

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

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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), *Oncotylus setulosus* (Herrick-Schaeffer, 1837) (Miridae), *Dictyla humuli* (Fabricius, 1794) (Tingidae), *Coranus aethiops* Jakovlev, 1893 (Reduviidae), *Aradus crenatocollis* 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

## 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 Egin-su 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).



**Figure 4.** Midlands of the Saur Mt. Range (photo by V.V. Rudo).

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 professors of the Altai State University, Barnaul.

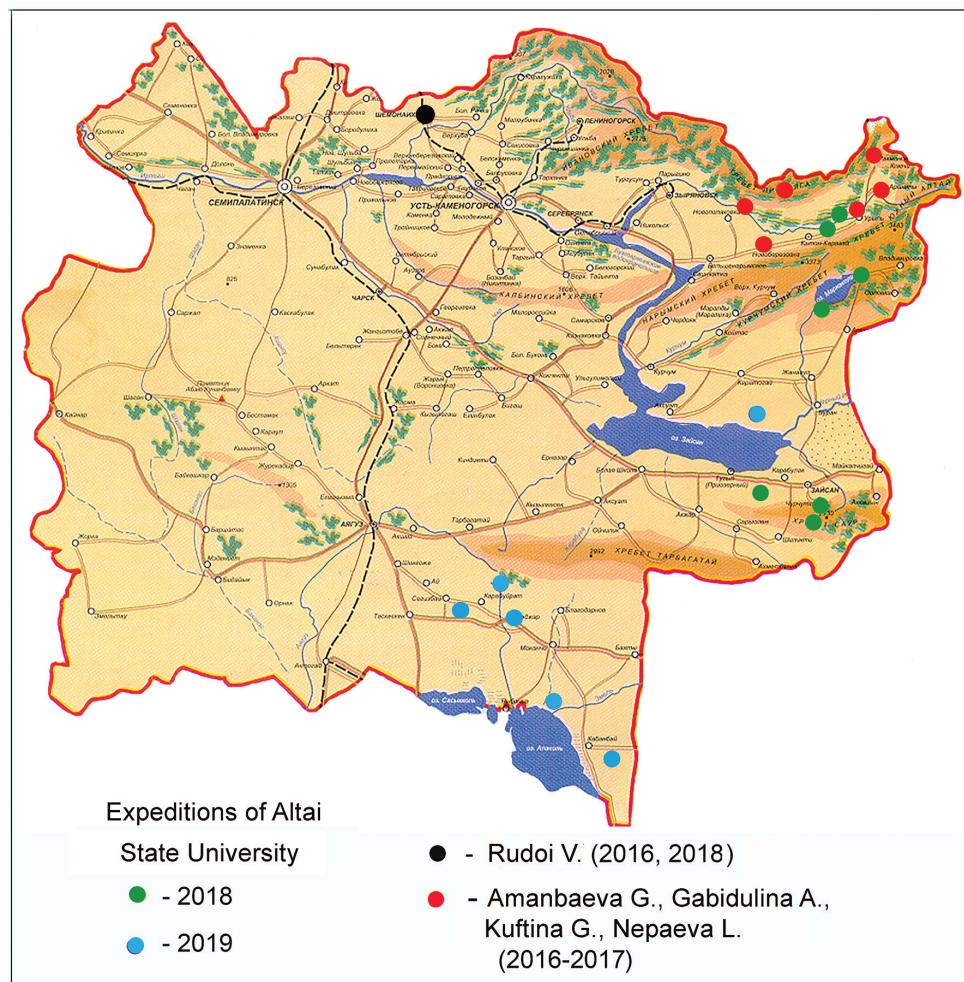
## Material and methods

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 Professor R.V. Yakovlev (Fig. 5). In the northern part of the region, V.V. Rudoi investigated the surroundings of the Shemonaiqua 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); Shemon-aikha 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.

