Materials on the fauna of true bugs (Heteroptera) of East Kazakhstan Region of the Republic of Kazakhstan

Nikolay N. Vinokurov¹, Valentin V. Rudoi²

¹ Institute for Biological Problems of Cryolithozone, Siberian Branch RAS, 41 Lenin Av., Yakutsk, 677980, Russia
² Altai State University, 61 Lenin Av., Barnaul, 656049, Russia

Corresponding author: Nikolay N. Vinokurov (vinok@ibpc.ysn.ru)

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Abstract
New data on the distribution of 101 species from 16 Heteroptera families in the East Kazakhstan Region of the Republic of Kazakhstan are reported. Twelve species are recorded for the first time from the study area: Nabis nigrovittatus steppensis (Kerzhner, 1981) (Nabidae), Deraeocoris ater (Jakovlev, 1889), Orthops mutans (Stål, 1858), Oncytus setulosus (Herrich-Schaeffer, 1837) (Miridae), Dictyla humuli (Fabricius, 1794) (Tingidae), Coranus aethiops Jakovlev, 1893 (Reduviidae), Aradus crenaticollis R.F. Sahlberg, 1848 (Aradidae), Horvathiolus superbus (Pollish, 1781), Acompus rufipes (Wolff, 1804), Acanthosoma denticaudum (Jakovlev, 1880) (Acanthosomatidae), Rubiconia peltata Jakovlev, 1890, and Eurydema fieberi Fieber, 1837 (Pentatomidae). Based on the latest data, the fauna of true bugs of the East Kazakhstan Region comprises 482 species from 25 families.

Keywords
Insects, bugs, Heteroptera, Kazakhstan, East Kazakhstan Region

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Introduction

The East Kazakhstan Region occupies vast territory in the eastern part of the Republic of Kazakhstan with an area of 283000 square km. Its relief is a complex combination of the plains, small hills (“melkosopochnik”), and mountain massifs in the north-east and east (South Altai, Tarbagatai, and Saur) – Figs 1–4. The regional river system belongs to the basin of the largest water body of the area – the Irtysh River and its tributaries, as well as to the Lake Balkhash basin. The largest lakes in the area are Zaisan, Markakol’, Alakol’, and Sasykkol’. The climate is sharply continental because of the position of the territory in the center of the Asian continent far from large sea basins (Sidorenko 1957). The insect fauna of East Kazakhstan is highly diverse: its includes the well-represented steppe fauna, the taiga and intra-zonal meadow and forest species penetrate the area from the north, and the desert and semi-desert fauna is quite developed in the south.

Figure 1. South Altai, Kyzylebltau Mts., gorge of the Eginsu River (photo by V.V. Rudoi).

Heteroptera in Kazakhstan have been investigated for a long time by the specialists of the Institute of Zoology of the Republic of Kazakhstan, Almaty, and of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, where voluminous collections on this group have been accumulated. A valuable contribution to the knowledge of the Heteroptera in East Kazakhstan was made by a scientist
Figure 2. Kalbinsky Mt. Range (photo by V.V. Rudoi).

Figure 3. The Emel River valley, Lake Alakol basin (photo by V.V. Rudoi).
of the Kazakhstan Institute of Zoology R.B. Asanova (Asanova 1974, 1986, 1996),
who gave the first synopsis of the distribution of 439 species from 25 families in East
Kazakhstan. Later, P.A. Esenbekova (Esenbekova 2007, 2011, 2013) recorded from
this region 219 species of 19 families.

In this paper we provide data on 101 species of 16 heteropterous families based
on the collections made in the East Kazakhstan Region by the students and profes-
sors of the Altai State University, Barnaul.

Material and methods

Field research of the heteropterans in the East Kazakhstan Region was carried out
by students of the Altai State University in 2016–2019 under the guidance of Profes-
sor R.V. Yakovlev (Fig. 5). In the northern part of the region, V.V. Rudoi investigated
the surroundings of the Shemonaikha Town in 2016 and 2018. In Southern Altay,
G.M. Amanbayeva, A.U. Gabdulina, G.N. Kuftina and E.A. Nepaeva collected bugs
on the Sarym-Saktyi in the Katon-Karagai National Nature Park in 2016 and 2017.
Expedition of the Altai State University worked in 1918 on Kalbinskii Mt. Range,
Tarbagatai and Saur (R.V. Yakovlev, V.V. Doroshkin, A.E. Naidenov and V.V. Rudoi),
and in 2019, at the Lake Zaisan and in Tarbagatai (R.V. Yakovlev, A.A. Kechaikin,
A.A. Fomichev and V.V. Rudoi).
Collecting was made using common methods (Fasulati 1971; Golub et al. 2012), net-sweeping herbaceous and arboreal vegetation and shrubs. The material collected amounts 403 specimens of bugs.

