

Addition to the fauna of terrestrial true bugs of the East Kazakhstan Province of Kazakhstan (Heteroptera: Cimicomorpha, Pentatomomorpha)

Дополнение к фауне наземных клопов Восточно-Казахстанской области Казахстана (Heteroptera: Cimicomorpha, Pentatomomorpha)

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КЛЮЧЕВЫЕ СЛОВА: Heteroptera, Казахстан, Восточно-Казахстанская область, новые находки.

ABSTRACT. The paper provides information on the distribution of 77 terrestrial species of true bugs from 13 families in the East Kazakhstan Province of the Republic of Kazakhstan. Four species are recorded for the Republic of Kazakhstan for the first time: *Nabis americanolimbatus* (Carayon, 1961), *N. inscriptus* (Kirby, 1837) (Nabidae); *Stenodema sibirica* Bergroth, 1914 (Miridae) and *Emblethis filicornis* Linnauvori, 1954 (Lygaeidae). For the fauna of the East Kazakhstan Province, new data on the distribution of 13 species are given: *Lygus wagneri* Remane, 1955, *Leptopterna albescens* (Reuter, 1891), *Labops burmeisteri* Stål, 1858 (Miridae); *Lygaeus murinus* (Kiritshenko, 1914), *Aphanus rolandri* (Linnaeus, 1758), *Trapezonotus arenarius elegantulus* Kiritshenko et Scudder, 1973, *Lamprodema maura* (Fabricius, 1803), *Naphiellus irroratus* (Jakovlev, 1889), *Peritrechus angusticollis* (R.F. Sahlberg, 1848) (Lygaeidae); *Pyrrhocoris marginatus* (Kolenati, 1845) (Pyrrhocoridae); *Spathocera laticornis* (Schilling, 1829) (Coreidae); *Elasmucha fiebri* (Jakovlev, 1865) (Acanthosomatidae); and *Eysarcoris aegeus* (Scopoli, 1763) (Pentatomidae). Thus, according

to the latest data, 498 species of 25 families have been found in eastern Kazakhstan.

РЕЗЮМЕ. В статье приводятся сведения о распространении в Восточно-Казахстанской области Республики Казахстан 77 наземных видов полужестокрылых из 13 семейств. Впервые указаны для фауны Республики Казахстан 4 вида: *Nabis americanolimbatus* (Carayon, 1961), *N. inscriptus* (Kirby, 1837) (Nabidae); *Stenodema sibirica* Bergroth, 1914 (Miridae) и *Emblethis filicornis* Linnauvori, 1954 (Lygaeidae). Для фауны Восточно-Казахстанской области приводятся новые данные о распространении 13 видов: *Lygus wagneri* Remane, 1955, *Leptopterna albescens* (Reuter, 1891), *Labops burmeisteri* Stål, 1858 (Miridae); *Lygaeus murinus* (Kiritshenko, 1914), *Aphanus rolandri* (Linnaeus, 1758), *Trapezonotus arenarius elegantulus* Kiritshenko et Scudder, 1973, *Lamprodema maura* (Fabricius, 1803), *Naphiellus irroratus* (Jakovlev, 1889), *Peritrechus angusticollis* (R.F. Sahlberg, 1848) (Lygaeidae); *Pyrrhocoris marginatus* (Kolenati, 1845) (Pyrrhocoridae); *Spathocera laticornis* (Schilling, 1829)

(Coreidae); *Elasmucha fiebri* (Jakovlev, 1865) (Acanthosomatidae); и *Eysarcoris aeneus* (Scopoli, 1763) (Pentatomidae). Таким образом, по последним данным, в Восточном Казахстане выявлено 498 видов из 25 семейств.

Introduction

The study of heteropterans in the north-east of the Republic of Kazakhstan, which was carried out during the Soviet period [Asanova, 1974, 1986, 1996], resumed after a long break only in the second decade of the 21st century. In the previous paper [Vinokurov, Rudoi, 2020], based on material of the Altai State University (Russian Federation, Barnaul), the authors published new data on the distribution of 101 horto-, tamno- and dendrobiont species belonging to 16 families in eastern Kazakhstan. Twelve of them proved to be new for the studied territory. Since then, the distribution of 498 species of 25 families was revealed for this province.

In this article, based on the collections of the Institute of Biology and Biotechnology, Altai State University and

the Katon-Karagay State National Nature Park (KKSNNP) (Republic of Kazakhstan, Katon-Karagay Vill.), we publish new data on the distribution of representatives of two infraorders of terrestrial true bugs, Cimicomorpha and Pentatomomorpha, in eastern Kazakhstan.

Material and methods

During the field studies in 2021, A.U. Gabdullina and G.A. Bolbotov together with the colleagues from KKSNNP V.M. Vorobjev and K.I. Avdeeva worked in the Kurchum, Katon-Karagay, Zharmin, Ulan and Altai Districts, and also in the vicinity of the Ust'-Kamenogorsk City and Ridder Town (Figs 1–10).

In Ridder Town, material was collected on the Korgon Mt. Range, near Ushakovo lake on the Tigirek Mt. Range and on the Ivanovskiy Mt. Range. In the Kurchum District, we examined the territories adjacent to the Chernyy Irtysh River, Zaysan and Markakol' lakes, on the Ushkurmynker, Kamenistyy (Kamennyy) and Narym Mt. Ranges. In the Katon-Karagay District, the studies were conducted in various parts of KKSNNP

