.vi.2006, 14.–15.vi.2008; Maharlu, 16.–17.vi.2008. **LORESTAN:** near Khoram Abad, 5.–6.vi.2005. **WEST AZERBAIJAN:** Bitas 20 km S of Mahabad, 19.–20.vii.2004.

**Comments.** At ligh in steppes and gardens. Eremian, extending from North Africa to the Middle East, Beluchistan, Pakistan, and tropical Africa.

***Lethaeus lethierryi* (Puton, 1869)**

**Material examined.** **KHUZESTAN:** near Ramhormoz, 2 specimens, 7.–9.vi.2008; Sadde-e-Dez, 1 specimen, 6.–7.vi.2005.

**Comments.** At light in steppes. Eremian, extending from North Africa to Italy, the Middle East, Pakistan, and tropical Africa.

***Lethaeus picipes* (Herrich-Schaeffer, 1850)**

**Material examined.** **KHUZESTAN:** Andimeshk, 3 specimens, 5.–6.vi.2008. **FARS:** Bavan near Nur Abad, 1 specimen, 20.–21.vi.2008; Dasht-e-Arzan, 1 specimen, 12.–13.vi.2003; Fasa – Mianjangan, 2 specimens, 17.–18.vi.2008; Khaneh Kat, 2 specimens, 16.–17.vi.2005; Maharlu, 1 specimen, 16.–17.vi.2008; Zarqan Bamon National Park, 1650 m a.s.l., 1 specimen, 13.–14.vi.1998. **ILAM:** Ilam, 2 specimens, 21.–22.vi.2006. **LORESTAN:** near Khoram Abad, 1 specimen, 5.–6.vi.2005. **ZANJAN:** Jilan Keshe, 2 specimens, 9.–13.x.2000.

**Comments.** At light in gardens, steppes and shore of a salt lake. Irano-Turanian, extending from the Balkan Peninsula to Pakistan.

Tribe Megalonotini

***Megalonotus colon* Puton, 1874**

**Material examined.** **FARS:** Baba Arab 50 km SE of Jahrom, 1 specimen, 16.–17.vi.2003; Zarqan Bamon National Park, 1650 m a.s.l., 2 specimens, 13.–14.vi.1996.

**Comments.** At light in hilly steppes and gardens. Ponto-Mediterranean, extending to the Middle East and Central Asia.

***Megalonotus sabulicola* (Thomson, 1870)**

**Material examined.** **KHUZESTAN:** Andimeshk – Tangvan, 1 specimen, 9.–10.vi.2006.

**Comments.** At light in a garden with a small brook with rich vegetation such as *Phragmites* and *Juncus*. Holarctic.

***Piezoscelis brachynota* Kiritschenko, 1925**

**Material examined.** KHUZESTAN: near Ahvaz, Karun River, 1 specimen, 10.–11.vi.2006; Andimeshk – Tangvan, 1 specimen, 9.–10.vi.2006.

**Comments.** At light in gardens with a brook and along shores of a river. Known from Iraq, Tajikistan and Turkmenistan. **New for Iran.**

Tribe Myodochini

***Paraparomius leptopoides* (Baerensprung, 1859)**

**Material examined.** KHUZESTAN: Dezful, 1 specimen, 6.–7.vi.2005.

**Comments.** North-Mediterranean, extending to Egypt and the Middle East.

Tribe Phasmosomini

***Phasmosomus priesneri* (Wagner, 1958)**

**Material examined.** FARS: Estahban, 1710 m a.s.l., 1 specimen, 10.–11.vi.1996.

**Comments.** In a hilly steppe. Known from Afghanistan, Iran, Iraq, Israel, and Sinai.

Tribe Plinthisini

***Plinthisus (Plinthisus) longicollis* Fieber, 1861**

**Material examined.** FARS: 15 km E of Sa'adatshahr, 1650 m a.s.l., 1 specimen, 6.–7.vi.1996.

**Comments.** In a hilly steppe. Holomediterranean, extending to Central Europe, the Middle East and Central Asia.

Tribe Rhyparochromini

***Dieuches schmitzi* Reuter, 1893**

**Material examined.** Many specimens: KHUZESTAN: Ahvaz – Jangieh, 11.–12.vi.2006; Andimeshk, 5.–6.viii.1998; Andimeshk – Tangvan, 9.–10.vi.2006; Lali, 6.–7.vi.2008; near Ramhormoz, 7.–9.vi.2008; Sardasht, 11.–12.vi.2008; Shadegan, 13.–14.vi.2006; Zeydoon, 26.–28.iv.2007. BUSHEHR: Ab Pakhs, 25.–26.iv.2007. FARS: Baba Arab 30 km SE of Jahrom, 16.–17.vi.2003; Farrahsband, 14.–15.vi.2008; Firuzabad, 15.–16.vi.2008; Maharlou, 15.–16.vi.2008; 10 km W of Shiraz, 16.–17.vi.2002.

