To the fauna of terrestrial bugs (Heteroptera: Cimicomorpha, Pentatomomorpha) of Altai Krai (Russia) I

KEY WORDS: Insect, biodiversity, Heteroptera, Altai Krai, Siberia, Russia, fauna, new records.

ABSTRACT. Basing on the materials of the Altai State University expedition in 2020, we provide new data on the distribution of 84 heteropteran species of 15 families in the Altai Krai. Of them, 17 species are recorded as new to the Siberian fauna. 17 species are recorded as new to the Altai Krai: Nabis brevis brevis Scholtz, 1847, N. feras (Linnaeus, 1758), N. incriptus (Kirby, 1837) (Nabidae); Lygus gemellatus gemellatus (Herrick-Shaffer, 1835), L. rugulipennis Poppius, 1911, L. sibiricus Aglyamzyanov, 1990, Orthops mutans (Stål, 1858), Phytocoris pini Kirschbaum, 1856, Pinailitus rubricatus (Fallén, 1807), Stenodema holsata (Fabricius, 1787), S. sibirica Bergroth, 1914, Anapus rugicollis (Jakowlev, 1877), Chlamydatus pulicarius (Fallén, 1807), Dacota hesperia Uhler, 1872, Psallas anticus (Reuter, 1876) (Miridae); Drymus brunneus brunneus (R.F. Sahlberg, 1848) (Lygaeidae); Elasmucha grisea (Linnaeus, 1758) (Acanthosomatidae).

Introduction

The Altai Krai is located in the southern part of Western Siberia within 49–54°N and 78–87°E. It borders in the west and south with Pavlovodar and East Kazakhstan Regions of the Republic of Kazakhstan, in the north and north-east with Novosibirsk and Kemerovo Regions, in the southeast with the Republic of Altai. The territory belongs to two geographical regions — the West Siberian Plain and the Altai-Sayan mountainous country [Lysenkova, Purdik, 1995]. A characteristic feature of the western lowlands are steppes, forest-steppe and belt forests, and the eastern part is mountainous, covered with mountain coniferous forests and developed mountain steppes.

The earliest data on heteropteran in Altai Krai were published in the first half of XIX century by Gebler [1830]. 80 years later, Kiritshenko [1910] published his data on bugs of Western Siberia basing on the collection of the Zoological Institute of RAS (ZIN); 65 species of 20 families were registered in the Altai Krai within its current borders of 1992. In her monograph, Petrova [1975] provided data on the distribution and biology of shield bugs in Western Siberia, 56 species of

How to cite this article: Vinokurov N.N., Rudoi V.V. 2022. To the fauna of terrestrial bugs (Heteroptera: Cimicomorpha, Pentatomomorpha) of Altai Krai (Russia) I // Russian Entomol. J. Vol.31. No.1. P.1–9. doi: 10.15298/rusentj.31.1.01

Russian Entomol. J. 31(1): 1–9 © RUSSIAN ENTOMOLOGICAL JOURNAL, 2022
of them were reported for Altai Krai. Vinokurov [2007a, b], Vinokurov and Golub [2007] gave new data on the distribution of heteropteran on the collection of ZIN, and on the collection of the first author from Belokurikha resort environs. Knyshov and Namyatova [2010] compiled an annotated list of bugs of the Ti-girek State Reserve, including 162 species, some of them were reported as new to the regional fauna. The information on the distribution of bugs in the Altai Krai is found in various taxonomic and faunistic works [see Vinokurov et al., 2010].

Below, we represent new data on the fauna of Heteroptera in the Altai Krai, basing on the materials of entomological expeditions of the Institute of Biology and Biotechnology (Altai State University).

Material and methods

In 2020, under the guidance of Professor R.V. Yakovlev, studies of Heteroptera were carried out in the north, west and south of the Altai Krai. Blagoveschensky, Mikhailovsky, Loktevsky, Rubtsovsky, Kuryinsky, Krasnoshekovsky, Pervomaisky, Charyshsky, Smolensky and Soloneshensky regions were studied (Fig. 1.). The collection was performed by traditional entomological methods: sweeping by entomological net in herbaceous and tree-shrub layers, manual collection from the soil surface and the root part of plants [Golub et al., 2012]. The collected material includes 293 specimens from 14 families.

When listing data on the labels, we used the following abbreviations. The coordinates of the following localities are not mentioned:

- Blagoveschensky District: 15 km SSW of Nizhnaya Suyetka village (53°05′20″ N, 79°47′22″ E);
- Mikhailovsky District: 2 km NNE of Malinovoe Ozero village (51°41′51″ N, 79°47′53″ E);
- Loktevsky District: Vicinity of Ust’yanka village (51°10′03″ N, 81°35′39″ E), 1 km N of Ust’yanka village (51°09′47″ N, 81°35′45″ E);
- Rubtsovsky District: 4 km W of Nazarovka village (51°25′50″ N, 81°36′06″ E);
- Kuryinsky District: 7.5 km W of Kolyvan village, Loktevka River basin (51°18′08″ N, 82°29′05″ E);
- Krasnoshekovsky District: 3 km WNW of Ust-Chagyrka village (51°26′17″ N, 83°04′13″ E);
- Pervomaisky District: Mylnikovo village (53°27′50″ N, 83°46′33″ E);
- Charyshsky District: vicinity of the village Sentelek, 5 km SW of the village Mashenka, the basin of the River Charysh (51°14′28″ N, 83°48′51″ E), Kumir River valley (50°54′38″ N, 84°15′56″ E; 50°55′17″ N, 84°16′01″ E);

