

The true bugs (Hemiptera, Heteroptera) of the Baykalo-Lenskiy Reserve with new records from Irkutskaya Oblast' in East Siberia, Russia

Полужесткокрылые насекомые (Hemiptera, Heteroptera) Байкало-Ленского заповедника с указанием новых находок для Иркутской области (Россия, Восточная Сибирь)

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Key words: Heteroptera, true bugs, list of species, Siberia, Baikal region, Irkutsk region, new records, Baykalo-Lenskiy Reserve.

Ключевые слова: Полужесткокрылые насекомые, клопы, список видов, Сибирь, Байкальский регион, Иркутская область, новые указания, Байкало-Ленский заповедник.

Abstract. The Baykalo-Lenskiy State Nature Reserve, currently a part of «Zapovednoe Pribaykal'e» organization, was established in 1986. The Heteroptera fauna in the Reserve has not been studied before the author's researches. 187 true bug species from 107 genera and 21 families were collected from the territories of the Reserve and the neighboring village Chanchur. Three species, *Closterotomus samojedorum* (J. Sahlberg, 1878), *Globiceps salicicola* Reuter, 1880, and *Orthotylus lenensis* Lindberg, 1928 are registered from Irkutskaya Oblast for the first time.

Резюме. Байкало-Ленский государственный природный заповедник был основан в 1986 году (в настоящий момент является частью организации «Заповедное Прибайкалье»). Фауна полужесткокрылых насекомых до исследований автора не изучалась. В данной статье приводятся указания 187 видов из 107 родов и 21 семейства клопов, собранных в заповеднике и деревне Чанчур, которая находится рядом с границами заповедника. 3 вида указываются впервые для Иркутской области: *Closterotomus samojedorum* (J. Sahlberg, 1878), *Globiceps salicicola* Reuter, 1880 и *Orthotylus lenensis* Lindberg, 1928.

Introduction

Approximately 600 Heteroptera species occur in the Eastern Siberia [Vinokurov et al., 2010]. The Heteroptera fauna of the reserve was not specifically investigated prior to my research. This study is based on the results of the author's field work which was conducted from 2007 to 2010 and also in 2013. During this time I investigated the main ecotopes of the reserve and revealed a number of interesting species [Sofronova, 2009, 2012, 2013]. This report provides the first comprehensive list of the Heteroptera species that have been taken in the reserve and new records from Irkutskaya Oblast'.

Materials and methods

The Baykalo-Lenskiy Reserve (BLR) is situated in the Eastern Siberia (Russia, Irkutskaya Oblast') and occupies an area of 6599 km² (Fig. 1a). The territory covers a part of the north-western coast of Baikal Lake, the southern third of the Baikal Range and headwater basins of the rivers Lena, Tongoda and Kirenga [Stepantsova, 2013].

The Baikal Mountain Range divides the reserve's territory into two parts, unequal in their size and physiographic characteristics: one part containing Baikal shore and the eastern macroslope of the Baikal Range, the other — the Lena-Kirenga river systems on western macroslope. The Baikal section's climate is largely influenced by Baikal and varies between oceanic and dry. Flora of the Baikal Mountain's slopes is characterized by vertical zoning of the East-Siberian category [Malyshiev, 1957]. Three different vegetation belts can be found here: forest, sub-alpine forest and alpine tundra.

Zonal forest (taiga) flora prevails in the reserve's area. Coniferous and deciduous-coniferous forests are typical for the Baikal section of the BLR. Dark-spruce taiga, consisting of Siberian pines, firs and spruces, is widespread in the Lena-Kirenga part of the reserve. Steppe and dry meadow communities develop on carbonate slopes, on alluvial cones and tips of capes. Natural meadows occur in the forest belt surrounding lakes, in degradations of capes and in the river valleys in the Lena-Kirenga section. Bogs are typical for the Lena-Kirenga part of the BLR, where they develop out of shoal lakes and river-valleys fed with spring water, often with underlying permafrost [Stepantsova, 2013].

The insects were sampled in 13 basic areas (Table 1, Fig. 1b). Techniques for collecting true bugs included