The following abbreviation was made in the label data:
– Uryl Vill., Katon-Karagai State National Nature park – Uryl Vill.;
– coordinates were omitted for the following localities: Akmarbak Vill. (49°33'05"N, 85°30'31"E); Arasantau Mts., 11 km ESE of Karabulak Vill. (46°07'N, 82°19'E); Berelsk Vill. (49°30'37"N, 86°26'40"E); Korobikha Vill. (49°27'32"N, 85°03'14"E); Matombaj Vill. (48°39'N, 85°39'E); Topkain Vill. (49°13'53"N, 85°21'44"E); Uryl Vill., Katon-Karagai SNNP (49°19'17"N, 86°21'45"E); Rakhman's Spring (49°32'09"N, 86°27'57"E); Rakhmanovsk (49°32'14"N, 86°30'15"E); Shemonaikha Town (50°35'N, 81°54'E; 50°36'N, 81°55'E; 50°37'N, 81°57'E; 50°40'N, 81°56'E);

Figure 5. Collection points of bugs in the East Kazakhstan Region.
Results

Annotated list of the Heteroptera of East Kazakhstan Region

Family Nepidae Latreille, 1802

*Nepa cinerea* Linnaeus, 1758

**Material.** Arasantau Mts., 11 km ESE of Karabulak Vill., H = 630 m. 5–7.05.2019, 2 males, 2 females.

**Distribution.** Transpaleartic. Recorded from East Kazakhstan Region (Asanova 1986).

Family Nabidae A. Costa, 1853

*Nabis flavomarginatus* Scholtz, 1847

**Material.** Korobiha Vill., 4.07.2017 (G. Kuftina, E. Nepaeva, 1 male); Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Rakhmanovsk, H = 1808–1829 m, 26.07.2017 (G. Amanbaeva), 7 males, 15 females.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

*Nabis nigrovittatus steppensis* (Kerzhner, 1981)

**Material.** Kyzylbeltau Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 1 female.

**Distribution.** Sic-Black Sea and Kazakhstan steppe. First record from East Kazakhstan Region.
Figures 6–12. Heteroptera of the East Kazakhstan Region: 6 – *Deraeocoris ater* Jak., 7 – *Orthops mutans* Stål, 8 – *Dictyla humuli* F., 9–12 – *Coranus laticeps* Wagn. (9 – dorsal view, 10 – lateral view, 11 – paramere and process of pygofer posteriorly, 12 – teca of aedeagus dorsally). (Orig.).
**Nabis brevis brevis** Scholtz, 1847

**Material.** Shemonaikha Town, H = 315 m, 28.08.2016 (V. Rudoi), 11 male, 16 females.

**Distribution.** Euro-Siberian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Nabis punctatus mimoferus** Hsiao, 1964

**Material.** Shemonaikha Town, H = 315 m, 7.08.2016 (V. Rudoi), 1 male.

**Distribution.** East Palearctic steppe. Recorded from East Kazakhstan (Asanova 1986, Esenbekova 2013). R.B. Asanova (1986) given this ubiquitous species as *N. feroides* Remane, 1953 and *N. punctatus* A. Costa, 1847.

**Nabis rugosus** (Linnaeus, 1758)

**Material.** Shemonaikha Town, H = 315 m, 28.08.2016 (V. Rudoi), 2 males, 4 females.

**Distribution.** From West Europe to Enisei River and Altai Mts. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Family Miridae** Hahn, 1833

**Deraeocoris ater** (Jakovlev, 1889)

**Material.** Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male.

**Distribution.** East Palaearctic. First record from East Kazakhstan Region.

**Adelphocoris lineolatus** (Goeze, 1778)

**Material.** Shemonaikha Town, H = 315 m, 3–28.08.2016 (V. Rudoi), 11 male, 16 females; Katon-Karagai, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 2 females; 15 km SSW of Karabulak Vill., H = 800 m, 26.06.2018, 2 males, 2 females; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male.

**Distribution.** Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Adelphocoris seticornis** (Fabricius, 1775)

**Material.** Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 male, 1 female.

**Distribution.** Euro-Siberian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
**Brachycoleus decolor** Reuter, 1887

**Material.** Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

**Lygus pratensis** (Linnaeus, 1758)

**Material.** 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 1 female; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 1 female; Arasantau Mts., 11 km ESE of Karabulak Vill., H = 630 m, 5–7.05.2019, 3 females.