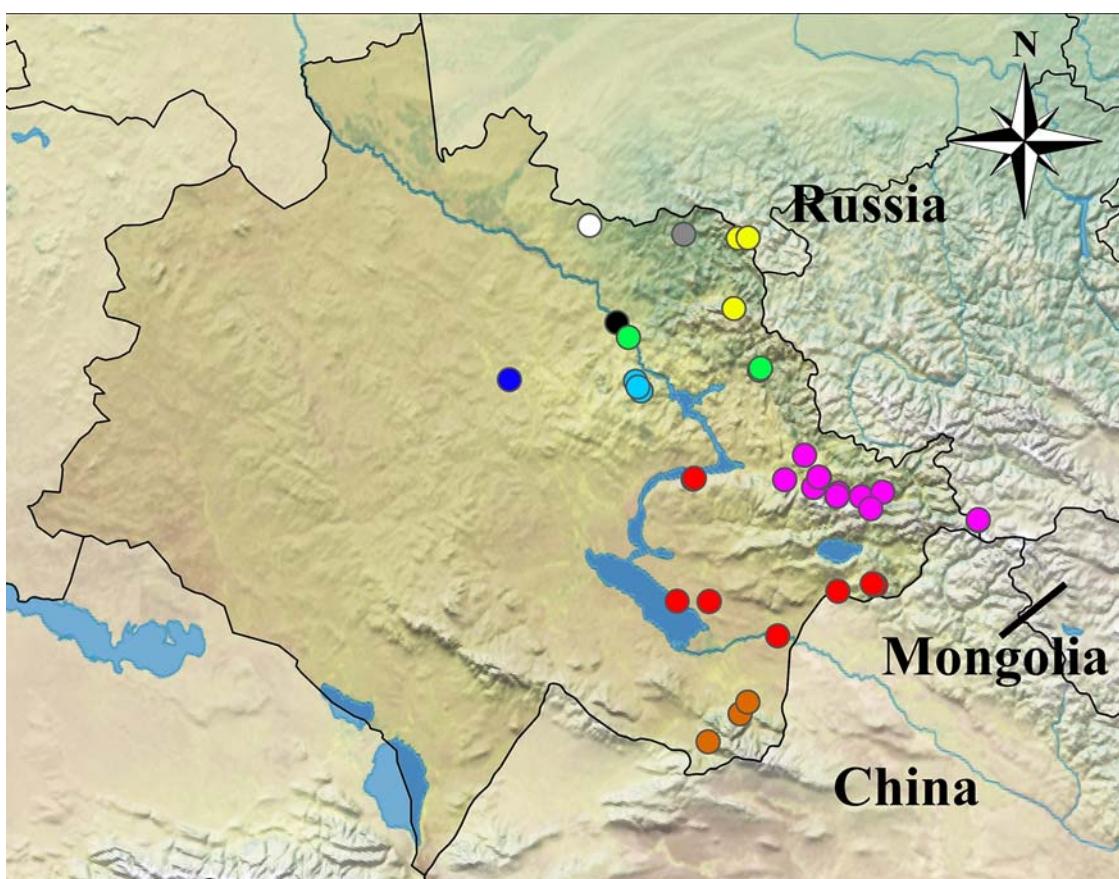


Fig. 1. Maps of collection points in the East Kazakhstan Province in 2021. Red circles: — Kurchum District; pink — Katon-Karagay District; blue — Zharmin district; turquoise — Ulan District; light green — Altai District; black — Ust'-Kamenogorsk City; yellow — Ridder Town; white — Shemonaikha District; grey — Glubokovskiy District; brown — Zaysan District.

Рис. 1. Карты пунктов сбора в Восточно-Казахстанской области в 2021 году. Красные кружки: — Курчумский район; розовые — Катон-Карагайский р-н; синие — Жарминский район; бирюзовые — Уланский р-н; светло-зеленые — Алтайский р-н; черные — г. Усть-Каменогорск; желтые — г. Риддер; белые — Шемонаихинский р-н; серые — Глубоковский район; коричневые — Зайсанский р-н.

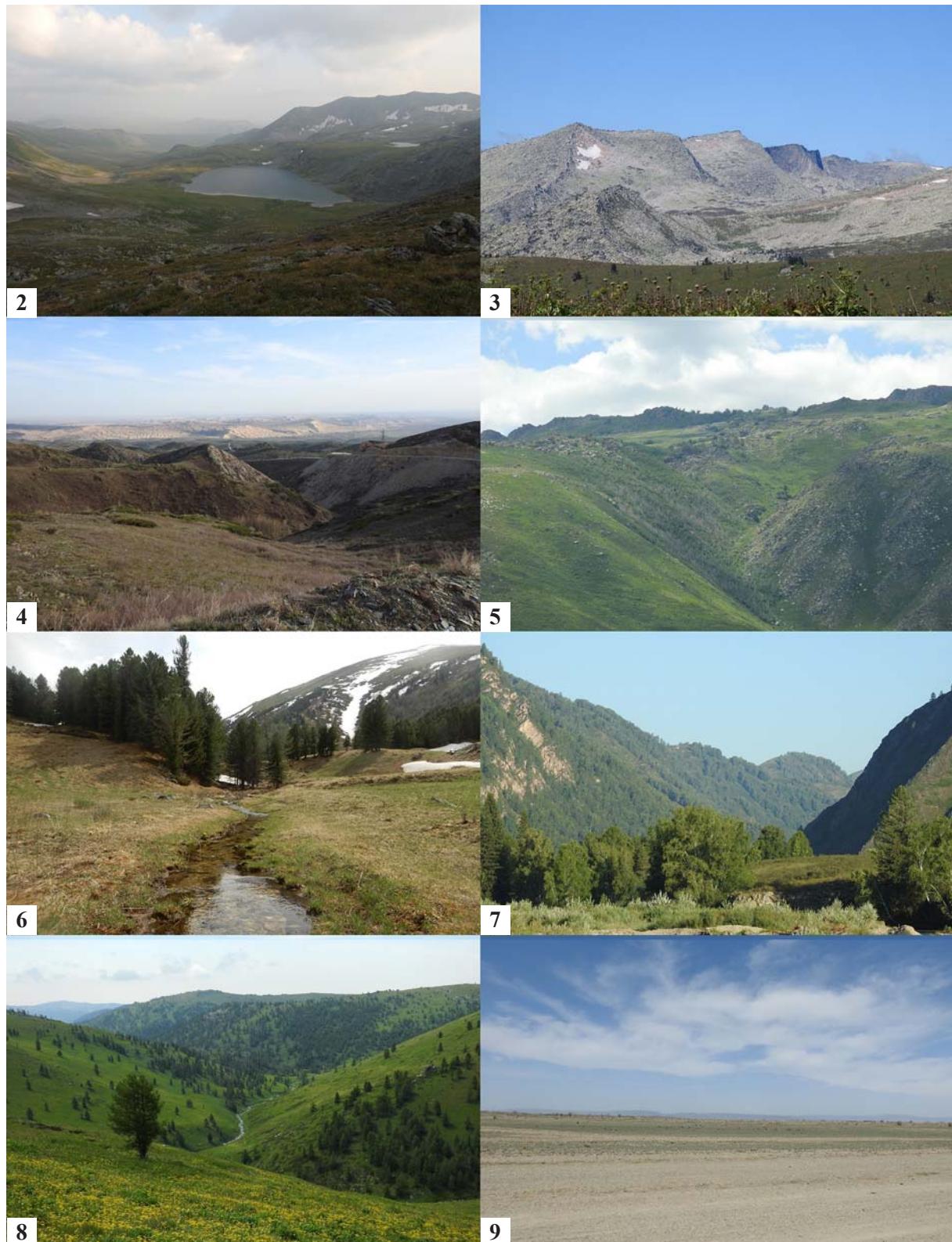


Fig. 2–9. Collection places on the territory of the East Kazakhstan Province: 2 — Ivanovskiy Mt. Range; 3 — Korgon Mt. Range; 4 — Mramornyy pass, view of the Akkum sands; 5 — Narym Mt. Range; 6 — Sarymsakty Mt. Range; 7 — Ust'-Sobach'e locality; 8 — Ushkurmynker Mt. Range; 9 — bank of the Chernyy Irtysh River (Photo by G.A. Bolbotov).

Рис. 2–9. Места сбора на территории Восточно-Казахстанской области: 2 — Ивановский хребет; 3 — Коргонский хребет; 4 — Мраморный перевал, вид на Аккумские пески; 5 — Нарымский хребет; 6 — Сарымсактинский хребет; 7 — местонахождение Усть-Собачье; 8 — Ушкурмынкерский хребет; 9 — берег р. Черный Иртыш (фото Г.А. Болботова).

and its environs; in the Zharmin District, in the vicinity of Kalbatau Village; in the Ulan District, in the Belogorsk and Asu-bulak Villages; in the Altai District, near the Chernyy Irtysh and Hamir rivers.