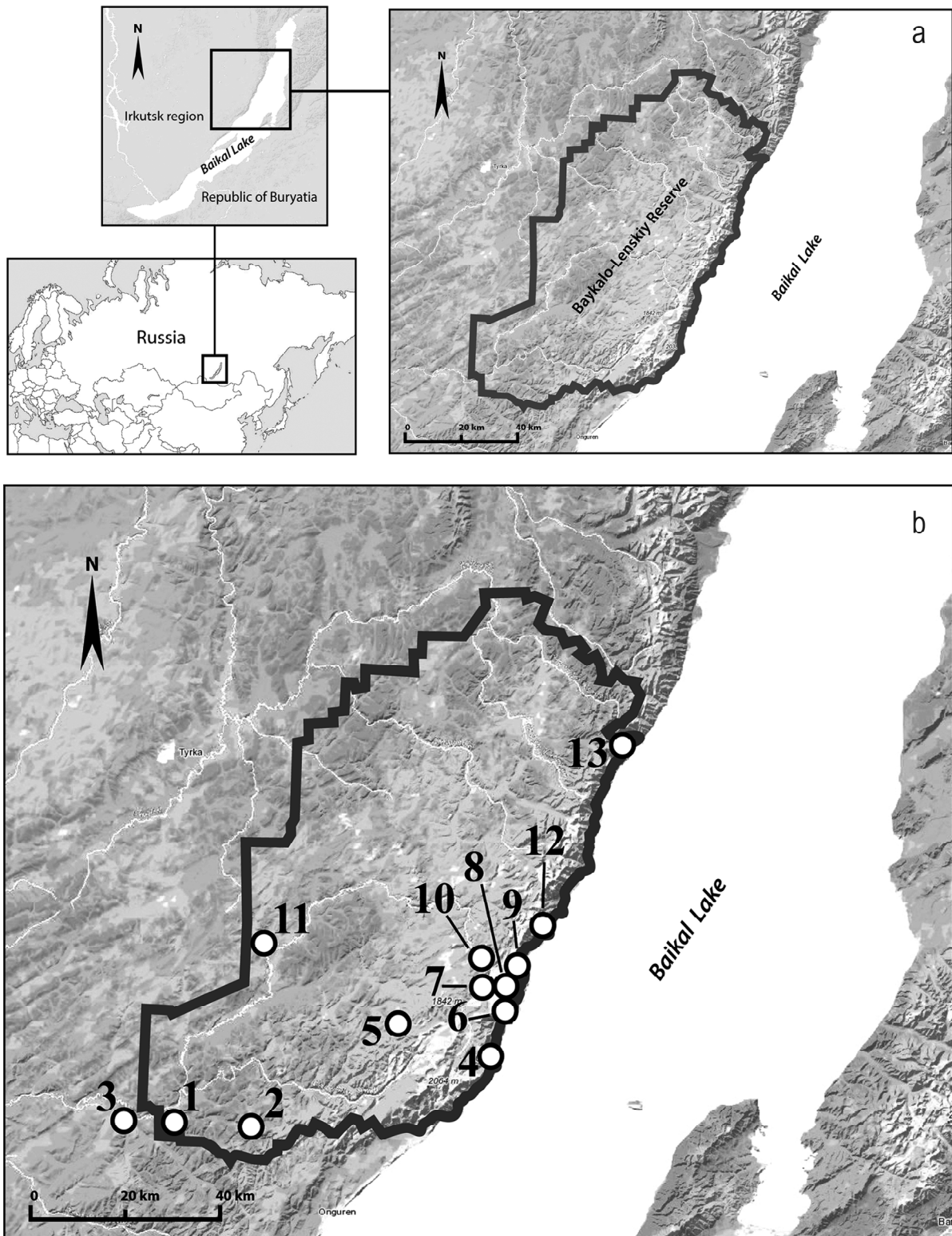


Fig. 1. Geographic location of BLR in Baikal region (a) and Map of BLR with collecting localities (b): 1 — Nugan river, 2 — Allilej river, 3 — Chanchur village, 4 — Shartlaj cape, 5 — source of Lena river, 6 — Pokojnyj cape, 7 — Izumrudnoe Lake, 8 — Solncepad' notch, 9 — Sagan-Morjan cape, 10 — Zolotokan river, 11 — Juhta river, 12 — Bol'shoj Soloncovjy cape, 13 — Elohin cape.

Рис. 1. Географическое положение Байкало-Ленского заповедника в Байкальском регионе (а) и карта заповедника с пунктами сбора (б): 1 — р. Нуган, 2 — р. Аллилей, 3 — д. Чанчур, 4 — мыс Шартлай, 5 — исток р. Лена, 6 — мыс Покойный, 7 — оз. Изумрудное, 8 — перевал Солнцепадъ, 9 — мыс Сagan-Морян, 10 — р. Золотокан, 11 — р. Юхта, 12 — мыс Большой Солонцовый, 13 — мыс Елохин.

routine methods (sweeping of vegetation using a collecting net, hand collecting from plant litter, grass and trees, beating tree foliage etc.) [Golub et al., 2012]. Thus more than 5000 specimens of true bugs from different ecotopes of both macroslopes of the Baikal Range were sampled.

The Heteroptera bugs were sorted and identified using taxonomic keys [Kerzhner 1981; Vinokurov, Kanjukova 1995; Kanyukova 2006; Namyatova, Konstantinov 2009; Gapon 2014] and by comparing them with specimens of Entomological Collection of the Zoological Institute of the Russian Academy of Sciences (Saint Petersburg). Data on the geographical distribution of the species were collected from the Catalogue of the Heteroptera of Asian part of Russia [Vinokurov et al., 2010].