**Distribution.** West-Central Palaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Lygus rugulipennis** Poppius, 1911

**Material.** Uryl Vill., 6.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 1 male, 2 females; Berelsk Vill., H = 1856–1918 m, 6–23.09.2017 (G. Amanbaeva) 2 males, 2 females; Rakhmanovsk, H = 1808–1829 m, 26.07.2017, (G. Amanbaeva), 1 male, 1 female.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986).

**Orthops mutans** (Stål, 1858)

Figure 7

**Material.** Uryl Vill., H = 1127 m, 6.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** South Siberia, Mongolia, China. – Introduced to North America. First record from East Kazakhstan Region.

**Polymerus brevicornis** (Reuter, 1879)

**Material.** Shemonaiikh Town, H = 315 m, 7–28.08.2016 (V. Rudoi), 1 male, 2 females.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

**Polymerus unifasciatus** (Fabricius, 1794)

**Material.** Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 1 female; Uryl Vill., H = 1795 m, 9.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
**Stenotus binotatus** *(Fabricius, 1794)*

**Material.** Korobiha Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Uryl Vill., H = 1127 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male.

**Distribution.** Trans-Euroasian. – Introduced to North America, Hawaii, New Zealand. Recorded from the East Kazakhstan Region (Asanova 1986).

**Stenodema calcarata** *(Fallén, 1807)*

**Material.** Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 1 female.

**Distribution.** Transpaleartic. Recorded from East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Trigonotylus caelestialium** *(Kirkaldy, 1902)*

**Material.** Shemonaikha Town, H = 310 m, 3.08.2016 (V. Rudoi), 1 male.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova, 1986).

**Labops sahlbergii** *(Fallén, 1829)*

**Material.** Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 2 males, 3 females; Uryl Vill., Rakhsman’s spring, H = 1724 m, 10.07.2017 (G. Kuftina, E. Nepaeva), 2 females.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

**Excentricus planicornis** *(Herrich-Scaeffter, 1836)*

**Material.** Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male.

**Distribution.** Transpaleartctic. Recorded from the East Kazakhstan Region (Asanova 1986).

**Macrotylus cruciatus** *(R.F. Sahlberg, 1848)*

**Material.** Uryl Vill., H = 1127 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

**Oncotylus setulosus** *(Herrich-Schaeffer, 1837)*

**Material.** Shemonaikha Town, H = 310 m, 3.08.2016 (V. Rudoi), 1 male.

**Distribution.** North & East Mediterranean, south of European Russia, middle Asia, Kazakhstan. First record from East Kazakhstan Region.
**Plagiognathus chrysanthemi** (Wolff, 1804)

**Material.** Topkain Vill., 5.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** Transpalearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

Family Tingidae Laporte, 1832

**Derephysia foliacea foliacea** (Fallén, 1807)

**Material.** Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 1 male.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986).

**Dictyla echii** (Schrank, 1782)

**Material.** Topkain Vill., 5.07.2017 (G. Kuftina, E. Nepaeva), 1 male.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986).

**Dictyla humuli** (Fabricius, 1794)

Figure 8

**Material.** Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 1 male, 1 female.

**Distribution.** Holarctic. First record from East Kazakhstan Region.

Family Reduviidae Latreille, 1807

**Phymata crassipes** (Fabricius, 1775)

**Material.** Shemonakha Town, H = 315 m, 28.08.2016 (V. Rudoi), 1 female; 20 km SEE of Zaisan Town, H =1225–1250 m, 20.06.2018, 1 female; Kalba Mts., 40 km NW of Kokpekty Vill., H = 760 m, 19.06.2018, 1 male; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 1 female.

**Distribution.** Transpalearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

**Rhynocoris iracundus** (Poda, 1761)

**Material.** Saur Mts., Kenderlik River Valley (left bank), 2 km W of Kenderlik Vill., H = 740 m, 24.06.2018, 3 females.

**Distribution.** From Europe & East Mediterranean to south of West Siberia, north-West China – Kashmir. Recorded from the East Kazakhstan Region (Putshkov 1987).
Figures 13–19. Heteroptera of the East Kazakhstan Region: 13 – Aradus crenaticollis R.F. Sahlb., 14 – Acompus rufipes Wolff., 15, 16 – Acanthosoma denticaudum Jak. (15 – male, 16 – male genital segment ventrally), 17, 18 – Rubiconia peltata Jak. (17 – male, 18 – buccula laterally), 19 – Eurydema fieberi Fieb. (Orig.).

Coranus aethiops Jakovlev, 1893

Material. Berelsk Vill., 27.09.2017 (G. Amanbaeva) 1 female.

Distribution. Euro-Siberian. First record from East Kazakhstan Region.

Coranus laticeps Wagner, 1952

Figures 9–12

Material. 15 km SSW of Karabulak Vill., H = 800 m. 26.06.2018, 1 male, 2 females.