Additionally, we studied material collected under the guidance of Professor R.V. Yakovlev in the East-Kazakhstan Province in 2018. The paper also includes material collected by V.V. Rudoi in the vicinity of Shemonaikha Town of the Shemonaikha District in 2021 and near Karaguzhikha Village in the Glubokovskiy District in 2019.

The material including 503 specimens was obtained using methods generally accepted in entomology [Golub et al., 2012]. The images were taken with a DP74 digital camera attached to an Olympus SZX16. The distribution map was produced using the SimpleMappr online mapping software [Shorthouse, 2010].

The coordinates were omitted for the following localities:

Altai District: bank of Chernyy Irtysh River, 14.5 km SE of Ust'-Kamenogorsk ($49^{\circ}53'41''N$, $82^{\circ}46'50''E$); bank of Hamir River point 1 ($49^{\circ}55'21''N$, $84^{\circ}21'40''E$), point 2 ($49^{\circ}56'22''N$, $84^{\circ}22'05''E$).

Glubokovskiy District: Karaguzhikha Village, valley of Uba River (left bank), ($50^{\circ}45'38''N$, $83^{\circ}04'09''E$).

Katon-Karagay District: KKSNNP, Altai Tarbagatai Mts, Burkhat Pass ($49^{\circ}07'N$, $86^{\circ}01'E$); Katon-Karagay Village vicinity ($49^{\circ}10'23''N$, $85^{\circ}36'35''E$); Sarymsakty Mt. Range, 3 km S of Katon-Karagay Village ($49^{\circ}08'42''N$, $85^{\circ}36'10''E$); 3 km SE of Belkaragay Village, Medvedevskiy nursery ($49^{\circ}10'N$, $85^{\circ}19'E$), Shyngystay Village, mouth of Tautekeli River ($49^{\circ}11'17''N$, $85^{\circ}52'41''E$); Narym Mt. Range, 1.5 km S of Mayemer Village ($49^{\circ}10'10''N$, $84^{\circ}58'16''E$); Ukok Pass, point 1 ($49^{\circ}13'02''N$, $87^{\circ}15'18''E$), point 2 ($49^{\circ}13'31''N$, $87^{\circ}15'11''E$); left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1 ($49^{\circ}15'07''N$, $85^{\circ}21'15''E$), point 2 ($49^{\circ}15'08''N$, $85^{\circ}20'37''E$); 3 km E of Akmalar Village ($49^{\circ}15'36''N$, $86^{\circ}06'15''E$); Barlyk (Pechi) Village vicinity ($49^{\circ}23'13''N$, $85^{\circ}07'18''E$).



Fig. 10. Collection place on the territory of the East Kazakhstan Province, Shekel'mes (Kiin-Kerish) locality (Photo by G.A. Bolbotov).

Рис. 10. Место сбора на территории Восточно-Казахстанской области, местонахождение Шекельмес (Киин-Кериш) (фото Г.А. Болботова).

Kurchum District: 3 km SE of Zhideli (Ordynka) Village, right bank of Chernyy Irtysh River ($48^{\circ}00'35''N$, $85^{\circ}20'23''E$); 24 km NW of Amanat Village, N shore of Lake Zaysan ($48^{\circ}04'09''N$, $84^{\circ}08'25''E$); Shekel'mes (Kiin-Kerish) locality, point 1 ($48^{\circ}07'48''N$, $84^{\circ}29'31''E$), point 2 ($48^{\circ}07'54''N$, $84^{\circ}29'34''E$); 3.5 km W of Moiylly Village, Mramornyy Pass ($48^{\circ}26'57''N$, $85^{\circ}52'43''E$); 32 km SW of Markakol' Lake, Ushkurmynker Mt. Range, point 1 ($48^{\circ}33'35''N$, $86^{\circ}15'29''E$), point 2 ($48^{\circ}33'44''N$, $86^{\circ}16'50''E$); Kamennistyy (Kamennyy) Mt. Range ($48^{\circ}34'02''N$, $86^{\circ}14'19''E$); Narym Mt. Range, Kulanzhorga locality, 14 km NE of Karabulak Village, point 1 ($48^{\circ}59'41''N$, $83^{\circ}56'59''E$), point 2 ($49^{\circ}00'12''N$, $83^{\circ}57'39''E$).

Ridder Town: Ivanovskiy Mt. Range, 10 km S of Poperechnoe Village ($50^{\circ}19'20''N$, $83^{\circ}52'50''E$); Korpon Mt. Range ($50^{\circ}50'37''N$, $83^{\circ}42'17''E$); Tigirek Mt. Range, south part of Ushakovo Lake ($50^{\circ}52'00''N$, $83^{\circ}49'10''E$).

Shemonaikha District: 4 km of Shemonaikha Town ($50^{\circ}37'30''N$, $81^{\circ}57'56''E$).

Ulan District: 9 km N of Belogorsk Village, Belogorsk mine ($49^{\circ}31'55''N$, $83^{\circ}05'42''E$); 3 km NE of Asu-bulak Village ($49^{\circ}33'15''N$, $83^{\circ}02'46''E$); 5 km N of Asu-bulak Village ($49^{\circ}35'25''N$, $83^{\circ}00'07''E$).

Ust'-Kamenogorsk City ($49^{\circ}58'40''N$, $82^{\circ}36'04''E$).

Zaysan District: Saur Mts., 7 km NE of Chagan-Obo ($47^{\circ}06'N$, $84^{\circ}53'E$); Saur Mt. Range, 20 km SEE of Lake Zaysan ($47^{\circ}22'N$, $85^{\circ}09'E$); Saur Mt. Range, valley of Kenderlik River (left bank), 2 km W of Kenderlik Village ($47^{\circ}28'N$, $85^{\circ}12'E$)

Zharmin District: Kalbatau Village ($49^{\circ}19'49''N$, $81^{\circ}35'31''E$).

The collectors are A.U. Gabdullina, G.A. Bolbotov, V.M. Vorobjev and K.I. Avdeeva, unless otherwise specified in the sections "Material".

Annotated list of heteropterans of the East Kazakhstan Province

Family Nabidae A. Costa, 1853

Prostemma (Prostemma) kiborti Jakovlev, 1889

MATERIAL. Katon-Karagay District: KKSNNP, near Barlyk (Pechi) Village, 610 m, 4.04.2021, 2♀.

DISTRIBUTION. From eastern Kazakhstan and the south of west Siberia to Japan and central China. Recorded from the East Kazakhstan Province [Kerzhner, 1981].

Prostemma (Prostemma) sanguineum (Rossi, 1790)

MATERIAL. Katon-Karagay District: Narym Mt. Range, 1.5 km S of Mayemer Village, 787 m, 17.05.2021, 1♀.

DISTRIBUTION. Mediterranean-Turanian. Recorded from the East Kazakhstan Province [Kerzhner, 1981].

Himacerus (Himacerus) apterus (Fabricius, 1798)

MATERIAL. Ridder Town: Lake Ushakovo, 1858 m, 21.08.2021, 1♂; Ivanovskiy Mt. Range, 10 km S of Poperechnoe Village, 1761 m, 7.08.2021, 1♀; Ulan District: 9 km N of Belogorsk Village, Belogorsk mine, 1150 m, 14.08.2021, 1♀.