15 km SSW of Karabulak Vill. (47°24'N, 84°38'E); 24 km NNW of Karabulak Vill. (46°21'41"N, 82°05'04"E); 5 km SW of Nekrasovka Vill. (47°11'N, 81°21'E); 2 km W of Kenderlik Vill. (47°28'N, 85°12'E); 40 km NW of Kokpeky Vill. (49°00'N, 82°00'E); 20 km SSE of Zaisan Vill. (47°22'N, 85°09'E); 6 km NW of Kyzylzhuldyz Vill. (47°11'N, 80°56'E); 11 km ESE of Karabulak Vill. (46°06'N, 82°19'E); Urdzhar (47°05'16"N, 81°37'47"E); 20 km SSE of Zaisan Vill. (47°22'N, 85°09'E).

– family names of the members of the expeditions of 2018 (R.V. Yakovlev, V.V. Doroshkin, A.E. Naidenov and V.V. Rudo) and 2019 (R.V. Yakovlev, A.A. Kechaikin, A.A. Fomichev, Yu.V. Dyachkov and V.V. Rudo) are omitted.

## 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

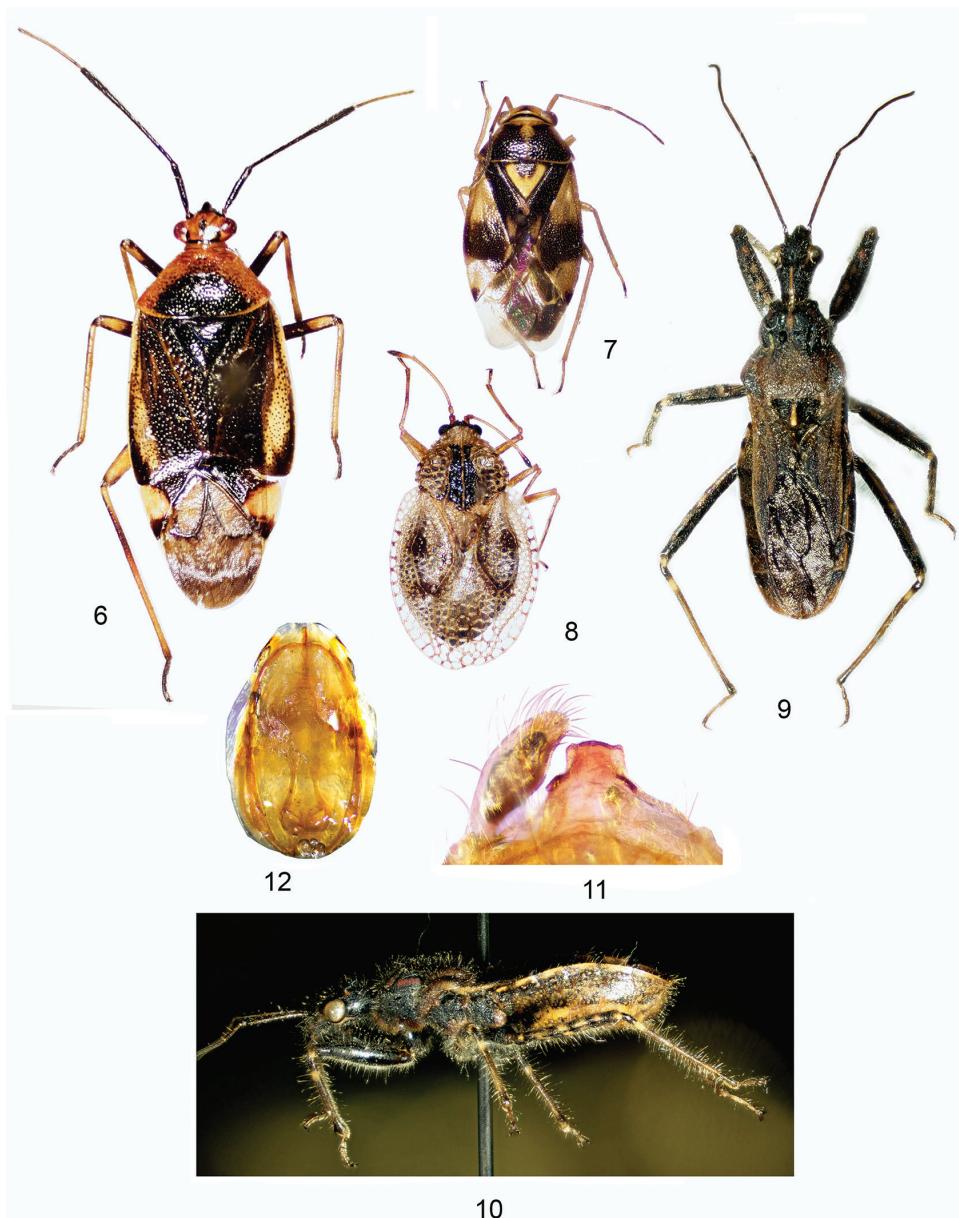
**Material.** Korobiha Vill., 4.07.2017 (G. Kuftina, E. Nepaeva, 1 male); Topkain Vill., 4.07.2017 (G. Kuftina, E. Nepaeva), 1 male; Uryl Vill., H = 1057 m, 7.07.2017 (G. Kuftina, E. Nepaeva), 1 female; Rakhmanovsk, H = 1808–1829 m, 26.07.2017 (G. Amanbaeva), 7 males, 15 females.