Distribution. Steppe of Europe & Kazakhstan. Recorded from the East Kazakhstan Region (P.V. Putshkov 1987). According to P.V. Putshkov, C. laticeps is a background species in Kazakhstan steppe mainly associated with sandy soils.
Family Aradidae Brúlle, 1836

*Aradus crenaticollis* R.F. Sahlberg, 1848

Figure 13

**Material.** Berelsk Vill., 11.07–23.09.2017 (G. Amanbaeva), 2 females.

**Distribution.** Holarctic. First record from East Kazakhstan Region.

Family Lygaeidae Schilling, 1829

*Lygaeus equestris* Linnaeus, 1758

**Material.** Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m., 2–4.05.2019, 1 male; Arasantau Mts., 11 km ESE of Karabaluk, 5–7.05.2019, 1 female.

**Distribution.** Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

*Horvathiolus superbus* (Pollish, 1781)

**Material.** 11 km ESE of Karabaluk Vill., 5–7.05.2019 (R. Yakovlev), 3 males, 3 females.

**Distribution.** West-Central Palearctic. First record from East Kazakhstan Region.

*Nithicus jacobaeae* (Schilling, 1829)

**Material.** Uryl Vill., Rakhman's spring, H = 1057–1724m, 7–10.07.2017 (G. Kuftina, E. Nepaeva), 1 male, 3 females; Berelsk Vill., H = 1856–1910 m, 10.07–6.09.2017 (G. Amanbaeva), 16 females; Rakhmanovsk, 27.09.2016 (G. Amanbaeva), 3 males, 4 females.

**Distribution.** Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

*Nysius helveticus* (Herrick-Schaeffer, 1850)

**Material.** Shemonaikha Town, 1–28.08.2016 (V. Rudoi), 3 males, 1 female.

**Distribution.** Trans-Euroasian. Recorded from East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

*Ortholomus punctipennis* (Herrick-Schaeffer, 1838)

**Material.** Shemonaikha Town, 1–08.08.2016 (V. Rudoi), 3 males, 13 females; Akmarbak, H = 1347 m, 24.07.2017 (A. Gabdulina), 1 female; Katon-Karagai, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
Cymus glandicolor Hahn, 1832

Material. Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 1 male, 1 female.

Distribution. Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Pterotmetus staphyliniformis (Schilling, 1829)

Material. Berelsk Vill., H = 1856 m, 10.08.2017 (G. Amanbaeva), 1 male.

Distribution. Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Trapezonotus arenarius arenarius (Linnaeus, 1758)

Material. Berelsk Vill., 11.07.2017 (G. Amanbaeva), 1 male.

Distribution. Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Ligyrocoris sylvestris (Linnaeus, 1758)

Material. Rakhmanovsk, 27.09.2016 (G. Amanbaeva), 1 male.

Distribution. Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986).

Aellopus atratus (Goeze, 1778)

Material. Arasantau Mts., 11 km ESE of Karabulak, 5–7.05.2019 (R. Yakovlev), 1 male, 2 females.

Distribution. West-Central Palaearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

Rhyparochromus pini (Linnaeus, 1758)

Material. Shemonaikha Town, H = 306 m, 23–27.08.2016 (V. Rudoi), 1 female.

Distribution. Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Rhyparochromus vulgaris (Schilling, 1829)

Material. Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 3 females.

Distribution. Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986).
**Acompus rufipes** (Wolff, 1804)

Figure 14

**Material.** Akmarbak Vill., H = 1347 m, 24.07.2017 (A. Gabdulina), 2 females.

**Distribution.** Transpalaearctic. First record from East Kazakhstan Region.

**Family Pyrrhocoridae Amyot & Serville, 1843**

**Pyrrhocoris apterus** (Linnaeus, 1758)

**Material.** Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 2 females.

**Distribution.** Transpalaearctic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

**Family Stenoecephalidae Dallas, 1852**

**Dicranosephalus agilis** (Scopoli, 1763)

**Material.** Kalba Mts., 40 km NW of Kokpekty Vill., H = 760 m, 19.06.2018, 1 male; 15 km SSW of Karabulak Vill., H = 800 m, 26.06.2018, 1 female.

**Distribution.** West-Central Palearctic – Neotropics. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Family Coreidae Leach, 1815**

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

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 3 males; Emel River Valley, 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 2 males, 1 female; 15 km SSW of Karabulak Vill., H = 800 m, 26.06.2018, 3 males, 2 females; Saur Mts., Kenderlik River Valley (left bank), 2 km W of Kenderlik Vill., 47°28’N, 85°12’E, H = 740 m, 24.06.2018, 1 male; Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 male, 4 females.