Results

This study resulted in listing the Heteroptera fauna of the reserve represented by 187 species belonging to 107 genera and 21 families comprising more than 30 % of the Eastern Siberia fauna. The list of Heteroptera fauna contains information about collecting localities, ecotopes and distribution for each species. Data for geographical distribution were collected from the Catalogue of the Heteroptera of Asian part of Russia [Vinokurov et al., 2010]. For listing the material the following notation is used:

Collecting localities: **1** — Nugan river, **2** — Allilej river, **3** — Chanchur village, **4** — Shartlaj cape, **5** — source of Lena river, **6** — Pokojnyj cape, **7** — Izumrudnoe Lake, **8** — Solncepad' notch, **9** — Sagan-Morjan cape, **10** — Zolotokan river, **11** — Juhta river, **12** — Bol'shoj Soloncovyj cape, **13** — Elohin cape.

Ecotopes: coniferous forests (**CF**): **CF1** — trees and shrubs, **CF2** — herbage, **CF3** — soil surface, plant litter, moss; deciduous forests (**DF**): **DF1** — trees and shrubs, **DF2** — herbage, **DF3** — soil surface, plant

litter, moss; wet meadows (**WM**): **WM1** — herbage, **WM2** — soil surface, plant litter, moss; moderately moist meadows (**MM**): **MM1** — herbage, **MM2** — soil surface, plant litter, moss; dry meadows and steppes (**DM**): **DM1** — herbage, **DM2** — soil surface, plant litter, moss; aquatic ecotopes (**AQ**).

Types of geographical distribution: **H** — Holarctic; **TP** — Transpalearctic; **TE** — Trans-Eurasian; **ES** — Euro-Siberian; **WCP** — Western and central Palaeartic; **SN** — Siberian and Nearctic; **O** — Oriental; **CAS** — Central Asian and Siberian; **CP** — Central Palaeartic; **SFE** — Siberian and Far Eastern; **ESFE** — East Siberian and Far Eastern; **EP** — Eastern Palearctic; **ECP** — Eastern and central Palaeartic.

The list of the Heteroptera species of the Baykalo-Lenskiy Reserve

Corixidae: *Cymatia bonsdorffii* (C. R. Sahlberg, 1819) — 6, 7, 12 — AQ — TE; *Callicorixa praeusta* (Fieber, 1848) — 6, 12 — AQ — TE; *Hesperocorixa sahlbergi* (Fieber, 1848) — 6, AQ — ES; *Sigara semistriata* (Fieber, 1848) — 6, 12 — AQ — ES; *S. striata* (Linnaeus, 1758) — 6, 9, 12 — AQ — ES.

Notonectidae: *Notonecta glauca* Linnaeus, 1758 — 9 — AQ — WCP; *N. reuteri* Hungerford, 1928 — 6 — AQ — TE.

Saldidae: *Micracanthia bergrothi* (Jakovlev, 1893) — 6 — WM2 — SN; *Saldula saltatoria* (Linnaeus, 1758) — 9 — WM2 — H; *Salda littoralis* (Linnaeus, 1758) — 6 — WM2 — H.

Veliidae: *Microvelia buenoi* Drake, 1920 — 6 — AQ — H; *M. reticulata* (Burmeister, 1835) — 6 — AQ — TE.

Gerridae: *Gerris lacustris* (Linnaeus, 1758) — 3, 12 — AQ — TP; *G. odontogaster* (Zetterstedt, 1828) — 3, 13 — AQ — TE. *Limnopus rufoscutellatus* (Latreille, 1807) — 3, 14 — AQ — H.

Table 1. List of collecting localities with coordinates and altitude data
Таблица 1. Список пунктов сбора с координатами и высотой н.у.м.

№	Localities	Coordinates	Altitude
1	Nugan river	N53°49'30" E106°59'10"	758
2	Allilej river	N53°47'00" E107°22'57"	925
3	Chanchur village	N53°49'30" E106°59'10"	637
4	Shartlaj cape	N53°55'28" E108°11'40"	483
5	source of Lena river	N53°59'37" E107°53'13"	1465
6	Pokojnyj cape	N54°00'52" E108°14'16"	465
7	Izumrudnoe Lake	N54°04'08" E108°10'18"	1214
8	Solncepad' notch	N54°04'15" E108°11'58"	1070
9	Sagan-Morjan cape	N54°05'29" E108°17'34"	456
10	Zolotokan river	N54°07'09" E108°09'43"	1303
11	Juhta river	N54°08'57" E107°26'34"	749
12	Bol'shoj Soloncovyj cape	N54°10'13" E108°20'55"	449
13	Elohin cape	N54°32'19" E108°39'11"	478

Nabidae: *Nabis Americolimbatus* (Carayon, 1961) — 1, 3 — WM1 — H; *N. flavomarginatus* Scholtz, 1847 — 2, 3, 5, 6, 7, 9, 13 — DF1, WM1, MM1, DM1 — H; *N. brevis brevis* Scholtz, 1847 — 11 — MM1, CF2 — ES; *N. punctatus mimiferus* Hsiao, 1964 — 6, 13 — MM1, DM1, CF2 — O.