Fig. 1. Collection points of heteropteran in the Altai Krai. Districts: 1 — Blagoveschensky, 2 — Mikhailovsky, 3 — Loktevsky, 4 — Rubtsovsky, 5 — Kuryinsky, 6 — Krasnoshekovsky, 7 — Pervomaisky, 8 — Charyshsky, 9 — Smolensky, 10 — Soloneshensky.

Рис. 1. Пункты сбора полужесткокрылых на территории Алтайского края. Районы: 1 — Благовещенский, 2 — Михайловский, 3 — Локтевский, 4 — Рубцовский, 5 — Курьинский, 6 — Краснощековский, 7 — Первомайский, 8 — Чарышский, 9 — Смоленский, 10 — Солонешенский.
Annotated list of Heteroptera of the Altai Krai

Family Nabidae A. Costa, 1853

Nabis limbatis Dahlbom, 1851
MATERIAL. Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 1 ♀.
DISTRIBUTION. Euro-Siberian. Recorded from Altai Krai [Kerzhner, 1981].

Nabis tesquoror (Kerzhner, 1968)
MATERIAL. 2 ♀. Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 2 ♀.
DISTRIBUTION. Black Sea-Kazakhstan steppe. From south of East Europe east to West Mongolia. Recorded from Altai Krai [Kerzhner, 1981].

Nabis brevis brevis Scholtz, 1847
MATERIAL. Vicinity of Ust'yanka village, H = 368 m, 1.VI.2020, 1 ♀, 3 ♀; 7.5 km W of Kolyvan village, Lektheva river basin, H = 417 m, 1.VI.2020, 2 ♀; Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 1 ♀; bank of Peschanaya river, H = 310 m, 29.V.2020, 2 ♀; vicinity of Tog-Alta village, Denisov’s Cave, H = 610 m, 29.V.2020, 1 ♀.
DISTRIBUTION. Euro-Siberian. First record from Altai Krai.

Nabis ferus (Linnaeus, 1758)
MATERIAL. Vicinity of Ust'yanka village, H = 368 m, 1.VI.2020, 1 ♀.
DISTRIBUTION. Euro-Siberian. First record from Altai Krai.

Nabis rugosus (Linnaeus, 1758)
MATERIAL. Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin and Altai Mts. Recorded from Altai Krai [Kerzhner, 1981].

Nabis incriptus (Kirby, 1837)
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 8–9.VIII.2020, 1 ♀.
DISTRIBUTION. Holartic. First record from Altai Krai.

Family Anthocoridae Fieber, 1836

Orius niger (Wolff, 1811)
MATERIAL. 7.5 km W of Kolyvan village, Lektheva river basin, H = 417 m, 1.VI.2020, 1 ♀; Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♀.
DISTRIBUTION. Transpalaeartic. Recorded from Altai Krai [Kiritshenko, 1910].

Family Miridae Hahn, 1833

Deraeocoris ater (Jakovlev, 1889)
MATERIAL. Mylnikovo village, H = 146 m, 13.VII.2019, A.E. Naydenov, K.E. Naydenova leg., 1 ♀.
DISTRIBUTION. South Siberia, South of the Far East.

— North-East China, Korea, Japan. Recorded from Altai Krai [Vinokurov, Golub, 2007].

Adelphocoris lineolatus (Goeze, 1778)
MATERIAL. Vicinity of Ust'yanka village, H = 368 m, 1.VI.2020, 1 ♀; 7.5 km W of Kolyvan village, Lektheva river basin, H = 417 m, 1.VI.2020, 1 ♀, 1 ♀.
DISTRIBUTION. Transpalaeartic. Recorded from Altai Krai [Kiritshenko, 1910; Kulik, 1965b; Putshkov, 1965; Knysyov, Namytova, 2010].

Adelphocoris quadripunctatus (Fabricius, 1794)
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 9–11.VIII.2020, 2 ♀.
Distribution. Transpalaeartic. Recorded from Altai Krai [Vinokurov, Golub, 2009; Knysyov, Namytova, 2010].

Lygus gemellatus gemellatus (Herrick-Shaeffer, 1835)
MATERIAL. Vicinity of Ust'yanka village, H = 368 m, 1.VI.2020, 1 ♀; Korgon Mts., Kumir river valley, H = 888 m, 9–11.VIII.2020, 2 ♀, 4 ♀.
DISTRIBUTION. Transpalaeartic. First record from Altai Krai.

Lygus pratensis (Linnaeus, 1758)
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 9–11.VIII.2020, 1 ♀.
DISTRIBUTION. West-Central Palaeartic. — India. Recorded from Altai Krai [Kiritshenko, 1910; Kulik, 1965b].