**Comments.** At light in gardens on slopes of hills and at a brook with *Tamarix*. Eremian, known from North Africa, Iran, Iraq, and Saudi Arabia, extending to tropical Africa (Cabo Verde Islands, Guinea, Senegal).

***Dieuches syriacus* Dohrn, 1860**

**Material examined.** FARS: Baba Arab 30 km SE of Jahrom, 6 specimens, 16.–17.vi.2003; Bavan near Nur Abad, 1 specimen, 20.–21.vi.2008; Estahban, 1710 m a.s.l., 2 specimens, 10.–14.vi.1996. KERMAN: Sar Chersmeh, 2225 m a.s.l., 1 specimen, 19.vi.1996.

**Comments.** At light in gardens in lower slopes of mountains. Eremian, known from the Middle East, Greece, Pakistan and tropical Africa.



***Elasmolomus transversus* (Signoret, 1861)**

**Material examined.** KHUZESTAN: near Lali, 1 specimen, 6.–8.v.2007.

**Comments.** In hilly slopes and valleys near the Karun river. Widely distributed in tropical Africa, also known from Saudi Arabia, Yemen and Iran (Hormozgan).

***Lachnethus singalensis* (Dohrn, 1860)**

**Material examined.** KHUZESTAN: Andimeshk, 3 specimens, 5.–6.vi.2008; Andimeshk – Tangvan, 4 specimens, 8.–10.vi.2006; Bandar-e-Mahshar, 2 specimens, 12.–13.vi.2006; Lali, 2 specimens, 6.–7.vi.2008; Sadde-e-Dez, several specimens, 6.–7.vi.2005. LORESTAN: near Khoram Abad, 1 specimen, 5.–6.vi.2005.

**Comments.** At light in gardens with a small brook with *Juncus* and *Phragmites*. Known from Iran (Hormozgan), Afghanistan, Yemen, tropical Africa, and Asia.

***Peritrechus flavicornis* Jakovlev, 1877**

**Material examined.** KHUZESTAN: Lali, 3 specimens, 6.–7.vi.2008; Sardasht, 1 specimen, 11.–12.vi.2008.

**Comments.** At light in gardens on lower slopes of a hill near a river. Known from Southern Russia, Turkey, Iran, Saudi Arabia, and Uzbekistan.

***Peritrechus gracilicornis* Puton, 1877**

**Material examined.** WEST AZERBAIJAN: Marangalu near Urmiyeh, 6 specimens, 15.–17.vi.2004.

**Comments.** At light in gardens near shore of a salt lake. Holomediterranean, extending to Central Asia.

***Peritrechus meridionalis* Puton, 1877**

**Material examined.** Many specimens: KHUZESTAN: Ahvaz – Jangieh, 11.–12.vi.2007. FARS: Khaneh Kat, 16.–17.vi.2006; Maharlu, 15.–16.vi.2006. WEST AZERBAIJAN: Marangalu near Urmiyeh, 15.–17.vii.2004; Nushin Sar near Urmiyeh, 25.–27.v.2006; 25 km S of Urmiyeh, 17.vi.2005.

**Comments.** At light near salt lakes. Holomediterranean, extending to Central Asia.

***Peritrechus rhomboidalis* Puton, 1877**

**Material examined.** KHUZESTAN: near Ahvaz, Karun river, 1 specimen, 10.–11.iv.2008.

**Comments.** At light in garden near river banks. Irano-Turanian, also known from Bulgaria, Greece and Tunisia.

***Trichaphanus fuentei* (Puton, 1894)**

**Material examined.** WEST AZERBAIJAN: Kitkeh 50 km S of Mahabad, 1 specimen, 19.–20.vi.2004.

**Comments.** At light in a garden. Known from Spain, Azerbaijan, Armenia, Turkey, and Iran.

## Tribe Stygnocorini

*Stygnocorisella mayeti* (Puton, 1879)