Anthocoridae: *Acomporis alpinus* (Reuter, 1875) — 7, 8, 13 — CF1 — TE; *Anthocoris nemorum* (Linnaeus, 1761) — 13 — DF1, MM1 — TE; *A. sibiricus* Reuter, 1875 — 6, 8 — DF1, DF1, DF2 — CAS; *Xylorcoris tesquorum* Kerzhner et Elov, 1976 — 13 — MM1, DM1 — CP; *X. piceus* (Reuter, 1884) — 1, 2, 11 — CF1, CF2 — TE.

Miridae: *Deraeocoris punctulatus* (Fallén, 1807) — 6 — MM1, CF2 — H; *D. annulipes* (Herrich-Schaeffer, 1842) — 6 — CF1, CF2 — TE; *D. scutellaris* (Fabricius, 1794) — 2 — MM1, CF2 — TE; *Adelphocoris laeviusculus* Vinokurov, 1976 — 2 — DF1, WM1 — TE; *A. lineolatus* (Goeze, 1778) — 1, 3, 6, 8 — WM1, MM1 — TP; *A. quadripunctatus* (Fabricius, 1794) — 1, 2, 4, 6, 8 — WM1, MM1 — TP; *A. reicheli* (Fieber, 1836) — 13 — MM1, DM1 — TE; *A. seticornis* (Fabricius, 1775) — 6 — MM1, CF2, DF2 — ES; *Agnocoris rubicundus* (Fallén, 1807) — 3 — DF1, MM1 — H; *Allorhinocoris flavus* J. Sahlberg, 1878 — 2, 7 — MM1 — SFE; *Apolygus lucorum* (Meyer-Dür, 1847) — 1, 2, 3, 13 — MM1, DM1 — TE; *A. nigronasutus* (Stål, 1858) — 11 — DF1, MM1 — SFE; *A. spinolae* (Meyer-Dür, 1841) — 1, 3, 11, 12 — DF1, MM1 — TE; *Capsus cinctus* (Kolenati, 1845) — 1, 2, 3, 11 — WM1, MM1 — H; *C. wagneri* (Remane, 1950) — 1, 2, 3, 5, 6 — WM1, MM1 — TE; *Charagochilus gyllenhalii* (Fallén, 1807) — 10 — MM1 — WCP; *Closterotomus fulvomaculatus* (De Geer, 1773) — 2, 7, 13 — DF1, WM1, CF2, DF2 — H; *C. samojedorum* (J. Sahlberg, 1878) — 5, 7 — DF1, WM1, MM1 — CP; *Dichrooscytus altaicus* Josifov, 1974 — 2 — CF1 — S; *Lygocoris rugicollis* (Fallén, 1807) — 3 — DF1, MM1 — H; *L. pabulinus* (Linnaeus, 1761) — 6, 8, 10 — DF1, DF1, WM1, MM1, CF2, DF2 — H; *Lygus gemellatus gemellatus* (Herrich-Schaeffer, 1835) — 6, 9, 12 — MM1, DM1 — TP; *L. punctatus* (Zetterstedt, 1838) — 1, 2, 3, 4, 6, 11 — WM1, MM1, DM1, CF2, DF2 — H; *L. rugulipennis* Poppius, 1911 — 1, 2, 4, 6, 11, 12 — DF1, WM1, MM1, DM1, CF2, DF2 — H; *L. wagneri* Remane, 1955 — 1, 2, 3, 4, 6, 8, 9, 11, 12, 13 — WM1, MM1, CF2 — TE; *Phytocoris longipennis* Flor, 1861 — 3 — DF1 — TE; *Pinalitus rubricatus* (Fallén, 1807) — 6 — CF1 — TE; *Polymerus palustris* (Reuter, 1907) — 7, 8, 10 — WM1, MM1 — TP; *P. unifasciatus* (Fabricius, 1794) — 2, 4, 6, 7 — WM1, MM1, DM1, CF2 — H; *P. vulneratus* (Panzer, 1806) — 8, 9, 12, 13 — DM1 — H; *Salignus distinguendus* (Reuter, 1875) — 1, 3 — DF1 — CP; *Leptopterna dolabrata* (Linnaeus, 1758) — 1, 2, 3, 4, 6, 9, 11, 12, 13 — MM1 — H; *Stenodema trispinosa* (Reuter, 1904) — 1, 2, 3, 6, 11, 12 — WM1, MM1 — H; *S. holsata* (Fabricius, 1787) — 1, 2, 3, 11 — WM1, MM1 — TE; *S. sibirica* Bergroth, 1914 — 1, 2, 3, 11 — WM1, MM1 — SFE; *Teratocoris saundersi saundersi* Douglas et Scott,