**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.** Shemonaiha Town, H = 315 m, 28.08.2016 (V. Rudo), 11 male, 16 females.

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

### *Nabis punctatus mimoferus* Hsiao, 1964

**Material.** Shemonaiha Town, H = 315 m, 7.08.2016 (V. Rudo), 1 male.

**Distribution.** East Palaearctic 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.** Shemonaiha Town, H = 315m, 28.08.2016 (V. Rudo), 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)

Figure 6

**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.** Shemonaiha Town, H = 315 m, 3–28.08.2016 (V. Rudo), 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.** Shemonaiqua 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.** Transpaleartcic. Recorded from East Kazakhstan Region (Asanova 1986, Esenbekova 2013).

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

**Material.** Shemonaiha 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., Rakhaman'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-Scaffer, 1836)**

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

**Distribution.** Transpaleartcic. 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.** Shemonaiha 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.** Transpaleartic. 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)**

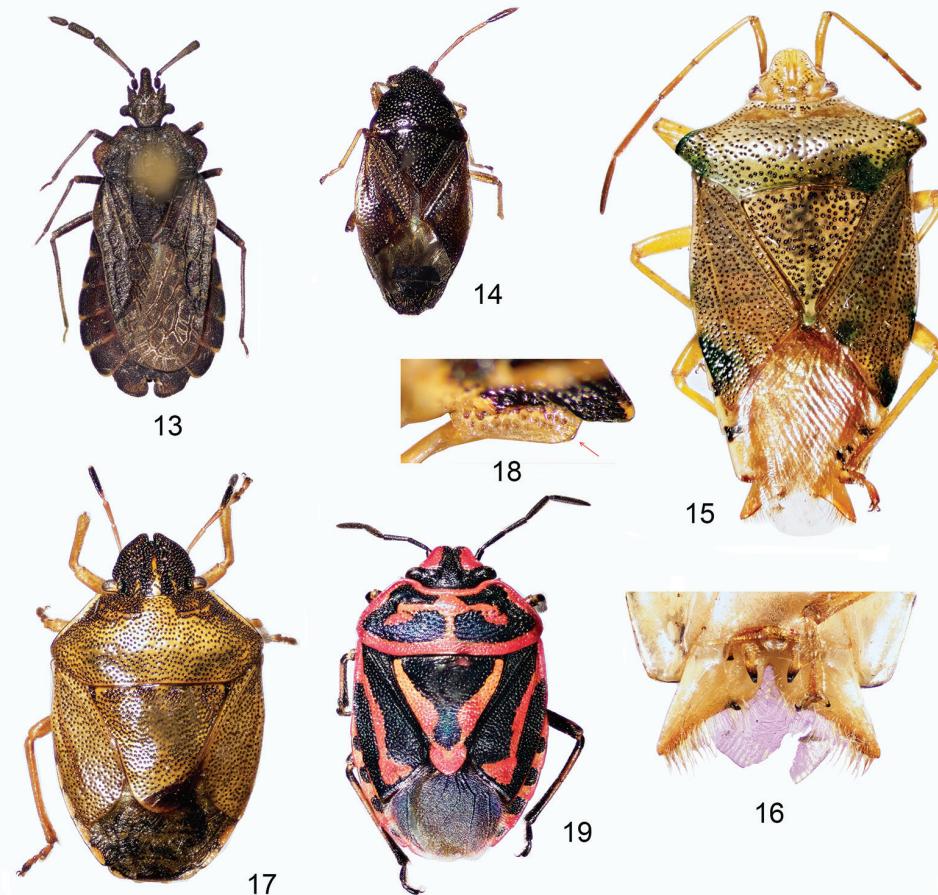
**Material.** Shemonaiha Town, H = 315 m, 28.08.2016 (V. Rudoi), 1 female; 20 km SEE of Zaisan Town, H = 1225–1250 m, 20.06.2018, 1 female; Kalba Mts., 40 km NW of Kokpekty Vill., H = 760 m, 19.06.2018, 1 male; Kyzylbeltay Mts., 5 km SW of Nekrasovka Vill., H = 1100 m, 5–7.05.2019, 1 female.