DISTRIBUTION. Trans-Euroasian. Recorded from the East Kazakhstan Province [Asanova, 1986].

Nabis (Dolichonabis) americolimbatus (Carayon, 1961)
Fig. 11.

MATERIAL. Ridder Town: Korgon Mt. Range, 988 m, 23.08.2021, 1♀.

DISTRIBUTION. Holarctic. First record from the Republic of Kazakhstan.

Nabis (Nabicula) flavomarginatus Scholtz, 1847

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 2.08.2021, 2♀♀.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Nabis (Nabis) brevis brevis Scholtz, 1847

MATERIAL. Katon-Karagay District: KKSNNP, Sarymsakty Mt. Range, 3 km S of Katon-Karagay Village, 1313 m, 17.05.2021, 1♂; Altai District: bank of Hamir River, point 2, 501 m, 29.06.2021, 1♀.

DISTRIBUTION. Euro-Siberian. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Nabis (Nabis) ferus (Linnaeus, 1758)

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 8♀♀.

DISTRIBUTION. Trans-Euroasian. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Nabis (Nabis) punctatus mimoferus Hsiao, 1964

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 1♀.

DISTRIBUTION. Eastern Palaearctic steppe. Recorded from East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Nabis (Reduviolus) inscriptus (Kirby, 1837)

Fig. 12.

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurnynker Mt. Range, point 1, 2244 m, 7.07.2021, 1♀; Altai District: bank of Hamir River, point 2, 501 m, 29.06.2021, 1♀.

DISTRIBUTION. Holarctic. First record from the Republic of Kazakhstan.

Family Miridae Hahn, 1833

Deraeocoris (Camptobrochis) punctulatus (Fallén, 1807)

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 1♀.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Adelphocoris lineolatus (Goeze, 1778)

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680m, 2.08.2021, 3♀♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

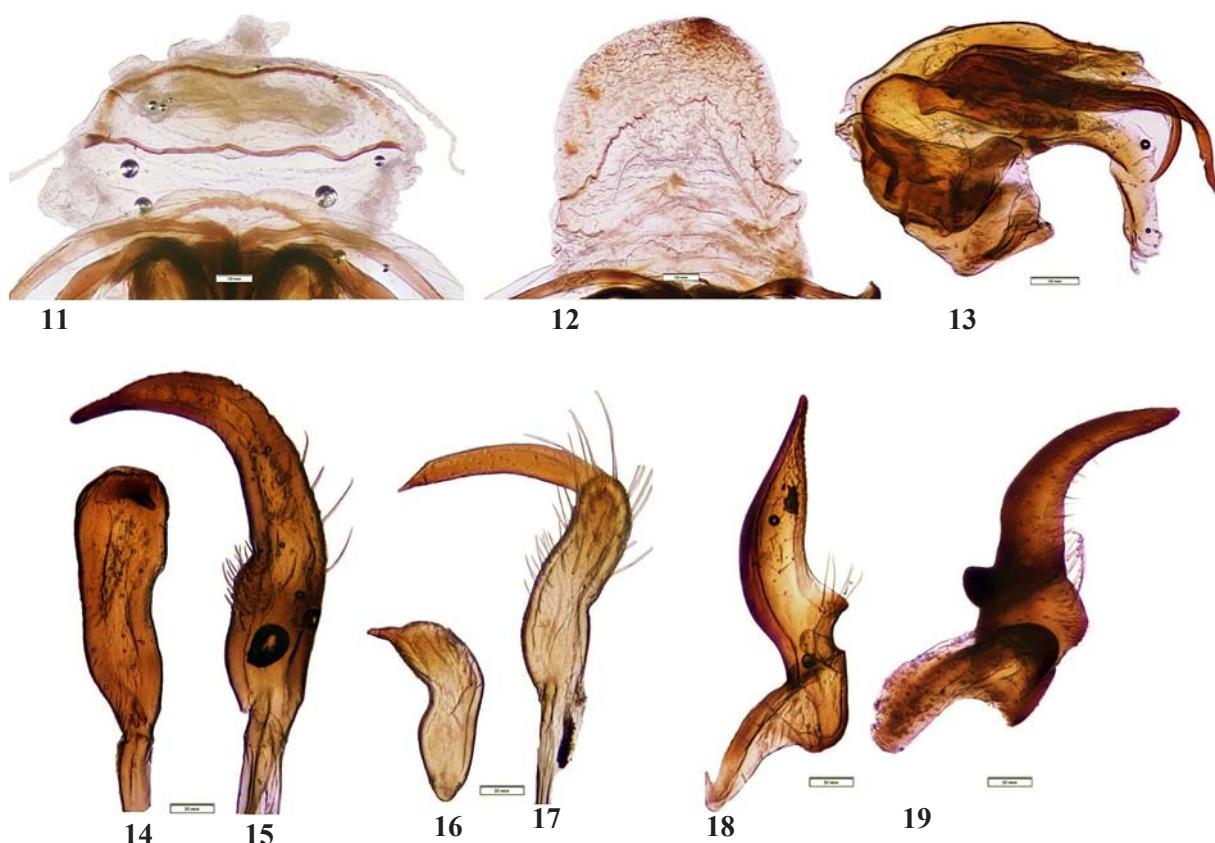


Fig. 11–19. Heteroptera of the East Kazakhstan Province: 11 — *Nabis americolimbatus*, 12 — *N. inscriptus* (Nabidae); 13, 14, 15 — *Leptopterna albescens*, 16, 17 — *Stenodema sibirica* (Miridae); 18 — *Emblethis filicornis*, 19 — *Trapezonotus arenarius elegantulus* (Lygaeidae) (11–12 — vagina; 13 — aedeagus; 14, 16 — right paramere, 15, 17 — left paramere).

Рис. 11–19. Heteroptera Восточно-Казахстанской области: 11 — *Nabis americolimbatus*, 12 — *N. inscriptus* (Nabidae); 13, 14, 15 — *Leptopterna albescens*, 16, 17 — *Stenodema sibirica* (Miridae); 18 — *Emblethis filicornis*, 19 — *Trapezonotus arenarius elegantulus* (Lygaeidae) (11–12 — вагина; 13 — эдеагус; 14, 16 — правый парамер; 15, 17 — левый парамер).

Adelphocoris seticornis (Fabricius, 1775)

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 2.08.2021, 1♀.

DISTRIBUTION. Euro-Siberian. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova 2013; Vinokurov, Rudoi, 2020].