**Distribution.** Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Coriomeris denticulatus** (Scopoli, 1763)

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 1 male; Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 male.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
**Coriomeris scabricornis scabricornis** (Panzer, 1805)

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., \( H = 1100 \) m, 8–10.05.2019, 1 ex.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

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**Enoplops sibiricus** (Jakovlev, 1889)

**Material.** 15 km SSW of Karabulak Vill., \( H = 800 \) m, 26.06.2018, 1 male.

**Distribution.** Dauro-Mongolian steppe. Recorded from the East Kazakhstan Region (Esenbekova 2013).

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**Syromastus rhombeus** (Linnaeus, 1767)

**Material.** Shemonaikha Town, \( H = 317 \) m, 8.08.2018 (V. Rudoi), 2 males; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., \( H = 1100 \) m, 5–7.05.2019, 3 males, 1 female; Emel River Valley, 24 km NNW of Karabulak Vill., \( H = 360 \) m, 4–5.05.2019, 1 male; Arasantau Mts., 11 km. ESE of Karabulak Vill., \( H = 630 \) m, 5–7.05.2019, 1 male.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

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**Family Alydidae Amyot & Serville, 1843**

**Alydus calcaratus** (Linnaeus, 1758)

**Material.** Shemonaikha Town, 3–8.28.08.2016 (V. Rudoi), 2 males; Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Uryl Vill., \( H = 1057 \) m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Berelsk Vill., \( H = 1910 \) m, 6–27.09.2016 (G. Amanbaeva), 9 males, 1 female; Katon-Karagai, \( H = 1050 \) m, 3.07.2017 (G. Kuftina, E. Nepaeva), 9 males.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

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**Camptopus lateralis** (Germar, 1817)

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., \( H = 1100 \) m, 5–7.05.2019, 2 males.

**Distribution.** West-Central Palearctic. – India, Pakistan. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
*Megalotomus ornaticeps* (Stål, 1858)

**Material.** Arasantau Mts., 11 km ESE of Karabulak, 5–7.05.2019 (R. Yakovlev), 1 male.

**Distribution.** Steppe zone of Euroasia. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Family Rhopalidae Amyot & Serville, 1843**

*Brachycarenus tigrinus* (Schilling, 1829)

**Material.** Shemonaikha Town, H = 315–317 m, 7–8.08.2018 (V. Rudoi), 2 males, 2 females.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

*Corizus hyoscyami hyoscyami* (Linnaeus, 1758)

**Material.** Kara-Kaba River Valley, H = 1450 m, 1.07.2018, 1 male.

**Distribution.** Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

*Corizus tetraspilus* Horváth, 1917

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 1 male, 1 female.

**Distribution.** East Palaearctic steppe. Recorded from the East Kazakhstan Region (V.G. Putshkov 1986).

*Maccevethus errans caucasicus* (Kolenati, 1845)

**Material.** Emel River valley, 24 km NNW Karabulak Vill. H = 360 m, 4–5.05.2019 (R. Yakovlev, V. Rudoi), 1 female.

**Distribution.** West-Central Palearctic. First record from East Kazakhstan Region.

*Rhopalus maculatus* (Fieber, 1837)

**Material.** Korobiha Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986, V.G. Putshkov 1986).
Rhopalus subrufus (Gmelin, 1790)

Material. Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 male.

Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, V.G. Putshkov 1986).

Stictopleurus abutilon (Rossi, 1790)

Material. Katon-Karagai, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 1 female; 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 1 male.

Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Stictopleurus crassicornis (Linnaeus, 1758)

Material. Shemonaikha Town, H = 317–326 m, 8–16.08.2018 (V. Rudoi), 1 male, 4 females; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male, 1 female; Markakol’ Lake, near Matombaj Vill., H = 1460 m, 28.06.2018, 1 male; 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 1 male.

Distribution. Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

Stictopleurus punctatonervosus (Goeze, 1778)

Material. Shemonaikha Town, H = 324 m, 12.08.2018 (V. Rudoi), 1 male; Arasantau Mts., 11 km. ESE of Karabulak Vill., H = 630 m, 5–7.05.2019, 1 female.

Distribution. Transpalaearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Stictopleurus unicolor (Jakovlev, 1873)

Material. 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 2 males.

Distribution. Sic-Black Sea-Kazakhstan steppe. Recorded from the East Kazakhstan Region (Asanova 1986, V.G. Putshkov 1986, Esenbekova 2013).

Chrosoma schillingi (Shilling, 1829)

Material. Shemonaikha Town, H = 315–326 m, 16–28.08.2016 (V. Rudoi), 6 males, 4 females.

Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
*Myrmus miriformis miriformis* (Fallén, 1807)

**Material.** Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Katon-Karagai, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 1 female.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Family Acanthosomatidae Signoret, 1864**

*Acanthosoma denticaudum* (Jakovlev, 1880)  
(Figs 15, 16)

**Material.** Saur Mts., Kenderlik River Valley (left bank), 2 km W of Kenderlik Vill., H = 740 m, 24.06.2018, 1 male.

**Distribution.** South Siberian-Far Eastern. First record from East Kazakhstan Region.

*Acanthosoma spinicolle* Jakovlev, 1880

**Material.** 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male, 1 female.

**Distribution.** East Palearctic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

*Acanthosoma haemorrhoidalis* (Linnaeus, 1758)

**Material.** 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 2 males.

**Distribution.** Transpaleartcic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

*Elasmostethus brevis* Lindberg, 1934

**Material.** 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 female; Saur Mts., Kenderlik River Valley (left bank), 2 km W of Kenderlik Vill., H = 740 m, 24.06.2018, 1 male, 2 females.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
Family Cydnidae Billberg, 1820

*Tritomegas bicolor* (Linnaeus, 1758)

**Material.** Uryl Vill., Rakhman’s spring, H = 1886 m, 9.07.2017 (G. Kuftina, E. Nepaeva), 2 females; Saur Mts., Mt. Tas, 47°16’N, 85°04’E, H = 2230–2400 m, 21–23.06.2018, 1 female.

**Distribution.** Transpaleartic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Family Scutelleridae Leach, 1815

*Odontoscelis fuliginosa* (Linnaeus, 1761)

**Material.** Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 female.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

*Odontotarsus purpureolineatus* (Rossi, 1790)

**Material.** Shemonaikha Town, H = 326 m, 16.08.2018 (V. Rudoi), 1 male; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male, 2 females; Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 2 males, 5 females.

**Distribution.** West-Central Palaearctic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

*Eurygaster dilaticollis* Dohrn, 1860

**Material.** 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 1 female.

**Distribution.** Euroasian steppe. Recorded from the East Kazakhstan Region (Asanova 1986).

*Eurygaster testudinaria testudinaria* (Geoffroy, 1785)

**Material.** Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male.

**Distribution.** Transpaleartic. Recorded from the East Kazakhstan Region (Asanova 1986).
Psacasta examthematica (Scopoli, 1763)

**Material.** Arasantau Mts., 11 km ESE of Karabulak Vill., H = 630 m. 5–7.05.2019, 1 female.

**Distribution.** West-Central Palearctic. In Kazakhstan distributed the eastern subspecies *P. examthematica conspersa* Germar, 1839. Recorded from the East Kazakhstan Region (Asanova 1986).

Family Pentatomidae Leach, 1815

Picromerus bidens (Linnaeus, 1758)

**Material.** 15 km SSW of Karabulak Vill., H = 800 m, 26.06.2018, 1 female.

**Distribution.** Holarctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Zicrona caerulea (Linnaeus, 1758)

**Material.** Saur Mts., Mt. Tas, 47°16’N, 85°04’E, H = 2230–2400 m, 21–23.06.2018, 1 male, 1 female.

**Distribution.** Holarctic & Oriental. Recorded from the East Kazakhstan Region (Asanova 1986).

Aelia acuminata (Linnaeus, 1758)

**Material.** 20 km SEE of Zaisan Town, H =1225–1250 m, 20.06.2018, 1 female.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

Aelia furcula Fieber, 1868

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 4 males, 7 females; Saur Mts., Kenderlik River Valley (left bank), 2 km W of Kenderlik Vill., H = 740 m, 24.06.2018, 1 male.

**Distribution.** European-Irano-Turanian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Neottiglossa leporina (Herrich-Scaffer, 1830)

**Material.** Shemonaiikhaila Town, H = 317–326 m, 1.08.2016–8.08.2018 (V. Rudoi), 8 males, 6 females; Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Katon-Karagai, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Kalba
Mts., 40 km NW of Kokpekty Vill., H = 760 m, 19.06.2018, 2 males; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 female.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

*Neottiglossa pusilla* (Gmelin, 1790)

**Material.** 20 km SEE of Zaisan Town, 47°22’N; 85°09’E, H = 1225–1250 m, 20.06.2018, 1 female.

**Distribution.** Trans-Euroasian. Recorded from the East Kazakhstan Region (Asanova 1986).

*Antheminia lunulata* (Goeze, 1778)

**Material.** Shemonaikha Town, H = 326 m, 16.08.2018 (V. Rudoi), 1 male; Katon-Karagai, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Arasantau Mts., 11 km ESE of Karabulak Vill., H = 630 m 5–7.05.2019, 1 male; Kyzylbelty Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 2 males, 2 females.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

*Brachynema germarii* (Kolenati, 1846)

**Material.** 15 km SSW of Karabulak Vill., H = 800 m, 26.06.2018, 1 male, 2 females.

**Distribution.** Mediterranean-Gobian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

*Carpocoris coreanus* Distant, 1899

**Material.** Shemonaikha Town, H = 317–326 m, 8.08.2018 (V. Rudoi), 1 male, 1 female; 15 km SSW of Karabulak Vill., H = 800 m, 26.06.2018, 1 male, 1 female.