1869 — 2, 11 — WM1 — H; *Trygonotylus caelestialium* (Kirkaldy, 1902) — 6 — WM1, MM1 — H; *Euryopocoris nitidus* (Meyer-Dür, 1843) — 5, 6, 7, 10, 11 — WM1, MM1, CF2 — TE; *Labops sahlbergi* (Fallén, 1829) — 2, 6, 7, 11 — DF1, WM1, MM1 — TE; *Myrmecophyes alboornatus* (Stål, 1858) — 7 — DF1 — ES; *Orthocephalus vittipennis* (Herrich-Schaeffer, 1835) — 1, 2, 3, 11 — WM1, MM1, DM1 — ES; *Blepharidopterus angulatus* (Fallén, 1807) — 11 — DF1, WM1, DF2 — TP; *Cyrtorhinus caricis* (Fallén, 1807) — 6, 12 — WM1 — H; *Globiceps flavomaculatus* (Fabricius, 1794) — 6, 13 — DM1, CF2 — TE; *G. salicicola* Reuter, 1880 — 7 — DF1, MM1 — TE; *Mecomma ambulans ambulans* (Fallén, 1807) — 6, 13 — DF1, WM1, CF2 — TP; *Orthotylus lenensis* Lindberg, 1928 — 5 — WM1, MM1 — H; *O. flavosparus* (C.F. Sahlberg, 1841) — 1, 2, 3 — MM1 — H; *Atomoscelis onusta* (Fieber, 1861) — 6 — DM1 — WCP; *Chlamydatus saltitans* (Fallén, 1807) — 4 — DM1 — TE; *Ch. pulicarius* (Fallén, 1807) — 3, 4, 6 — MM1 — TE; *Ch. pullus* (Reuter, 1870) — 4, 6, 11, 13 — MM1, DM1, CF2 — H; *Criocoris quadrimaculatus* (Fallén, 1807) — 2, 7, 8 — DF1, WM1, MM1 — TE; *Dacota hesperia* Uhler, 1872 — 2, 7, 8 — DF1 — H; *Europiella artemisiae* (Becker, 1864) — 4, 6, 12 — MM1, DM1 — H; *Macrotylus mundulus* (Stål, 1858) — 4, 13 — MM1, DM1 — O; *M. cruciatus* (R.F. Sahlberg, 1848) — 1, 2, 3, 11 — MM1 — TE; *Megalocolus tanacetii* (Fallén, 1807) — 2 — MM1 — ES; *Monosynamma bohemanii* (Fallén, 1829) — 1, 3 — DF1, WM1 — H; *Plagiognathus arbustorum arbustorum* (Fabricius, 1794) — 4, 12 — MM1, DM1 — H; *P. chrysanthemi* (Wolff, 1804) — 1, 3, 4, 6, 12, 13 — MM1, DM1, CF2, DF2 — TP; *P. obscuriceps* (Stål, 1858) — 4, 6 — DM1, CF2 — SFE; *P. pini* Vinokurov, 1878 — 5, 7, 8, 13 — CF1 — ESFE; *Plesiode-ma pinetella* (Zetterstedt, 1828) — 7, 8 — CF1 — TP; *Psallus aetiops* (Zetterstedt, 1834) — 1, 2, 3 — DF1 — H.

Tingidae: *Acalypta carinata* (Panzer, 1806) — 9 — CF3 — TP; *A. elegans* (Horváth, 1906) — 9 — CF3 — H; *A. marginata* (Wolff, 1804) — 6 — DM1, DM2 — TP; *Derephysia foliacea foliacea* (Fallén, 1807) — 9, 12, 13 — MM1 — H; *Galeatus spinifrons* (Fallén, 1807) — 4, 6, 9, 13 — DM1, CF2 — H; *Physatocheila costata* (Fabricius, 1794) — 1, 2, 3 — DF1 — TE; *Ph. smreczynskii* China, 1952 — 6, 9 — DF1, DF1 — TP; *Tingis cardui* (Linnaeus, 1758) — 11 — CF2 — TP.

Reduviidae: *Coranus aethiops* Jakovlev, 1893 — 6, 8, 13 — DM2 — TE; *Rhynocoris leucospilus* (Stål, 1859) — 2, 11, 12 — WM1, MM1, DF2 — SN.