Lygocoris pabulinus (Linnaeus, 1761)

MATERIAL. Ridder Town: Ivanovskiy Mt. Range, 10 km S of Poperechnoe Village, 1761 m, 7.08.2021, 3♂♂; Tigirek Mt. Range, Ushakovo Lake, 1858 m, 21.08.2021, 1♂, 1♀.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Lygus pratensis (Linnaeus, 1758)

MATERIAL. Katon-Karagay District: KKSNNP, left bank Buhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 02.08.2021, 1♂.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Lygus punctatus (Zetterstedt, 1838)

MATERIAL. Katon-Karagay District: KKSNNP, 3 km E of Akmaral Village, 1174 m, 5.09.2021, 1♂; Ridder Town: Ivanovskiy Mt. Range, 10 km S Poperechnoe Village, 1761 m, 7.08.2021, 1♂.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Lygus rugulipennis Poppius, 1911

MATERIAL. Katon-Karagay District: KKSNNP, 3 km E Akmaral Village, 1174 m, 5.09.2021, 1♂, 3♀♀; Shemonaihka District: 4 km of Shemonaihka Town, 335 m, 24.09.2021, V.V. Rudoi leg., 1♀.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Lygus wagneri Remane, 1955

MATERIAL. Ridder Town: Tigirek Mt. Range, Ushakovo Lake, 1858 m, 21.08.2021, 2♀♀; Katon-Karagay District: KKSNNP, 3 km E Akmaral Village, 1174 m, 5.09.2021, 1♂.

DISTRIBUTION. Holarctic. First record from East Kazakhstan Province.

Orthops mutans (Stål, 1858)

MATERIAL. Ridder Town: Tigirek Mt. Range, Ushakovo Lake, 1858 m, 21.08.2021, 1♂.

DISTRIBUTION. Southern Siberia, Mongolia, China. Introduced to North America. Recorded from the East Kazakhstan Province [Vinokurov, Rudoi, 2020].

Stenotus binotatus (Fabricius, 1794)

MATERIAL. Ridder Town: Ivanovskiy Mt. Range, 10 km S of Poperechnoe Village, 1761 m, 7.08.2021, 1♂.

DISTRIBUTION. Trans-Euroasian. Introduced to North America, Hawaii, New Zealand. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Leptopterna albescens (Reuter, 1891)

Figs 13–15.

MATERIAL. Zaysan District: Saur Mt. Range, 20 km SEE of Lake Zaysan, 12251250 m, 20.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♂.

DISTRIBUTION. Euroasian steppe. First record from East Kazakhstan Province.

Leptopterna dolabrata (Linnaeus, 1758)

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmynker Mt. Range, point 1, 2244 m, 7.07.2021, 1♀, point 2, 2368 m, 7.28.07.2021, 19♂♂, 16♀♀; Kamenisty (Kamennyy) Mt. Range, 2444 m, 29.07.2021, 1♂; Katon-Karagay District: KKSNNP, Ukok Pass, point 2, 2500 m, 17.07.2021, 1♂, 3♀♀; Altai District: bank of Hamir River, point 1, 686 m, 29.06.2021, 10♂♂, 9♀♀, point 2, 501 m, 29.06.2021, 11♂♂, 4♀♀; Ridder Town: Ivanovskiy Mt. Range, 10 km S of Poperechnoe Village, 1761 m, 7.08.2021, 1♂.

DISTRIBUTION. Holarctic. First record from East Kazakhstan Province.

Notostira elongata (Geoffroy, 1785)

MATERIAL. Katon-Karagay District: KKSNNP, near Katon-Karagay Village, 1055 m, 27.06.2021, 1♂.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Stenodema (Brachystira) trispinosa Reuter, 1904

MATERIAL. Zaysan District: Saur Mt. Range, valley of Kenderlik River (left bank), 2 km W of Kenderlik Village, 740 m, 24.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 2♂♂; Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 2♂♂.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Esenbekova, 2013].

Stenodema (Stenodema) holsata (Fabricius, 1787)

MATERIAL. Katon-Karagay District: KKSNNP, Altai Tarbagatai Mts, Burkhat Pass, 2130–2200 m, 2.07.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♀.

DISTRIBUTION. Euroasian. Recorded from the East Kazakhstan Province [Asanova, 1986].

Stenodema (Stenodema) sibirica Bergroth, 1914

Figs 16–17, 20.

MATERIAL. Katon-Karagay District: KKSNNP, Sarymsakty Mt. Range, 3 km SE of Belkaragay Village, Medvedevskiy nursery, 927 m, 30.05.2021, 1♂; KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 2, 695 m, 03.06.2021, 1♀; Ridder Town: Korgon Mt. Range, 988 m, 23.08.2021, 1♀.

DISTRIBUTION. Siberia, south of the Russian Far East. Mongolia, China, Korea, Japan. First record from the Republic of Kazakhstan.

Stenodema (Stenodema) virens (Linnaeus, 1767)

MATERIAL. Katon-Karagay District: KKSNNP, Sarymsakty Mt. Range, 3 km SE of Belkaragay Village, Medvedevskiy nursery, 927 m, 30.05.2021, 1♀.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Euryopicoris nitidus (Meyer-Dür, 1843)

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmynker Mt. Range, point 1, 2244 m, 7.07.2021, 1♀, point 2, 2368 m, 7.28.07.2021, 19♂♂, 16♀♀; Kamenisty (Kamennyy) Mt. Range, 2444 m, 29.07.2021, 1♂; Katon-Karagay District: KKSNNP, Ukok Pass, point 2, 2500 m, 17.07.2021, 1♂, 3♀♀; Altai District: bank of Hamir River, point 1, 686 m, 29.06.2021, 10♂♂, 9♀♀, point 2, 501 m, 29.06.2021, 11♂♂, 4♀♀; Ridder Town: Ivanovskiy Mt. Range, 10 km S of Poperechnoe Village, 1761 m, 7.08.2021, 1♂.

DISTRIBUTION. Euro-Siberian. Recorded from the East Kazakhstan Province [Asanova, 1986].

Labops burmeisteri Stål, 1858

Fig. 21.

MATERIAL. Katon-Karagay District: KKSNNP, Ukok Pass, point 1, 2500 m, 17.07.2021, 29♂♂, 29♀♀; Kurchum District: 32 km SE of Lake Markakol', Ushkurmynker Mt. Range, point 2, 2368 m, 7.07.2021, 39♂♂, 37♀♀; Altai District: bank of Hamir River, point 1, 686 m, 29.06.2021, 13♂♂, 18♀♀.

DISTRIBUTION. Holarctic. First record from East Kazakhstan Province.

Labops sahlbergii (Fallén, 1829)

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmynker Mt. Range, point 2, 2368 m, 7.07.2021, 3♂♂, 2♀♀; Altai District: bank of Hamir River, point 1, 686 m, 29.06.2021, 1♂, 3♀♀, point 2, 501 m, 29.06.2021, 3♂♂, 1♀.

DISTRIBUTION. Trans-Euroasian. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Plagiognathus arbustorum arbustorum (Fabricius, 1794)

MATERIAL. Ridder Town: Tigirek Mt. Range, Ushakovo Lake, 1858 m, 1.08.2021, 1♂, 1♀.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Family Tingidae Laporte, 1832

Tingis (Tingis) ampliata (Herrich-Schaeffer, 1838)

MATERIAL. Zaysan District: Saur Mt. Range, valley of Kenderlik River (left bank), 2 km W of Kenderlik Village, 740 m, 24.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♂, 2♀♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Tingis (Neolasiotropis) pilosa Hummel, 1825

MATERIAL. Zaysan District: Saur Mt. Range, valley of Kenderlik River (left bank), 2 km W of Kenderlik Village, 740 m, 24.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♂.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Family Reduviidae Latreille, 1807

Rhynocoris (Rhynocoris) annulatus (Linnaeus, 1758)

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 2, 695 m, 3.06.2021, 1♂.