**Distribution.** Irano-Turano-Siberian. Recorded from the East Kazakhstan Region (Asanova 1986).

*Carpocoris fuscispinus* (Boheman, 1851)

**Material.** Katon-Karagai State National Nature park, H = 1050 m, 3.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Kyzylbelty Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 4 males, 2 females; Emel River Valley, 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 1 male; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 female.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986).
**Carpocoris purpureipennis** (De Geer, 1773)

**Material.** Shemonaihka Town, H = 317 m, 8.08.2018 (V. Rudoi), 2 females; Markakol’ Lake, near Matomajb Vill., H = 1460 m, 28.06.2018, 1 male, 1 female; Tarbagatai & Sarym-Sakty Mts., Burkhat pass, 49°07’N, 86°01’E, H = 2130–2200 m, 2.07.2018, 1 male, 1 female; Kara-Kaba River Valley, 48°57’N; 86°05’E, H = 1450 m, 1.07.2018, 1 male, 3 females.

**Distribution.** Transpaleartic. Recorded from the East Kazakhstan Region (Asanova 1986).

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

**Material.** 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 1 male.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

**Dolycoris baccarum** (Linnaeus, 1758)

**Material.** Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Berelsk Vill., H = 1856 m, 6.09.2017 (G. Amanbaeva), 1 female.

**Distribution.** Transpaleartic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Dolycoris penicillatus** Horváth, 1904

**Material.** Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 male, 2 females. Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–07.05.2019, 1 male.

**Distribution.** Irano-Turanian. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Peribalus strictus vernalis** (Wolff, 1804)

**Material.** Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Tarbagatai & Sarym-Sakty Mts., Burkhat pass, 49°07’N, 86°01’E, H = 2130–2200 m, 2.07.2018, 1 female.

**Distribution.** Transpaleartic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Palomena prasina** (Linnaeus, 1761)

**Material.** Uryl Vill., H = 1127 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male.

**Distribution.** Transpaleartic. Recorded from the East Kazakhstan Region (Asanova 1986).
Rubiconia peltata Jakovlev, 1890
Figures 17, 18

Material. 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male, 6 females.
Distribution. East Palearctic. First record from East Kazakhstan Region.

Piezodorus lituratus (Fabricius, 1794)

Material. Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–07.05.2019, 2 males, 1 female.
Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Sciocoris cursitans cursitans (Fabricius, 1794)

Material. 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 male, 2 females; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–07.05.2019, 2 females.
Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Esenbekova 2013).

Eurydema oleracea (Linnaeus, 1758)

Material. Shemonaikha Town, H = 326 m, 16.08.2018 (V. Rudoi), 2 females; Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 2 males, 5 females; Emel River Valley, 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 1 male, 2 females; Karaberik Mts., 40 km S of Karatogai Vill., H = 500 m, 12.05.2019, 1 male; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 4 females.
Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

Eurydema ornata (Linnaeus, 1758)

Material. Shemonaikha Town, H = 316–326 m, 1.08.2016–18.06.2018 (V. Rudoi), 4 males, 6 females; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 4 males, 7 females; Karaberik Mts., 40 km S of Karatogai Vill., H = 500 m, 12.05.2019, 2 males, 3 females; Urdzhazh, H = 300 m, 4–5.05.2019, 5 males, 1 female; 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 2 females; Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 male; Emel River Valley, 24 km NNW of Karabulak Vill., H = 360 m, 4–5.05.2019, 4 males, 2 females.
Distribution. West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).
**Eurydema ventralis** Kolenati, 1846

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 3 males, 2 females; Urdzhark, H = 300 m, 4.05.2019, 6 males, 3 females.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Eurydema fieberi** Fieber, 1837

(Fig. 19)

**Material.** Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 8–10.05.2019, 1 female.

**Distribution.** West-Central Palearctic. First record from East Kazakhstan Region.

**Graphosoma lineatum** (Linneaus, 1758)

**Material.** Uryl Vill., Rakhman’s spring, H = 1127 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 male; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 female; Saur Mts., Kenderlik River Valley (left bank), 2 km W of Kenderlik Vill., H = 740 m, 24.06.2018, 2 males, 2 females.