**Distribution.** Transpaleartic. 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 sieberi* 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 Karabulak, 5–7.05.2019, 1 female.

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

### *Horvathiulus superbus* (Pollish, 1781)

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

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

### *Nithecus 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.** Transpaleartcic. Recorded from the East Kazakhstan Region (Asanova 1986).

### *Nysius helveticus* (Herrich-Schaeffer, 1850)

**Material.** Shemonaiha Town, 1–28.08.2016 (V. Rudoj), 3 males, 1 female.

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

### *Ortholomus punctipennis* (Herrich-Schaeffer, 1838)

**Material.** Shemonaiha Town, 1–08.08.2016 (V. Rudoj), 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.** Transpaleartcic. 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.** Transpaleartcic. 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 Palearctic. Recorded from the East Kazakhstan Region (Asanova 1986).

*Rhyparochromus pini* (Linnaeus, 1758)

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

**Distribution.** Transpaleartcic. 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.** Transpaleartcic. 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.** Transpaleartcic. 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.** Transpaleartcic. Recorded from the East Kazakhstan Region (Esenbekova 2013).**Family Stenocephalidae Dallas, 1852*****Dicranoccephalus agilis* (Scopoli, 1763)****Material.** Kalba Mts., 40 km NW of Kokpekyt 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.** Transpaleartcic. 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).

### *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).

### *Syromastus rhombaeus* (Linnaeus, 1767)

**Material.** Shemonaiha Town, H = 317 m, 8.08.2018 (V. Rudoi), 2 males; Kyzylbel-tay 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).

## Family Alydidae Amyot & Serville, 1843

### *Alydus calcaratus* (Linnaeus, 1758)

**Material.** Shemonaiha 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).

### *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.** Shemonaiqua 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.** Transpaleartcic. 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.** Shemonaiha 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.** Shemonaiha 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.** Transpalearctic. 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.** Shemonaiha 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.** Transpalearctic. 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.** Transpaleartcic. 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.** Shemonaiha 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; Kyzylbelta 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.** Transpaleartcic. 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.** Shemonaiqua 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.** Shemonaiha 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; Kyzylbeltay 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).

### *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.** Shemonaiha 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; Kyzylbeltay 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.** Shemonaiha Town, H = 317 m, 8.08.2018 (V. Rudoi), 2 females; Markakol' Lake, near Matombaj 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.** Transpaleartcic. 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.** Transpaleartcic. 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.** Transpaleartcic. 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.** Transpaleartcic. 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.** Shemonaiha 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.** Shemonaiha 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; Urdzhar, H = 300 m, 4.05.2019, 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; Urdzhar, 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 reduvinus* (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); *Pleuroxonotus stysi* 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* Jakovlev, 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* Jakovlev, 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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