Lygus rugulipennis Poppius, 1911
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 9–11.VIII.2020, 11 ♀, 6 ♀.
DISTRIBUTION. Holartic. First record from Altai Krai.

Lygus sibiricus Aglyamzyanov, 1990
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 9–11.VIII.2020, 1 ♀.
DISTRIBUTION. From South of West Siberia east to South of Far East. — Mongolia, China. Korea. First record from Altai Krai.

Orthops mutans (Stål, 1858)
MATERIAL. Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♀; Korgon Mts., Kumir river valley, H = 888 m, 8–9.VIII.2020, 2 ♀; Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 5 ♀, 2 ♀.
DISTRIBUTION. Siberia. — Mongolia, China. First record from Altai Krai.

Orthops scutellatus Uhler, 1877
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 8–9.VIII.2020, 1 ♀; Korgon Mts., Kumir river Valley, H = 880 m, 9–11.VIII.2020, 3 ♀.
DISTRIBUTION. Siberia, South of the Far East. — East China, Korea, Japan, North USA. Recorded from Altai Krai [Vinokurov, Golub, 2007].

Phytocoris pini Kirschbaum, 1856
MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 8–9.VIII.2020, 1 ♀.
DISTRIBUTION. Euro-Siberian. First record from Altai Krai.

Pinalitus rubricatus (Fallén, 1807)
MATERIAL. Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 2 ♀.
**Polymerus unifasciatus** (Fabricius, 1794)

**DISTRIBUTION.** Euro-Siberian. — Introduced to North America. First record from Altai Krai.

**MATERIAL.** Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 1♂; Vicinity of Tog-Altaï village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1♂.

**DISTRIBUTION.** Holarctic. Recorded from Altai Krai [Kiritschenko, 1910].

**Salignus distinguendus** (Reuter, 1875)

**MATERIAL.** Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1♂.

**DISTRIBUTION.** Siberia. — Mongolia, China. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

**Stenotus binotatus** (Fabricius, 1794)

**MATERIAL.** Korgon Mts., Kurnick river valley, H = 330 m, 18–20.V.2020, 1♂; Vicinity of Tog-Altaï village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1♂.

**DISTRIBUTION.** Euro-Siberian. Recorded from Altai Krai [Vinokurov, Golub, 2007; Knyshov, Namyatova, 2010].

**Notostira elongata** (Geoffroy, 1785)

**MATERIAL.** Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1♂.

**DISTRIBUTION.** West-Central Palaeartic. Recorded from Altai Krai [Vinokurov, Golub, 2007; Knyshov, Namyatova, 2010].

**Stenodema holsata** (Fabricius, 1794)

**MATERIAL.** Korgon Mts., Kurnick river valley, H = 330 m, 18–20.V.2020, 2♂, 7♀♀; Vicinity of Tog-Altaï village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1♂.

**DISTRIBUTION.** Transpalaeartic. Recorded from Altai Krai [Kiritschenko, 1910; Vinokurov, Golub, 2007].

**Anapus rugicollis** (Jakovlev, 1877)

**MATERIAL.** Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 1♂.

**DISTRIBUTION.** Euro-Siberian. First record from Altai Krai.

**Stenodema calcărata** (Fallén, 1807)

**MATERIAL.** Korgon Mts., Kurnick river valley, H = 888 m, 8–11.VIII.2020, 1♂; Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1♂.

**DISTRIBUTION.** Siberia, South of the Far East. — China, Korea, Japan. First record from Altai Krai.

**Family Tingidae Laporte, 1832**

**Derephysia longispina** Golub, 1974

**MATERIAL.** 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 2♀♀.

**DISTRIBUTION.** Euro-Siberian. Recorded from Altai Krai [Kiritschenko, 1910; Vinokurov, Golub, 2007; Knyshov, Namyatova, 2010].

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

**MATERIAL.** Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1♂.

**DISTRIBUTION.** Transpalaeartic. Recorded from Altai Krai [Petrova, 1978; Knyshov, Namyatova, 2010].

**Family Reduviidae Lateille, 1807**

**Phymata crassipes** (Fabricius, 1775)

**MATERIAL.** NE coast of lake Kulundinskoye, 15 km SSW of Nizhnyaya Suyetka village, H = 100 m, 10–12.V.2020, 1♂; 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 1♂; Charysh river valley, 3 km NW of Ust‘-Chagyryka village, H = 330 m, 18–20.V.2020, 2♂, 2♀♀.

**DISTRIBUTION.** Transpalaeartic. Recorded from Altai Krai [Kanyukova, Vinokurov, 2010; Knyshov, Namyatova, 2010].

**Rhynocoris annulus** (Linnaeus, 1758)

**MATERIAL.** Vicinity of Tog-Altaï village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1♂.

**DISTRIBUTION.** Euro-Baikalian. Recorded from Altai Krai [Gebler, 1830; Oshianin, 1870; Kiritschenko, 1910; Putshkov, 1982; Knyshov, Namyatova, 2010].

**Rhynocoris iranducus** (Poda, 1761)

**MATERIAL.** Charysh river valley, 3 km WNW of Ust‘-Chagyryka village, H = 330 m, 18–20.V.2020, 1♂.

**DISTRIBUTION.** From Europe east to South of West Siberia and North-West China. — Kashmir. Recorded from Altai Krai [Oshianin, 1870; Kiritschenko, 1910; Vinokurov, Kanyukova, 1995a, b].