**Distribution.** West-Central Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

**Leprosoma inconspicuum** Baerensprung, 1859

**Material.** Ushbulak Mts., 6 km NW of Kyzylzhuldyz Vill., H = 690 m, 2–4.05.2019, 1 female.

**Distribution.** West-Central Palearctic. First record from East Kazakhstan Region.

**Conclusion**

The heteropterous fauna of Kazakhstan is highly diverse and comprises, according to published data (Catalogue... 1995–2006; Esenbekova 2013), 1250 species in 411 genera of 35 families. Kazakhstan scientists (Asanova 1974, 1986; Esenbekova, Bekmurzaev 2007; Esenbekova, Kemelkhanova 2008; Esenbekova 2011, 2013; Esenbekova, Ashimova 2011) reported 439 species of 25 families from East Kazakhstan, which implies insufficient knowledge of this important group in the region, given that it includes agriculture pests, some of them dangerous.

Data on the Heteroptera of East Kazakhstan are scattered in a number of taxonomic revisions and monographs on the fauna of the former USSR. In the Saldidae, Cobben (1985) described the subspecies *Macrosaldula oblonga acetabularis* Cobben, 1985 from the Saur foothills, and Vinokurov (2009), *Teloleuca altaica* Vi-
nokurov, 2009 from South Altai. These authors also have recorded Macrosaldula jakowleffii (Reuter, 1891) from the Saur (Cobben, 1985), and M. simulans Cobben, 1985, from South Altai (Vinokurov, 2014).

Kerzhner (1976) and Elov (1977) report for this territory in their publications on the flower bugs of Kazakhstan and Middle Asia Anthocoris limbatus Fieber, 1836 (Shamonaikha; Bukhtarma River), A. nemorum (Linnaeus, 1761) (Katon-Karagai; Lake Markakol’), Temnostethus redivinus (Herrick-Schaeffer, 1850) (Saur), Orius niger Wolff, 1804 and O. horvathi (Reuter, 1884), Xylocoris tesquorum Kerzhner & Elov, 1976 (Burna, Kaldzhir mouth, Zaisan).

Of the Miridae, Eumecotarsus breviceps (Reuter, 1878) and Criocoris quadrimaculatus (Fallén, 1807) were mentioned (Kerzhner 1962, 1984) and two Orthocephalus species – O. bivittatus Fieber, 1864 and O. vittipennis (Herrick-Schaeffer, 1835) (Namyatova, Konstantinov 2009). Several species, some of them new to science, have been found in the Saur Mt. Range: Phytocoris sauricus Muminov, 1998; Tuponia soongorica Drapolyuk, 1980; Atomophora maculosa Reuter, 1903; Solenoxyphus candidatus (Reuter, 1879); S. lepidus (Puton, 1874); Pleuroxotonotus stygi Konstantinov, 2008; Ethelastia liturata (Fieber, 1858) (Drapolyuk 1980; Muminov 1998; Konstantinov 2000, 2008a, b, c).

Data on three species of the lace bugs (Tingidae) – Galeatus spinifrons (Fallén, 1807), Physatocheila putshkovi Golub 1976 and Ph. distinguenda Jaklev, 1880 – were published by Golub (1974, 1976). P.V. Putshkov (1982, 1987) has recorded five species of the assassin bugs (Reduviidae): Empicoris culiciformis (De Geer, 1773); Coranus aethiops Jaklev, 1893; C. contraris Reuter, 1881; C. laticeps Wagner, 1952 and C. woodroffei P.V. Putshkov, 1982. Based on the collection of the Zoological Institute of the Russian Academy of Sciences, a dangerous cereal pest, the Sunn pest Eurygaster integriceps Puton, 1881 of the family Scutelleridae was recorded from southern East Kazakhstan (Neimorovets et al. 2006).

In this paper, data on the distribution of 101 widespread water and land horto-, thamno- and dendrobiont species from 16 Heteroptera families in the East Kazakhstan Region are reported.

Twelve species are recorded for the first time from the study area: Nabis nigrovittatus steppensis Kerzh. (Nabidae), Deraeocoris ater Jak., Orthops mutans Stål, Oncotylus setulosus H.-S. (Miridae), Dictyla humuli F. (Tingidae), Coranus aethiops Jak. (Reduviidae), Aradus crenaticollis R. F. Sahlb. (Aradidae), Horvathiolus superbus Poll., Acompus rufipes Wolff (Lygaeidae), Acanthosoma denticaudum Jak. (Acanthosomatidae), Rubiconia peltata Jak., Eurydema fieberi Fieb. (Pentatomidae).

Thus, the heteropterous fauna of the East Kazakhstan Region, based on the published data and those given in this paper, comprises 482 species of 25 families.

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