Aradidae: *Aradus aterrimus* Fieber, 1864 — 6, 9 — CF2 — TE; *A. betulae* (Linnaeus, 1758) — 9 — DF1 — TE; *A. corticalis* (Linnaeus, 1758) — 1, 2, 11 — CF1, CF2 — TE; *A. crenaticollis* R.F. Sahlberg, 1848 — 6, 9 — CF1, CF2 — TE; *A. lugubris* Fallén, 1807 — 4, 6, 12, 13 — CF1, CF2 — H.

Piesmatidae: *Piesma maculatum* (Laporte, 1833) — 6 — DF1 — TP.

Berytidae: *Berytinus clavipes* (Fabricius, 1775) — 2, 11 — CF2 — TP; *Metatropis rufescens* (Herrich-Schaeffer, 1835) — 1, 2, 8, 11 — CF2, CF3 — TE.

Lygaeidae: *Lygaeosoma sibiricum* Seidenstücker, 1962 — 6, 8 — MM2, DM2 — CP; *Nithecus jacobaeae* (Schilling, 1829) — 5, 6, 7, 8 — DF1, WM1, MM1, DF2 — TP; *Nysius ericae ericae* (Schilling, 1829) — 5, 6, 7, 8, 10 — DM1, CF2, DM2 — TP; *N. ericae groenlandicus* (Zetterstedt, 1838) — 4, 5, 6, 7, 8, 9, 10, 12, 13 — MM1, DM2 — H; *N. helveticus* (Herrich-Schaeffer, 1850) — 6, 8, 13 — DM1 — TE; *N. thymi thymi* (Wolff, 1804) — 4, 6, 13 — MM1, DM1 — H; *Ortholomus punctipennis* (Herrich-Schaeffer, 1838) — 2, 3, 4, 6, 9, 11, 13 — MM1, DM1 — TE; *Kleidocerys resedae resedae* (Panzer, 1797) — 6, 7, 9, 12 — DF1, DF1 — TP; *Cymus clavicolus* (Fallén, 1807) — 1, 2, 3, 9, 11 — WM1 — TE; *C. glandicolor* Hahn, 1832 — 6 — WM1 — TE; *Geocoris arenarius* (Jakovlev, 1876) — 4, 6, 8, 13 — DM2 — TE; *G. grylloides* (Linnaeus, 1761) — 6 — DM2 — TE; *G. itonis* Horváth, 1905 — 6 — DM2 — EP; *G. lapponicus* Zetterstedt, 1838 — 6 — DM2 — TE; *Philomyrmex insignis* R.F. Sahlberg, 1848 — 1, 2, 11 — CF3 — TE; *Drymus brunneus brunneus* (R.F. Sahlberg, 1848) — 1, 2, 3, 11 — CF3, DF3 — TE; *Eremocoris abietis abietis* (Linnaeus, 1758) — 3, 4, 6, 13 — MM1, CF3, DF3, MM2 — TP; *Gastrodes grossipes grossipes* (De Geer, 1773) — 6, 9 — CF1, CF2 — TE; *Emblethis brahynotus* Horváth, 1897 — 4 — DM1, DM2 — TE; *Trapezonotus arenarius arenarius* (Linnaeus, 1758) — 13 — MM2, DM2 — TP; *Lamprodema rufipes* Reuter, 1891 — 6 — MM1, DM2 — CAS; *Megalonotus hirsutus* Fieber, 1861 — 8, 13 — DF1, CF3, DF3 — ES; *Sphragisticus nebulosus* (Fallén, 1807) — 8, 13 — MM1 — TE; *Ligyrocorys sylvestris* (Linnaeus, 1758) — 5, 6, 7, 8, 12, 13 — DF1, MM2 — H; *Plinthisus lativentris* Horváth, 1906 — 2 — CF3 — EP; *Panaorus adspersus* (Mulsant et Rey, 1852) — 4 — DM1, MM2 — TE; *Peritrechus convivus* (Stål, 1858) — 4, 6, 9 — CF2, MM2 — H; *Rhyparochromus pini* (Linnaeus, 1758) — 6, 9, 11 — MM1, CF2 — TP; *Stygnocoris sabulosus* (Schilling, 1829) — 11 — MM1, CF3 — TP; *S. similis* Wagner, 1953 — 6 — MM2 — ES.

Coreidae: *Coriomeris scabricornis scabricornis* (Panzer, 1805) — 4, 6, 12, 13 — MM1, DF2 — TE; *Coreus marginatus marginatus* (Linnaeus, 1758) — 1, 2, 3, 9 — MM1 — TP.

Alydidae: *Enoplops sibiricus* Jakovlev, 1889 — 4, 13 — MM1, DM1 — CAS; *Alydus calcaratus* (Linnaeus, 1758) — 3, 4, 6, 13 — MM1, DM1 — H; *Megalotomus ornaticeps* (Stål, 1858) — 6 — MM1, DM1 — CP.