**Family Piesmatidae Amyot et Serville, 1843**

**Parapisca quadratum** (Fieber, 1844)

**MATERIAL.** Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1♂.
DISTRIBUTION. West-Central Palaearctic. Recorded from Altai Krai [Kanukova, Vinokurov, 2009a].

Family Berytidae Feiber, 1851

Berytus clavipes (Fabricius, 1775)

MATERIAL. 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 3 ♀; vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♂.

DISTRIBUTION. Trans-Euroasian. Recorded from Altai Krai [Kanukova, Vinokurov, 2009a; Knyszov, Namyatova, 2010].

Family Lygaeidae Schilling, 1829

Nieuces jacobaeae (Schilling, 1829)

MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 9–11.VIII.2020, 1 ♀, 1 ♂.

DISTRIBUTION. Transpalaearctic. Recorded from Altai Krai [Vinokurov, 2007a; Knyszov, Namyatova, 2010].

Nysius helveticus (Herrich-Schaeffer, 1850)

MATERIAL. Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 1 ♀; 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 1 ♀, 2 ♂; vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 6 ♀, 5 ♂; Korgon Mts., Kumir river valley, H = 888 m, 8–9.VIII.2020, 1 ♀; bank of Peschanaya river, H = 310 m, 29.VI.2020, 1 ♀.

DISTRIBUTION. Transpalaearctic. Recorded from Altai Krai [Kanukova, Vinokurov, 2007a; Knyszov, Namyatova, 2010].

Kleidocerys resedae resedae (Panzer, 1797)

MATERIAL. NE of coast of lake Kulundinskoye, 15 km SSW of Nizhnyaya Suyetka village, H = 100 m, 10–12.V.2020, 1 ♀.

DISTRIBUTION. Euroasian. Recorded from Altai Krai [Kanukova, Vinokurov, 2009a; Knyszov, Namyatova, 2010].

Platyplax salviae (Schilling, 1829)

MATERIAL. Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 1 ♀.

DISTRIBUTION. West-Central Palaearctic. Recorded from Altai Krai [Vinokurov, 2007a].

Oxycarenus pallens (Herrich-Scaeffer, 1850)

MATERIAL. 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 5 ♀, 1 ♀.

DISTRIBUTION. West-Central Palaearctic. Recorded from Altai Krai [Vinokurov, 2007a; Knyszov, Namyatova, 2010].

Drymus bruneus brunneus (R.F. Sahlberg, 1848)

MATERIAL. Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 3 ♀, 1 ♂.

DISTRIBUTION. Transpalaearctic. Recorded from Altai Krai [Vinokurov, 2007a; Knyszov, Namyatova, 2010].

Eremocoris abietis abietis (Linnaeus, 1758)

MATERIAL. Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 2 ♀.

DISTRIBUTION. Transpalaearctic. Recorded from Altai Krai [Kiritshenko, 1910].

Panaurus adpersus (Mulsant et Rey, 1872) 203

MATERIAL. 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 1 ♀.

DISTRIBUTION. Euro-Siberian. Recorded from Altai Krai [Kiritshenko, 1910; Vinokurov, 2007a; Knyszov, Namyatova, 2010].

Rhyparochromus pini (Linnaeus, 1758)

MATERIAL. Charysh river valley, 3 km WNW of Ust’-Chagyryka village, H = 330 m, 18–20.V.2020, 1 ♀; Korgon Mts., Kumir river valley, H = 888 m, 8–11.VIII.2020, 1 ♂, 1 ♀.

DISTRIBUTION. Transpalaearctic. Recorded from Altai Krai [Kiritshenko, 1910; Vinokurov, 2007a; Knyszov, Namyatova, 2010].

Family Coreidae Leach, 1815

Coreus marginatus marginatus (Linnaeus, 1758)

MATERIAL. 1 km N of Ust’yanka village, H = 330 m, 17–18.V.2020, 2 ♀, 1 ♂; vicinities of Korgon and Altai villages, Denisov’s Cave, H = 610 m, 29.VI.2020, 1 ♀.

DISTRIBUTION. Transpalaearctic and Oriental. Recorded from Altai Krai [Kiritshenko, 1910].

Rhopalus latus (Jakovlev, 1883)

MATERIAL. Korgon Mts., Kumir river valley, H = 888 m, 8–11.VIII.2020, 2 ♀, 2 ♂; vicinity of Tog-Altai village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1 ♀, 1 ♂.

DISTRIBUTION. From the South of the Far East west to Altai and East Kazakhstan. Recorded from Altai Krai [Kiritshenko, 1910; Knyszov, Namyatova, 2010].

Rhopalus conspersus (Fieber, 1837)

MATERIAL. Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VL.2020, 1 ♀.

DISTRIBUTION. From Europe and East Mediterranean east to mountains of Middle Asia and South Siberia. Recorded from Altai Krai [Putshkov, 1986; Knyszov, Namyatova, 2010].

Rhopalus subrufus (Gmelin, 1790)

MATERIAL. Charysh river valley, 3 km WNW of Ust’-Chagyryka village, H = 330 m, 18–20.V.2020, 1 ♀.