DISTRIBUTION. Euro-Baikalian. Recorded from the East Kazakhstan Province [Asanova, 1986].

Rhynocoris (Rhynocoris) iracundus (Poda, 1761)

MATERIAL. Ulan District: 5 km N of Asu-bulak Village, 500 m, 8.06.2021, 1♂, 3♀♀.

DISTRIBUTION. From Europe and eastern Mediterranean to the south of West Siberia and north-western China. Kashmir. Recorded from the East Kazakhstan Province [Putshkov, 1987; Vinokurov, Rudoi, 2020].

Family Aradidae Brullé, 1836

Aradus (Aradus) betulae (Linnaeus, 1758)

MATERIAL. Altai District: Bank of Irtysh River, 14.5 km SE of Ust'-Kamenogorsk, 326 m, 16.06.2021, 5♂♂, 3♀♀.

DISTRIBUTION. Trans-Euroasian. Recorded from the East Kazakhstan Province [Esenbekova, 2013].

Family Lygaeidae Schilling, 1829

Lygaeus equestris (Linnaeus, 1758)

MATERIAL. Kurchum District: Shekel'mes (Kiin-Kerish) locality, point 2, 458 m, 27–28.04.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Lygaeus murinus (Kiritschenko, 1914)

Fig. 22

MATERIAL. Kurchum District: Shekel'mes (Kiin-Kerish) locality, point 2, 458 m, 27–28.04.2021, 1♂.

DISTRIBUTION. Turano-Gobian. First record from East Kazakhstan Province.

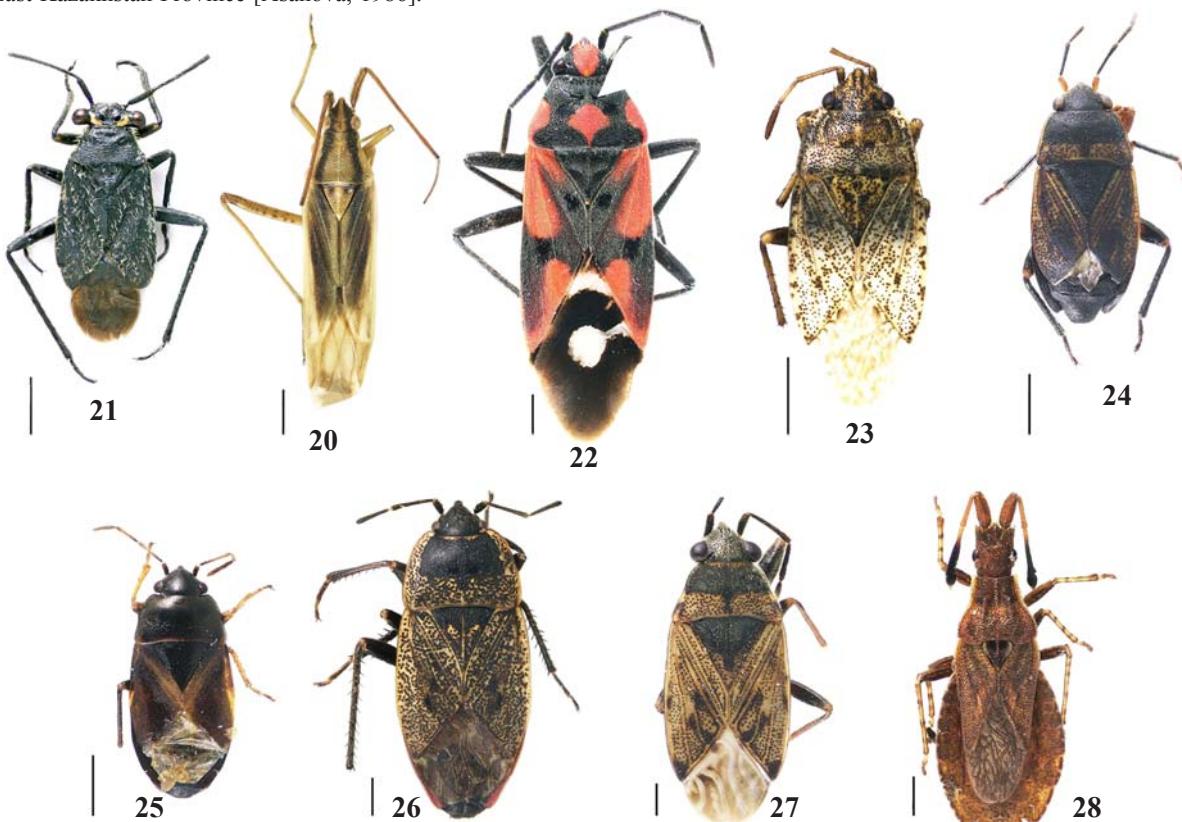


Fig. 20–28. Heteroptera of the East Kazakhstan Province: 20 — *Stenodema sibirica*, 21 — *Labops burmeisteri* (Miridae); 22 — *Lygaeus murinus*, 23 — *Emblethis filicornis*, 24 — *Trapezonotus arenarius elegantulus*, 25 — *Lamprodema maura*, 26 — *Naphiellus irroratus*, 27 — *Peritrechus angusticollis* (Lygaeidae); 28 — *Spathocera laticornis* (Coreidae).

Рис. 20–28. Полужесткокрылые Восточно-Казахстанской области: 20 — *Stenodema sibirica*, 21 — *Labops burmeisteri* (Miridae); 22 — *Lygaeus murinus*, 23 — *Emblethis filicornis*, 24 — *Trapezonotus arenarius elegantulus*, 25 — *Lamprodema maura*, 26 — *Naphiellus irroratus*, 27 — *Peritrechus angusticollis* (Lygaeidae); 28 — *Spathocera laticornis* (Coreidae).

Nithecus jacobaeae (Schilling, 1829)

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmyner Mt. Range, point 1, 2244 m, 7.07.2021, 4♀♂; Katon-Karagay District: KKSNNP, 3 km E of Akmaral Village, 1174 m, 5.09.2021, 2♂♂, 8♀♀; Altai District: bank of Hamir River, point 2, 501 m, 29.06.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Kleidocerys resedae resedae (Panzer, 1797)

MATERIAL. Kurchum District: Narym Mt. Range, Kulanzhor-ga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♂, 3♀♀; Katon-Karagay District: KKSNNP, 3 km E of Akmaral Village, 1174 m, 05.09.2021, 1♀; Ridder Town: Tigirek Mt. Range, Ushakovo Lake, 1858 m, 21.08.2021, 5♂♂, 10♀♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Aphanus rolandri (Linnaeus, 1758)

MATERIAL. Zaysan District: Saur Mts., valley of Kenderlik River (left bank), 2 km W of Kenderlik Village, 740 m, 24.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♀; Kurchum District: 3.5 km W of Moiyldy Village, Mramornyy Pass, 847 m, 30.04.2021, 1♀.

DISTRIBUTION. Western-central Palaearctic. First record from East Kazakhstan Province.