**Material examined.** WEST AZERBAIJAN: 25 km S of Urumiyeh, 1 specimen, 17.vi.2005.

**Comments.** In shore of Lake Urumiyeh with *Juncus* and *Alhagi*. Holomediterranean, known from Albania, France, Greece, Spain, Algeria, Tunisia, Azerbaijan, Armenia, Turkey, Iraq, Israel, and Syria. **New for Iran.**

## Family Piesmatidae

*Parapiesma rotundatum* (Horváth, 1906)

**Material examined.** KHUZESTAN: near Ahvaz, Karun river, 1 specimen, 10.–11.vi.2006. FARS: Mokshah near Ghotb Abad, 1 specimen, 17.vi.2003.

**Comments.** In shores of rivers with *Tamarix*, *Juncus* and *Alhagi*. South-Mediterranean, known from Spain, Italy, Macedonia, the Middle East, North Africa, Yemen, and West Pakistan. **New for Iran.**

## Family Berytidae

## Subfamily Berytinae

## Tribe Berytini

*Neides brevipennis* Puton, 1895

**Material examined.** Many specimens: FARS: Estahban, 1610 m a.s.l., 10.–11.vi.1996; 15 km E of Sa'adatshahr, 1680 m a.s.l., 6.–7.vi.1996; Tang-e-Bostanak, 1650 m a.s.l., 8.–9.vi.1996. KERMAN: Sar Chesmeh, 2225 m a.s.l., 19.vi.1996.

**Comments.** In mountain meadows. Recorded on *Echium*. Syrio-Anatolian, extending to Yemen and Turkmenistan.

## Tribe Berytinini

*Berytinus (Lizinus) montivagus* (Meyer-Dür, 1841)

**Material examined.** Many specimens: KHUZESTAN: Bagh Malek, 9.–11.v.2007; near Lali, 6.–8.v.2007; Zeydoon, 26.–28.iv.2007. FARS: Estahban, 1710 m a.s.l., 10.–11.v.1996; Fasa – Mianjangal, 18.–19.vi.1996.

**Comments.** In slopes of hills with steppes and gardens. Recorded on *Medicago* and *Trifolium*. Euro-Mediterranean, extending to the Middle East and Central Asia.

## Tribe Gampsocorini

*Gampsocoris punctipes pallidus* Hoberlandt, 1951

**Material examined.** KHUZESTAN: Andimeshk, 1 specimen, 5.–6.vi.2008; near Lali, 9 specimens, 6.–7.vi.2008. FARS: Bavan near Nur Abad, 1 specimen, 20.–27.vi.2008; Dasht-e-Arzan, 1 specimen, 16.–17.vi.2002; Fasa – Mianjangal, 1 specimen, 18.–19.vi.2006; Firuzabad, 4 specimens, 15.–16.vi.2008; 15 km E of Sa'adatshahr, 1610 m a.s.l., several specimens, 6.–7.vi.1996; Takhst-e-Jamshid, 3 specimens, 14.–15.vi.2002.

**Comments.** Most of the examined specimens are totally pale, in some of them tubercles and even sides of calli of pronotum are black.

In steppes and gardens in hilly areas. Recorded e.g. on *Heliotropium*, *Salvia rubifolia* and *Potentilla*. Syrio-Anatolian extending to Central Asia.

#### Tribe Metacanthinae

#### *Metacanthus (Metacanthus) lineatus* (Jakovlev, 1875)

**Material examined.** KHUZESTAN: near Ahvaz, Karun river, 1 specimen, 10.–11.vi.2006. FARS: Maharlu, 3 specimens, 17.–18.vi.2002, 16.–17.vi.2008.

**Comments.** In gardens in lower slopes of hills near a salt lake. Known from South Russia, Ukraine, Egypt, the Middle East, and Central Asia.

### Discussion

Of the 123 identified species and subspecies, 38 (30.9 %) represent the Mediterranean element, 35 (28.5 %) Anatolian, Caucasian, Central-Asian, Irano-Turanian, and Syrio-Anatolian elements, 29 (23.6 %) Eremian, Palaeotropical and Cosmopolitan elements, 18 (14.6 %) West-Palaeartic, European, Holopalaeartic, Euro-Siberian, and Holarctic elements. Moreover, two species are endemic and one is Pantropical.

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