DISTRIBUTION. West-Central Palaearctic. Recorded from Altai Krai [Kiritshenko, 1910; Knyszov, Namyatova, 2010].

Stictopleurus abutilon (Rossi, 1790)

MATERIAL. Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♂.

DISTRIBUTION. West-Central Palaearctic. Recorded from Altai Krai [Kanyukova, Vinokurov, 2009a; Knyszov, Namyatova, 2010].

Stictopleurus crassicornis (Linnaeus, 1758)

MATERIAL. 7.5 km W of Kolyvan village, Loktevka river basin, H = 417 m, 1.VI.2020, 1 ♂; vicinities of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♀.

DISTRIBUTION. West-Central Palaearctic. Recorded from Altai Krai [Kanukova, Vinokurov, 2009a; Knyszov, Namyatova, 2010].

Stictopleurus punctatorervosus (Goeze, 1778)

MATERIAL. NE coast of lake Kulundinskoye, 15 km SSW of Nizhnyaya Suyetka village, H = 100 m, 10–12.V.2020, 1 ♀; 1 km N of Ust’yanka village, H = 330 m, 17–18.V.2020, 1 ♀.
DISTRIBUTION. Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

**Myrmus miriformis miriformis** (Fallén, 1807)

**MATERIAL.** Korgon Mts., Kumir river valley, H = 880 m, 9–11.VIII.2020, 1 ♀, 2 ♂.

**DISTRIBUTION.** Trans-Euroasian. Recorded from Altai Krai [Kiritchenko, 1910; Knyshov, Namyatova, 2010].

**Family Plataspidae** Dallas, 1851

**Coptosoma mucronatum** Seidenstücker, 1963

Figs 2–3.

**MATERIAL.** Bank of Peschanaya river, H = 310 m, 29.VI.2020, 1 ♀, 3 ♂.

**DISTRIBUTION.** Steppe and semi-deserts of Europe and Kazakhstan. New record of the fauna of Siberia. This species inhabits on bank of the Peschanaya River (Smolensky District) together with *Coptosoma scutellatum*.

**Coptosoma scutellatum** (Geoffroy, 1785)

Figs 4–5.

**MATERIAL.** Bank of Peschanaya river, H = 310 m, 29.VI.2020, 1 ♀, 3 ♂.

**DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Gebler, 1830; Oshanin, 1870; Jakovlev, 1875; Kiritchenko, 1910; Knyshov, Namyatova, 2010].

Family Acanthosomatidae Signoret, 1864

**Elasmotherus interstinctus** (Linnaeus, 1758)

MATERIAL. N coast of lake Yodnoe, 2 km NNE of Malinovoë Ozero village, H = 160 m, 13–14.V.2020, 2 ♂; 1 km N of Ust’yanka village, H = 330 m, 17–18.V.2020, 9 ♂, 1 ♀; Kizikha river valley, 4 km W of Nazarovka village, H = 270 m, 15–16.V.2020, 1 ♂; vicinity of Sentelek village, 5 km SW of Meshenka village, Charysh river basin, H = 625 m, 30.V.2020, 5 ♂, 6 ♀.

**DISTRIBUTION.** Holarctic. Recorded from Altai Krai [Kiritchenko, 1910; Petrova, 1975].

**Elasmucha fieberi** (Jakovlev, 1865)

**MATERIAL.** Bank of Shchebnyukha river, H = 420 m, 31.05.2020, 1 ♀; Korgon Mts., Kumir river valley, H = 888 m, 8–11.VIII.2020, 1 ♂, 3 ♀; vicinity of Tog-Altai village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1 ♂.

**DISTRIBUTION.** Euro-Siberian. Recorded from Altai Krai [Kiritchenko, 1910].

**Elasmucha grisea** (Linnaeus, 1758)

**MATERIAL.** NE coast of lake Kulundinskoye, 15 km SSW of Nizhnaya Suyetka village, H = 100 m, 10–12.V.2020, 3 ♀; N coast of lake Yodnoe, 2 km NNE of Malinovoë Ozero village, H = 160 m, 13–14.05.2020, 1 ♂.

**DISTRIBUTION.** Euro-Siberian. First record from Altai Krai.

Family Cydnidae Billberg, 1820

**Canthophorus impressus** (Horvath, 1880)

**MATERIAL.** Charysh river valley, 3 km NW of Ust’-Chagyryka village, H = 330 m, 18–20.V.2020, 1 ♀.

**DISTRIBUTION.** Euro-Baikalian. Recorded from Altai Krai [Asanova, 1964; Petrova, 1975].

Figs 2–5. Species of the genus *Coptosoma*: 2–3 — *C. mucronatum*; 4–5 — *C. scutellatum*; 2, 4 — habitus; 3, 5 — ♂ genital segment.
To the fauna of terrestrial bugs of Altai Krai I

Family Scutelleridae Leach, 1815

*Eurygaster dilaticollis* Dohrn, 1860

**MATERIAL.** Charysh river valley, 3 km WNW of Ust'-Chagyrka village, H = 330 m, 18–20.V.2020, 1 ♀.  **DISTRIBUTION.** Euroasian. Recorded from Altai Krai [Petrova, 1975].