Emblethis brachynotus Horváth, 1897

MATERIAL. Kurchum District: 3 km SE of Zhideli (Ordynka) Village, right bank of Chernyy Irtysh River, 404 m, 30.04.2021, 1♀; 32 km SW of Lake Markakol', Ushkurmyner Mt. Range, point 2, 2368 m, 28.07.2021, 1♂.

DISTRIBUTION. Euro-Siberian. Recorded from the East Kazakhstan Province [Asanova, 1986].

Emblethis filicornis Linnavuori, 1954

Figs 18, 23.

MATERIAL. Kurchum district: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 2♂♂.

DISTRIBUTION. Altai and Sayan Mts. First record from the Republic of Kazakhstan.

Trapezonotus (Trapezonotus) arenarius arenarius (Linnaeus, 1758)

MATERIAL. Kurchum District: 3.5 km W of Moiyldy Village, Mramornyy Pass, 847 m, 30.04.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Trapezonotus (Trapezonotus) arenarius elegantulus Kiritshenko et Scudder, 1973

Figs 19, 24.

MATERIAL. Altai District: bank of Hamir River, point 1, 686 m, 29.06.2021, 1♂.

DISTRIBUTION. China, Central Asia, Korea. First record from East Kazakhstan Province.

Trapezonotus (Trapezonotus) desertus Seidenstücker, 1951

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmyner Mt. Range, point 2, 2368 m, 28.07.2021, 2♀♀; Kamenisty (Kamennyy) Mt. Range, 2444 m, 29.07.2021, 1♀; Katon-Karagay District: KKSNNP, Altai Tarbagatai Mts., Burkhat Pass, 2130–2200 m, 2.07.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♂.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986].

Lamprodema maura (Fabricius, 1803)

Fig. 25.

MATERIAL. Kurchum District: 3 km SE of Zhideli (Ordynka) Village, right bank of Chernyy Irtysh River, 404 m, 30.04.2021, 1♀; 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 8♂♂, 12♀♀; 32 km SW of Lake Markakol', Ushkurmyner Mt. Range, point 2, 2368 m, 28.07.2021, 1♀.

DISTRIBUTION. Western-central Palaearctic. First record from East Kazakhstan Province.

Naphiellus irroratus (Jakovlev, 1889)

Fig. 26.

MATERIAL. Kurchum District: Narym Mt. Range, Kulanzhor-ga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♀.

DISTRIBUTION. From central and southern-east Kazakhstan to the south of the Russian Far East. First record from East Kazakhstan Province.

Panaorus adspersus (Mulsant et Rey, 1852)

MATERIAL. Kurchum District: Narym Mt. Range, Kulanzhor-ga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♂.

DISTRIBUTION. Euro-Siberian. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Peritrechus angusticollis (R.F. Sahlberg, 1848)

Fig. 27.

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 2♂♂, 2♀♀.

DISTRIBUTION. Euro-Siberian. First record from East Kazakhstan Province.

Peritrechus convivus (Stål, 1858)

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 1♂.

DISTRIBUTION. Holarctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Rhyparochromus pini (Linnaeus, 1758)

MATERIAL. Katon-Karagay District: KKSNNP, Sarymsakty Mt. Range, 3 km S of Katon-Karagay Village, 1313 m, 17.05.2021, 1♂; KKSNNP, Sarymsakty Mt. Range, Shyngystay Village, mouth of Tautekeli River, 870 m, 27.05.2021, 1♂; Ukok Pass, point 1, 2400 m, 14.07.2021, 1♂, 8♀♀, point 2, 2500 m, 17.07.2021, 1♀; Ulan District: 5 km N of Asu-bulak Village, 500 m, 8.06.2021, 1♀; Altai District: bank of Hamir River, point 2, 501 m, 29.06.2021, 5♀♀; Ust'-Kamenogorsk, 288 m, 17.06.2021, 1♂.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Rhyparochromus vulgaris (Schilling, 1829)

MATERIAL. Zaysan District: Saur Mts., 7 km NE of Chagan-Obo, 2300 m, 27.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Xanthochilus quadratus (Fabricius, 1798)

MATERIAL. Zaysan District: Saur Mts., valley of Kenderlik River (left bank), 2 km W of Kenderlik Village, 740 m, 24.06.2018, R. Yakovlev, V. Doroshkin, A. Naydenov & V. Rudoi leg., 2♀♀; Kurchum District: Narym Mt. Range, Kulanzhor-ga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♀; Glubokovskiy District: Karaguzhikha Village, valley of Uba River (left bank), 486 m, 15.09.2019, V. Rudoi leg., 2♂♂.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Family Pyrrhocoridae Amyot et Serville, 1843

Pyrrhocoris apterus (Linnaeus, 1758)

MATERIAL. Ulan District: 3 km NE of Asu-bulak Village, 590 m, 8.06.2021, 1♂, 1♀; Altai District: bank of Hamir River, point 2, 501 m, 29.06.2021, 2♂♂, 2♀♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Pyrrhocoris marginatus (Kolenati, 1845)

MATERIAL. Kurchum District: 3.5 km W of Moiyldy Village, Mramorni Pass, 847 m, 30.04.2021, 1♂, 1♀.

DISTRIBUTION. Euroob'-Irano-Turanian. First record from Asian part of Kazakhstan.

Family Coreidae Leach, 1815

Coreus marginatus marginatus (Linnaeus, 1758)

MATERIAL. Ulan District: 5 km N of Asu-bulak Village, 500 m, 8.06.2021, 1♀; vicinity of Ust-Kamenogorsk, 288 m, 17.06.2021, 2♀♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Spathocera laticornis (Schilling, 1829)

Fig. 28.

MATERIAL. Katon-Karagay District: KKSNNP, Sarymsakty Mt. Range, Shygystay Village, mouth of Tautekeli River, 870 m, 27.05.2021, 1♀.

DISTRIBUTION. Europe, Azerbaijan, Turkey, Kazakhstan. First record from East Kazakhstan Province.

Family Rhopalidae Amyot et Serville, 1843

Corizus hyoscyami hyoscyami (Linnaeus, 1758)

MATERIAL. Katon-Karagay District: KKSNNP, Sarymsakty Mt. Range, 3 km SE of Belkaragay Village, Medvedevskiy locality, 927 m, 30.05.2021, 5♂♂, 3♀♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Rhopalus (Rhopalus) conspersus (Fieber, 1837)

MATERIAL. Katon-Karagay District: KKSNNP, Ukok Pass, point 1, 2400 m, 14.07.2021, 1♀.

DISTRIBUTION. Europe, West Asia, southern Siberia, mountains of Central Asia. Recorded from the East Kazakhstan Province [Asanova, 1986].

Stictopleurus punctatonervosus (Goeze, 1778)

MATERIAL. Kurchum District: Narym Mt. Range, Kulanzhorga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♀; Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 2.08.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Family Acanthosomatidae Signoret, 1864

Acanthosoma spinicolle Jakovlev, 1880

MATERIAL. Shemonaiha District: 4 km E of Shemonaiha Town, 335 m, 24.09.2021, 1♂.

DISTRIBUTION. Eastern Palaearctic. Recorded from the East Kazakhstan Province [Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Elasmucha fiebri (Jakovlev, 1865)

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 2.08.2021, 1♀.

DISTRIBUTION. Euro-Siberian. First record from East Kazakhstan Province.