Rhopalidae: *Corizus hyoscyami hyoscyami* (Linnaeus, 1758) — 6, 8, 13 — MM1, DM1 — TP; *Rhopalus maculatus* (Fieber, 1837) — 11 — WM1, MM1 — TE; *Rh. distinctus* (Signoret, 1859) — 6 — DM1 — TP; *Rh. parumpunctatus* Schilling, 1829 — 6, 8, 12 — MM1, DM1 — TP; *Stictopleurus abutilon* (Rossi, 1790) — 3, 11 — MM1, CF2 — WCP; *S. crassicornis* (Linnaeus, 1758) — 2, 4, 6, 9, 12, 13 — DF1, MM1 — TE; *S. punctattonervosus* (Goeze, 1778) — 1, 2, 4, 6, 8, 9, 12, 13 — MM1, DM1 — TP; *S. sericeus* (Horváth, 1896) — 12 — DM1 — CP; *S. viridicatus* (Uhler, 1872) — 2, 6 — MM1, DM1 — H; *Myrmus miriformis miriformis* (Fallén, 1807) — 1, 2, 3, 6, 9, 11, 12, 13 — MM1, DM1 — TE.

Acanthosomatidae: *Acanthosoma haemorrhoidalis angulatum* Jakovlev, 1880 — 4, 12, 13 — DF1 — EP; *Elasmotethus interstinctus* (Linnaeus, 1758) — 4, 6, 9, 11, 12 — DF1 — H; *Elasmucha dorsalis* (Jakovlev, 1876) — 4, 13 — DF1 — EP; *E. ferrugata* (Fabricius, 1787) — 13 — DF1 — TE; *E. fieberi* (Jakovlev, 1865) — 4, 6, 8, 9, 12, 13 — DF1 — TE; *E. grisea* (Linnaeus, 1758) — 2, 3, 4, 6, 9, 12, 13 — DF1 — TE.

Cydnidae: *Canthophorus niveimarginatus* Scott, 1874 — 4 — DM2 — EP.

Scutelleridae: *Phimodera laevilinea* Stål, 1873 — 13 — DM1 — CAS; *Eurygaster testudinaria* (Geoffroy, 1785) — 1, 2, 3 — WM1 — TP.

Pentatomidae: *Arma custos* (Fabricius, 1794) — 12 — DF1 — TE; *Picromerus bidens* (Linnaeus, 1758) — 12 — DF1 — H; *Aelia klugii* Hahn, 1833 — 13 — MM1, DM1 — TP; *Ae. sibirica* Reuter, 1884 — 6 — DM1 — CP; *Neottiglossa metallica* (Jakovlev, 1876) — 6 — WM1 — ESFE; *N. pusilla* (Gmelin, 1790) — 1, 2, 3, 6 — WM1 — TE; *Anthemina aliena* (Reuter, 1891) — 6 — WM1 — TE; *A. varicornis* (Jakovlev, 1874) — 1, 3 — WM1 — TE; *Carpocoris coreanus* Distent, 1899 — 4, 6, 13 — MM1, DM1 — CP; *C. fuscispinus* (Bohemann, 1851) — 3 — DF2 — WCP; *C. purpureipennis* (De Geer, 1773) — 1, 2, 3, 5, 6, 8, 10, 11, 12, 13 — WM1, MM1, DM1 — TP; *Chlorochroa juniperina juniperina* (Linnaeus, 1758) — 2 — CF1 — TP; *Dolycoris baccarum* (Linnaeus, 1758) — 1, 2, 6, 9, 10, 11, 12, 13 — MM1, DF2 — TP; *Holcostethus ovatus* (Jakovlev, 1889) — 6 — MM1, DM1 — ESFE; *H. strictus vernalis* (Wolff, 1804) — 3 — MM1 — TP; *Palomena viridissima* (Poda, 1761) — 1, 2, 3, 5, 7, 11 — MM1, CF2 — TP; *Rubiconia intermedia* (Wolff, 1811) — 1, 6 — MM1 — TP; *Pentatoma rufipes* (Linnaeus, 1758) — 2 — DF1, MM1, DF2 — TP; *Sciocoris microphthalmus* Flor, 1860 — 13 — MM1, MM2 — H; *S. umbrinus* (Wolff, 1804) — 1, 2, 11 — MM1, CF2 — WCP; *S. abbreviatus* (Reuter, 1879) — 12 — DM1, DF2 — ECP; *S. cursitans* (Fabricius, 1794) — 13 — DM1 — WCP; *S. distinctus* Fieber, 1851 — 1, 2, 3, 11 — WM1 — TP; *Eurydema gebleri* Kolenati, 1846 — 13 — MM1 — TE; *E. oleracea* (Linnaeus, 1758) — 2, 3, 6, 9, 11 — MM1, CF2, DF2 — WCP; *E. dominulus* (Scopoli, 1763) — 1, 2, 12, 13 — MM1, DM1 — TP.