Family Pentatomidae Leach, 1815

*Arma custos* (Fabricius, 1794)

**MATERIAL.** Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 1 ♀.  **DISTRIBUTION.** Trans-Euroasian. Recorded from Altai Krai [Kiritshenko, 1910; Petrova, 1975].

*Aelia acuminata* (Linnaeus, 1758)

**MATERIAL.** NE coast of lake Kulundinskoye, 15 km SSW of Nizhnyaya Suyetka village, H =100 m, 10–12.V.2020, 1 ♀; vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 1 ♀.  **DISTRIBUTION.** West-Central Palaearctic. Recorded from Altai Krai [Kiritshenko, 1910; Petrova, 1975].

*Aelia knullii* Hahn, 1833

**MATERIAL.** Kizikha river valley, 4 km W of Nazarovka village, H = 270 m, 15–16.V.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Kiritshenko, 1910; Petrova, 1975].

*Neottiglossa leporina* (Herrich-Scaeffer, 1830)

**MATERIAL.** Vicinity of Ust’yanka village, H = 368 m, 1.VI.2020, 2 ♂, 7.5 km W of Kolyven village, Lokevka river basin, H = 417 m, 1.VI.2020, 2 ♂; Charysh river valley, 3 km WNW of Ust-Chagyrka village, H = 330 m, 18–20.V.2020, 1 ♂, 1 ♀.  **DISTRIBUTION.** Trans-Euroasian. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Neottiglossa pusilla* (Gmelin, 1790)

**MATERIAL.** Korgon Mts., Kizikha river valley, H = 310 m, 30.V.2020, 1 ♀; vicinity of Tog-Altai village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Antheminia lunulata* (Gozece, 1778)

**MATERIAL.** NE coast of lake Kulundinskoye, 15 km SSW of Nizhnyaya Suyetka village, H =100 m, 10–12.V.2020, 1 ♀.  **DISTRIBUTION.** West-Central Palaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Carpocoris purpureipennis* (De Geer, 1773)

**MATERIAL.** 7.5 km W of Kolyvan village, Lokevka river basin, H = 417 m, 1.VI.2020, 1 ♀; Charysh river valley, 3 km WNW of Ust-Chagyrka village, H = 330 m, 18–20.V.2020, 2 ♀; vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 2 ♀; Korgon Mts., Kizikha river valley, H = 880 m, 9–11.VIII.2020, 1 ♀; vicinity of Tog-Altai village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

**DISTRIBUTION.** West-Central Palaearctic. Recorded from Altai Krai [Petrova, 1975; Derzhankiy, 1990].

*Dolycoris baccarum* (Linnaeus, 1758)

**MATERIAL.** Charysh river valley, 3 km WNW of Ust-Chagyrka village, H = 330 m, 18–20.V.2020, 1 ♀; vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♀; Korgon Mts., Kizikha river valley, H = 888 m, 8–11.VIII.2020, 2 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Kiritshenko, 1910; Petrova, 1975].

*Peribolus strictus vernalis* (Wolff, 1804)

**MATERIAL.** 1 km N of Ust’yanka village, H = 330 m, 17–18.05.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Petrova, 1975].

*Palomena prasina* (Linnaeus, 1761)

**MATERIAL.** Korgon Mts., Kizikha river valley, H = 880 m, 9–11.VIII.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Petrova, 1975].

*Palomena viridissima* (Poda, 1761)

**MATERIAL.** Vicinity of Sentelek village, 5 km SW of Mashenka village, Charysh river basin, H = 625 m, 30.V.2020, 2 ♂, 2 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Eyscaris aeuen* (Scopoli, 1763)

**MATERIAL.** 7.5 km W of Kolyvan village, Lokevka river basin, H = 417 m, 1.VI.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Piezodorus liturus* (Fabricius, 1794)

**MATERIAL.** 1 km N of Ust’yanka village, H =330 m, 17–18.V.2020, 1 ♀; vicinity of Tog-Altai village, Denisov’s Cave, H = 610 m, 29.VI.2020, 1 ♀, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Eurydema oleracea* (Linnaeus, 1758)

**MATERIAL.** 7.5 km W of Kolyvan village, Lokevka river basin, H = 417 m, 1.VI.2020, 1 ♀.  **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Knyshov, Namyatova, 2010].

*Eurydema ornata* (Linnaeus, 1758)

**MATERIAL.** NE coast of lake Kulundinskoye, 15 km SSW of Nizhnyaya Suyetka village, H = 100 m, 10–12.V.2020, 1 ♀, 1 ♂; NE coast of lake Kulundinskoye, 15 km SSW of Kolyven village, H = 310 m, 29.VI.2020, 1 ♀.  **DISTRIBUTION.** West-Central Palaearctic. Recorded from Altai Krai [Gebler, 1830; Oshinov, 1870; Mamaev, 1929; Kovrigin, 1958, 1965; Kulik, 1965a; Petrova, 1975].
**Eurydema dominulus** (Scopoli, 1763)

**MATERIAL.** Vicinity of Sentelek village, 5 km SW of Mezhnaka village, Charysh river basin, H = 625 m, 30.V.2020, 1 ♂; Korgon Mts., Kuzer river Valley, H = 880 m, 9–11.VIII.2020, 2 ♂. **DISTRIBUTION.** Transpalaearctic. Recorded from Altai Krai [Kiritchenko, 1910].