Elasmucha grisea grisea (Linnaeus, 1758)

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 2.08.2021, 1♂; Ridder Town: Tigirek Mt. Range, Ushakovo Lake, 1858 m, 21.08.2021, 5♀♀.

DISTRIBUTION. Euro-Siberian. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Family Cydnidae Billberg, 1820

Byrsinus flavigornis (Fabricius, 1794)

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 3♂♂.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Family Scutelleridae Leach, 1815

Odontotarsus purpureolineatus (Rossi, 1790)

MATERIAL. Narym Mt. Range, Kulanzhorga locality, 14 km NE of Karabulak Village, point 1, 408 m, 1.08.2021, 2♂♂, 5♀♀.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Eurygaster maura (Linnaeus, 1758)

MATERIAL. Shemonaiha District: 4 km E of Shemonaiha Town, 335 m, 24.09.2021, 1♂.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013].

Eurygaster testudinaria (Geoffroy, 1785)

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmynker Mt. Range, point 1, 2244 m, 7.07.2021, 2♂♂, 2♀♀; Katon-Karagay District: KKSNNP, 3 km SE of Belkaragay Village, Medvedevskiy nursery, 927 m, 30.05.2021, 1♀; KKSNNP, left bank of Bukhtarma River, Ust'-Sobach'e locality, point 1, 680 m, 2.08.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Family Pentatomidae Leach, 1815

Carpocoris (Carpocoris) fuscispinus (Bohemian, 1851)

MATERIAL. Katon-Karagay District: KKSNNP, 3 km E of Akmaral Village, 1174 m, 5.09.2021, 1♂.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Carpocoris (Carpocoris) purpureipennis (De Geer, 1773)

MATERIAL. Katon-Karagay District: KKSNNP, 3 km E of Akmaral Village, 1174 m, 5.09.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Dolycoris baccarum (Linnaeus, 1758)

MATERIAL. Kurchum District: 24 km NW of Amanat Village, N shore of Lake Zaysan, 397 m, 28.04.2021, 1♂, 1♀; Shekel'mes (Kiin-Kerish) locality, point 1, 495 m, 29.04.2021, 1♂, point 2, 458

m, 27–28.04.2021, 1♂; 4 km E Shemonaikha Town, 335 m, 24.09.2021, 1♂.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Palomena prasina (Linnaeus, 1761)

MATERIAL. Katon-Karagay District: KKSNNP, 3 km E of Akmaral Village, 1174 m, 5.09.2021, 1♂.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Vinokurov, Rudoi, 2020].

Eysarcoris aeneus (Scopoli, 1763)

MATERIAL. Glubokovskiy District: Karaguzhikha Village, valley of Uba River (left bank), 486 m, 15.09.2019, V. Rudoi leg., 1♀.

DISTRIBUTION. Transpalaearctic. First record from East Kazakhstan Province.

Pentatoma (Pentatoma) rufipes (Linnaeus, 1758)

MATERIAL. Ridder Town: Tigirek Mt. Range, Ushakovo Lake, 1858 m, 21.08.2021, 1♀.

DISTRIBUTION. Transpalaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova 2013].

Eurydema (Eurydema) oleracea (Linnaeus, 1758)

MATERIAL. Katon-Karagay District: KKSNNP, left bank of Buhtarma River, Ust'-Sobach'e locality, point 2, 695 m, 3.06.2021, 1♀; KKSNNP, near Barlyk (Pechi) Village, 610 m, 4.04.2021, 1♂; KKSNNP, Sarymsakty Mt. Range, 3 km S of Katon-Karagay Village, 1370 m, 27.05.2021, 1♀; Zharmin district: Kalbatau Village, 428 m, 15.08.2021, 1♀.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Eurydema (Eurydema) ornata (Linnaeus, 1758)

MATERIAL. Kurchum District: Narym Mt. Range, Kulanzhor-ga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♀; 4 km E of Shemonaikha Town, 335 m, 24.09.2021, 1♂, 1♀.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Eurydema (Rubrodorsarium) ventralis Kolenati, 1846

MATERIAL. Kurchum District: Narym Mt. Range, Kulanzhor-ga locality, 14 km NE of Karabulak Village, point 2, 400 m, 13.06.2021, 1♂, 3♀.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Graphosoma (Graphosoma) lineatum (Linnaeus, 1758)

MATERIAL. Kurchum District: 32 km SW of Lake Markakol', Ushkurmynder Mt. Range, point 1, 2244 m, 7.07.2021, 2♀.

DISTRIBUTION. Western-central Palaearctic. Recorded from the East Kazakhstan Province [Asanova, 1986; Esenbekova, 2013; Vinokurov, Rudoi, 2020].

Conclusion

Based on the materials of the Katon-Karagay State National Nature Park of the Republic of Kazakhstan and the Altai State University (Russia), the paper pro-

vides information on 77 terrestrial species of true bugs from 13 families. Talking into account 17 species recorded for the first time, the faunal list of the East Kazakhstan Province now consists of 498 species belonging to 25 families

Thus, 4 species of the families Nabidae, Miridae and Lygaeidae are indicated for the first time for the fauna of the Republic of Kazakhstan.

Nabis americanolimbatus (Carayon, 1961) is a boreal holartic species distributed in East Siberia, Russian Far East and Mongolia, inhabiting swamps and humid meadows [Kerzhner, 1981]. It was recently found in the Republic of Altai (Russia) near Teletskoye Lake [Golub et al., 2021].

Nabis inscriptus (Kirby, 1837) is an arctoboreal holartic species distributed in the north of West Siberia, the Altai Republic, East Siberia, the north of the Russian Far East, and northern Mongolia [Kerzhner, 1981], inhabiting hygrophytic and mesophytic meadows [Vinokurov, 1979].

Stenodema sibirica Bergroth, 1914 is a boreal species distributed in Siberia and the Russian Far East [Kerzhner, 1981]. It inhabits meadows and forest glades and lives on cereals [Vinokurov et al., 2003].

Emblethis filicornis Linnauvori, 1954 is an endemic of Altai, western Sayan and western Mongolian, that was first described from the Republic of Tuva [Vinokurov, Kanyukova, 1995].

According to the new material, the fauna of heteropterans of eastern Kazakhstan is supplemented with 13 new species which were not recorded previously. These are: *Lygus wagneri* Remane, 1955, *Leptopterna albescens* (Reuter, 1891), *Labops burmeisteri* Stål, 1858 (Miridae); *Lygaeus murinus* (Kiritshenko, 1914), *Apharus rolandri* (Linnaeus, 1758), *Trapezonotus arenarius elegantulus* Kiritshenko et Scudder, 1973, *Lamprodema maura* (Fabricius, 1803), *Naphiellus irroratus* (Jakovlev, 1889), *Peritrechus angusticollis* (R.F. Sahlberg, 1848) (Lygaeidae); *Pyrrhocoris marginatus* (Kolenati, 1845) (Pyrrhocoridae); *Spathocera laticornis* (Schilling, 1829) (Coreidae); *Elasmucha fiebleri* (Jakovlev, 1865) (Acanthosomatidae); and *Eysarcoris ae-neus* (Scopoli, 1763) (Pentatomidae).

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