Thus, most of the species were collected in two or more types of ecotopes. Main part of Heteroptera populates herbage of open habitats: wet, dry and moderately moist meadows (42, 48 and 87 species respectively). The most species-rich families were Miridae (65 species), Lygaeidae (30 species) and Pentatomidae (26 species). Three species from Miridae are recorded in Irkutskaya Oblast' for the first time: *Closterotomus samojedorum* (J. Sahlberg, 1878), *Globiceps salicicola* Reuter, 1880, *Orthotylus lenensis* Lindberg, 1928.

The majority of Heteroptera species have a Trans-Eurasian (32 %, 59 species), Holarctic (22 %, 42 species), Transpalearctic (20 %, 38 species), Central Palaearctic (9 %, 17 species) and Euro-Siberian (7 %, 10 species) types of geographical distribution. The rest of

the species, including Siberian, Oriental, Central Palaearctic etc., made up only about 10 % of the fauna.

Acknowledgements

I am grateful to N.N. Vinokurov (Yakutsk, Russia), V.B. Golub (Voronezh, Russia) and D.A. Gapon (St.-Petersburg, Russia) for the help with identification of some Heteroptera species.

References

- Gapon D.A. 2014. Revision of the genus *Polymerus* (Heteroptera: Miridae) in the Eastern Hemisphere. Part 1: Subgenera *Polymerus*, *Pachycentrum* subgen. nov. and new genus *Dichelocentrum* gen. nov. // *Zootaxa*. Vol.3787. P.1–87.
- Golub V.B., Tsurikov M.N., and Prokin A.A. 2012. [Collections of insects: collecting, handling and keeping of the material]. Moscow: KMK Scientific Press Ltd. 339 p. [In Russian].
- Henry T.J. 2009. Biodiversity of Heteroptera // R.G. Foottit, P.H. Adler (Eds). *Insect biodiversity*. Science and Society. Oxford (Hoboken). P.233–267.
- Kanyukova E.V. 2006. [Aquatic and semiaquatic bugs (Heteroptera: Nepomorpha, Gerromorpha) of the fauna of Russia and neighbouring countries]. Vladivostok: Dalnauka. 297 p. [In Russian].
- Kerzhner I.M. 1981. [Fauna of the USSR. Rhynchota. Vol.13. Iss.2. Bugs of the family Nabidae]. Leningrad: Nauka. 326 p. [In Russian].
- Ladeyshchikov N.P. 1977. [Study of climate of Baikal and surrounding areas] // *Struktura i resursy klimata Baykala i sopredel'nykh prostranstv*. Novosibirsk: Nauka. P.5–20. [In Russian].
- Malyshev L.I. 1957. [Vertical distribution of vegetation on the coast of Northern Baikal] // *Izvestiya Vostochnogo Filiala AN SSSR*. No.10. P.113–121. [In Russian].
- Namyatova A.A., Konstantinov F.V. 2009. Revision of the genus *Orthocephalus* Fieber, 1858 (Hemiptera: Heteroptera: Miridae: Orthotylinae) // *Zootaxa*. Vol.2316. P.1–118.
- Sofronova E.V. 2009. [Some data of the aquatic bugs fauna (Heteroptera) of state nature reserve “Baikalo-Lenskiy”] // *Baykal'skiy Zoologicheskii Zhurnal*. No.3. P.133–134. [In Russian].
- Sofronova E.V. 2012. [New records of true bugs (Heteroptera) from Irkutsk region] // *Baykal'skiy Zoologicheskii Zhurnal*. No.9. P.122–123. [In Russian].
- Sofronova E.V. 2013. [Study of biodiversity, ecology and economic importance of true bugs (Heteroptera) in Northern Baikal region: history and perspectives] // *Izvestiya Irkutskogo Gosudarstvennogo Universiteta*. Vol.6 No.2. P.90–95. [In Russian].
- Stepantsova N.V. 2013. [Biota of the Baykalo-Lenskiy reserve: vegetation cover]. Irkutsk: Time of travel. 208 p. [In Russian].
- Vinokurov N.N., Golub V.B., Kanyukova E.V. 2010. [Catalogue of the Heteroptera of Asian part of Russia]. Novosibirsk: Nauka. 319 p. [In Russian].
- Vinokurov N.N., Kanyukova E.V. 1995. [True bugs (Heteroptera) of Siberia]. Novosibirsk: Nauka, Siberian Branch Publ. 237 p. [In Russian].

Поступила в редакцию 18.01.2017