**Graphosoma lineatum** (Linnaeus, 1758)

**MATERIAL.** 1 km N of Ust’yanka village, H = 330 m, 17–18.V.2020, 1 ♂, 1 ♀; Zikhikha river valley, 4 km W of Nazarovka village, H = 270 m, 15–16.V.2020, 2 ♀. **DISTRIBUTION.** West-Central Palaearctic. Recorded from Altai Krai [Oshanin, 1870; Kiritchenko, 1910; Petrova, 1980].

**Conclusion**

The article provides data on 84 species of Heteroptera of 15 families. Among them, *Coptosoma micronatum* Seidenstucker, 1963 (Plataspidae) is a new species for Siberia, and 17 species are new for Altai Krai: *Nabis brevis brevis*, *N. feras*, *N. incriptus* (Nabidae); *Lygas gelmannus gelmannus*, *L. rugulipennis*, *L. sibiricus*, *L. rugulipennis*, *Orthops mutans*, *Phytocoris pini*, *Phytocoris rubricatus*, *Stenodema holsata*, *S. sibirica*, *Anapus rugicollis*, *Chlamydatus pulicarius*, *Dacota hesperia*, *Psylla anticus* (Miridae); *Drymus brunnus brunnus* (Lygaeidae), *Elasmucha grisea* (Acanthosomatidae).

According to the recent data, the fauna of Heteroptera of Altai Krai now includes 340 species of 180 genera belonging to 29 families. The bugs fauna of investigated territory is studied insufficiently, as evidenced by the discovery of new species, including 18 species indicated in this article, which were previously reported from the adjacent regions.

**Acknowledgements.** The authors are grateful to Professor R.V. Yakovlev and the students A.A. Fomichev, A.E. Lysenkova, Z.V. Purdik for the help in translation of the paper.

The research of N.N. Vinokurov was carried out within the state assignment of Ministry of Science and Higher Education of the Russian Federation (theme No. 0297–2021–0044, reg. No. 121020500194–9).

**Competing interests.** The authors declare no competing interests.

**References**

Asanova R.B. 1964. *[Genus Canthophorus Muls. et Rey, 1866 (Heteroptera, Cydnidae)]* in the fauna of USSR // Entomologicheskoe Obozrenie. Vol.43. No.1. P.138–144 [in Russian].

Derzhansky V.V. 1990. Shield bugs of the genus *Carpocoris* Kol. (Heteroptera, Pentatomidae) of the USSR // Entomologicheskoe Obozrenie. Vol.69. No.1. P.61–70 [in Russian].

Gebler F.A. 1830. Bemerkungen über die Insekten Sibiriens, vorzüglich der Altai. Liefers' Reise durch des Altai-Gebirge (Heteroptera: Reduviidae, Aradidae, Lygaeidae. Cydnidae) // Amurskii zoologicheskii zhurnal. Vol.2. No.1. P.10–12 [in Russian].

Kerzherm I.M. 1972. [New and little-known species of Heteroptera from Mongolia and adjacent regions of the USSR. I] // Nasekomye Mongoli. Leningrad: Nauka. Vol.1. P.349–379 [in Russian].

Kerzherm I.M. 1981. [Bugs of the family Nabidae] // Fauna SSSR. Nasekomye khobotnye. Vol.13. No.2. Leningrad: Nauka. 327 pp. [in Russian].

Kiritchenko A.N. 1910. [Contribution to the entomofauna of West Siberia: Hemiptera–Heteroptera of Altai and Tomsk Gouvernement] // Revue Russe d’Entomologie. Vol.10. No.3. P.173–185 [in Russian].

Knyshov A.A., Namyatova A.A. 2010. [Additions to the fauna of bugs (Heteroptera) of the Tigerreksky State Nature Reserve, Altai Krai] // Vestnik SPbGU. Vol.3. No.3. P.9–20 [in Russian].

Kovrigin A.I. 1958. [Heteroptera of some areas of the Gorno-Altai Region] // Nauchnye zapiski Gorno-Altaiskogo pedinstituta. Vol.3. P.116–125 [in Russian].

Kovrigin A.I. 1965. [Geography of the Heteroptera in some areas Altai Mountains] // Izvestiya Altaiiskogo otdeleniya Geograficheskogo obschestva SSSR. Vol.5. P.161–163 [in Russian].

Kulik S.A. 1965a. [Shield bugs (Heteroptera, Pentatomidae) of Eastern Siberia and the Far East // Acta entomologica Musei nationalis Pragae. Vol.10. No.93. P.139–161 [in Russian].

Kulik S.A. 1965b. [Bugs of Eastern Siberia and the Far East (Heteroptera — II. Miridae)] // Acta entomologica Musei nationalis Pragae. Vol.11. No.98. P.39–70 [in Russian].

Lysenkova Z.V., Purdik N.N. 1995. [Physico-geographical location and regionalization. Encyclopedia of Altai Krai]. Barnaul: Altaiskoe knizhnoe izdatel’stvo. Vol.1. 368 pp. [in Russian].

Mamaev L.S. 1929. [A preliminary list of agricultural pests in the Kamensk Okrug] // Izvestiya Sibirskei knoeoi stantsii zashchitanykh rasteniy roditel’stvo. Tomsk. Vol.3. No.6. P.134–146 [in Russian].

Oshanin V.F. 1870. [On Siberian true bugs] // Izvestiya Obshchestva nasekomykh khobotnykh i khishchnykh [in Russian].

Petrova V.P. 1975. [Shieldbugs of Western Siberia (Hemiptera, Pentatomidae)] // Novosibirsk: Novosibirsk Pedagogical Institute. 237 pp. [in Russian].

Petrova V.P. 1978. [For known of Tingidae (Hemiptera, Tingidae) of Western Siberia] // Trudy. Biologicheskogo instituta SO AN SSSR. Novosibirsk: Nauka. Vol.34. P.62–73 [in Russian].

V. Petrova 1980. [On two closely related species of the genus Graphosoma Lap. (Hemiptera, Pentatomidae) from Siberia] // Fauna i ekologiya rasten’ rot'nykh i khishchnykh naseko-mykh Sibiri. Novosibirsk: Nauka. P.29–33 [in Russian].

Putshkov P.V. 1982. [Maps 131, 132, 134. Rhynocoris annulatus, R. iracundus, R. personatus, Phymata crassipes (Heteroptera, Reduviidae)] // Atlas arealovery naseko-mykh Evropeiskoi chasti SSSR. Leningrad: Nauka. P.9–12 [in Russian].

Putshkov V.G. 1965a. [The main plant bugs — pests of agricultural crops]. Kiev: Naukova Dumka. 172 pp. [in Russian].

Jakovlev V.E. 1875. [Bugs, Hemiptera — Heteroptera, of the Russian fauna] // Bulletin de la Société des Naturalistes de Moscou. Vol.49. No.4. P.258–270 [in Russian].

Kanyukova E.V., Vinokurov N.N. 2009a. [New data to the fauna of superfamily families Lygaeoidea, Pyrrhocoroidea and Coreioidea (Heteroptera) of the Asian Part of Russia] // Problems of ichnology and okhrany zhivotnogo mira na Severe: Materialy dokladov Vserossiiskoi nauchnoy konferentsii s mezhdunarodnym uchastvem (Syktyvkar, Republika Komi, Rossiya, 16–20 noyabrya 2009 g.). Syktyvkar. P.57–59 [in Russian].

Kanyukova E.V., Vinokurov N.N. 2009b. [New data on shield-bugs with notes of its distribution in Siberia (Heteroptera: Pentatomomoeidae)] // Problems of ichnology and okhrany zhivotnogo mira na Severe: Materialy dokladov Vserossiiskoi nauchnoy konferentsii s mezhdunarodnym uchastvem (Syktyvkar, Republika Komi, Rossiya, 16–20 noyabrya 2009 g.). Syktyvkar. P.59–61 [in Russian].

Kanyukova E.V., Vinokurov N.N. 2010. [Materials for the fauna of true bugs of Asian part of Russia (Heteroptera: Reduviidae, Aradidae, Lygaeidae. Cydnidae)] // Amurskii zoologicheskii zhurnal. Vol.2. No.1. P.10–12 [in Russian].
To the fauna of terrestrial bugs of Altai Krai

Putshkov V.G. 1986. [Bugs of the family Rhopalidae (Heteroptera) of the fauna of the USSR]. Leningrad: Nauka (Opredeleteli po faune SSSR). Vol.146. 132 pp. [In Russian]

Vinokurov N.N. 2007a. New records of ground bugs from Siberia (Heteroptera: Lygaeidae) // Zoosystematica Rossica. Vol.16. No.2. P.243–244.

Vinokurov N.N. 2007b. [Rare and little known Heteroptera from health resort Belokurikha (Altay Province)] // Altaiskii zoologicheskii zhurnal. Vol.1. P.15–16 [in Russian].

Vinokurov N.N., Golub V.B. 2007. New data on distribution of plant bugs (Heteroptera, Miridae) in the Asian part of Russia // Zoosystematica Rossica. Vol.16. No.1. P.27–30.

Vinokurov N.N., Golub V.B. 2009. [Materials on Heteroptera of the fauna of Siberia and the Russian Far East] // Altaiskii Zoologicheskii Zhurnal. Vol.3. P.25–28 [in Russian].

Vinokurov N.N., Kanyukova E.V. 1995a. [Synopsis of the fauna of Heteroptera of Siberia]. Yakutsk. 62 pp. [In Russian]

Vinokurov N.N., Kanyukova E.V. 1995b. [True bugs (Heteroptera) of Siberia]. Novosibirsk: Nauka. 237 pp. [In Russian]

Vinokurov N.N., Kanyukova E.V., Golub V.B. 2010. [Catalogue of the Heteroptera of Asian part of Russia]. Novosibirsk: Nauka. 320 pp. [In Russian]