

NEW RECORDS OF AQUATIC AND SEMI-AQUATIC BUGS (HETEROPTERA: NEPOMORPHA, GERROMORPHA) FROM MONGOLIA

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Revised 18.01.2023

New distributional records for 17 species of aquatic and semi-aquatic bugs are provided from Mongolia: two species recorded for the first time for the country, Corixidae: *Sigara (Sigara) striata* (Linnaeus, 1758) and Gerridae: *Aquarius paludum paludum* (Fabricius, 1794). For 15 species, new province records are listed: Nepidae (1), Notonectidae (3), Corixidae (7), Veliidae (1) and Gerridae (3).

Keywords: fauna, water bugs, Province, District

DOI: 10.47021/0320-3557-2023-54-56

INTRODUCTION

All available data on aquatic and semi-aquatic bugs of Mongolia were summarized by E.V. Kanyukova [1976, 1980, 1990]. After that, some new localities for previously known from Mongolia species were recorded in our publications [Prokin, 2014, 2018; Prokin et al., 2019].

The aim of this paper is to report new records of Nepomorpha and Gerromorpha from Mongolia.

MATERIAL AND METHODS

The present work is based on the material collected by A.A. Prokin mainly by sweeping with an aquatic net and nowadays deposited in the Invertebrates collection of the Papanin Institute for Biology of Inland Waters, Russian Academy of Sciences, Borok.

Photographs of morphological details, important for the identification of species new for Mongolia were taken with a Leica MC170 HD

digital camera mounted on a Leica M165C stereomicroscope and processed in Helicon Focus 7.7.4 and Photoshop CS4.

Taxonomy follows the published catalogue [Aukema, Rieger, 1995].

Province and District information for localities are given according to Geo-database (<https://eic.mn/geodata/>).

RESEARCH RESULTS AND DISCUSSION

Family Nepidae

Nepa cinerea Linnaeus, 1758

Uvs Province: Davst District, Torkhilog-gol River, 50°33'13.9"N, 92°29'36.8"E, 31.VII.2010, 1 ex.

Khovd Province: Durgen District, Chono-Chariakha-gol River, pools in floodplain, 48°18'49.7"N, 92°47'46.2"E, 06.VIII.2010, 9 exs.

Sigara (Sigara) striata (Linnaeus, 1758)
(Fig. 1a)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, pools in Orkhon-gol River floodplain, 50°10'44.0"N, 106°11'20.5"E, 17.VII.2009, 7 exs.

Sigara (S.) seistanensis (Distant, 1920)

Khovd Province: Durgen District, Chono-Chariakha-gol River, pools in floodplain, 48°18'49.7"N, 92°47'46.2"E, 06.VIII.2010, 1 ex.

Sigara (Subsigara) fallenoidea (Hungerford, 1926)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, limnocrene near railway, 50°10'16.3"N, 106°11'34.5"E, 18.VII.2009, 1 ex.

Sigara (Vermicorixa) lateralis (Leach, 1817)

Övörkhangai Province: Baruun Bayan-Ulaan District, vicinity of Baruun Bayan-Ulaan, Tatsyn-Tsagaan-nuur Lake, 45°09'47.4"N, 101°29'13.8"E, 13.VIII.2017, 1 ex.

Family Corixidae

Arctocoris carinata lansburyi Jansson, 1979
Govi-Altai Province: Taishir District, Zavkhan-gol River upstream of Taishir Reservoir, pools in floodplain, 46°41'37.5"N, 96°39'29.4"E, 08.VIII.2012, 1 ex.

Callicorixa gebleri (Fieber, 1848)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, pools in Orkhon-gol River floodplain, 50°10'44.0"N, 106°11'20.5"E, 17.VII.2009, 2 exs.

Callicorixa praeusta praeusta (Fieber, 1848)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, pools in Orkhon-gol River floodplain, 50°10'44.0"N, 106°11'20.5"E, 17.VII.2009, 1 ex.

Paracorixa armata (Lundblad, 1934)

Family Notonectidae

Notonecta (Notonecta) amplifica Kiritshenko, 1930

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, pools in Orkhon-gol River floodplain, 50°10'44.0"N, 106°11'20.5"E, 17.VII.2009, 1 ex.

Notonecta (N.) glauca glauca Linnaeus, 1758

Bulgan Province: Teshig District, Olon-nuur Lake, 49°55'11.7"N, 102°37'20.1"E, 24.VII.2009, 2 exs.

Notonecta (N.) reuteri Hungerford, 1928

Khovd Province: Durgen District, Chono-Chariakha-gol River, pools in floodplain, 48°18'49.7"N, 92°47'46.2"E, 06.VIII.2010, 1 ex.; Durgen Reservoir, 48°17'33.6"N, 92°59'46.6"E, 15.VIII.2012, 1 ex.

Family Veliidae

Microvelia (Microvelia) buenoi Drake, 1920

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, limnocrene near railway, 50°10'16.3"N, 106°11'34.5"E, 18.VII.2009, 2 exs.

Darkhan-Uul Province: near Darkhan, small lake in Orkhon-gol River floodplain, 49°32'23.6"N, 105°40'07.8"E, 26.VII.2009, 2 ex.

Family Gerridae

Limnoporus rufoscutellatus (Latreille, 1807)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, pools in Orkhon-gol River

floodplain, 50°10'44.0"N, 106°11'20.5"E, 17.VII.2009, 4 exs.

Khovd Province: Durgen District, Chono-Chariakha-gol River, pools in floodplain, 48°18'49.7"N, 92°47'46.2"E, 15.VIII.2012, 1 ex.

Aquarius paludum paludum (Fabricius, 1794) (Fig. 1b)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, small tributary of Orkhon-gol River floodplain, 50°10'44.0"N, 106°11'20.5"E, 16.VII.2009, 4 exs.

Gerris (Gerris) odontogaster (Zetterstedt, 1828)

Selenge Province: Sükhbaatar District, vicinity of Sükhbaatar, pools in Orkhon-gol River floodplain, 50°10'44.0"N, 106°11'20.5"E, 17.VII.2009, 9 exs.

Gerris (G.) sahlbergi Distant, 1879

Uvs Province: Ulangoom District, Borshoo-gol River, 50°19'28.4"N, 92°09'01.1"E, 02.VIII.2010, 11 exs.

Övörkhangai Province: Ölziit District: vicinity of Sangyin-Dalay-nuur Lake, 46°40'19.7"N, 103°18'06.1"E, 31.VIII.2010, 15 exs.

Including our results, the Mongolian fauna includes 26 species of aquatic (Nepomorpha) and 10 species of semi-aquatic (Gerromorpha) bugs: Nepidae – 1, Notonectidae – 3, Corixidae – 22, Hydrometridae – 1, Veliidae – 1, Gerridae – 8.



Fig. 1. Morphological details of species, new for Mongolia: *a* – *Sigara striata* (Linnaeus, 1758), right paramere; *b* – *Aquarius p. paludum* (Fabricius, 1794), abdominal end of macropterous male, ventral view.

ACKNOWLEDGEMENTS

Author is grateful to A.S. Sazhnev (Papanin Institute for Biology of Inland Waters, Russian Academy of Sciences, Borok) for the help in photographs processing and anonymous reviewer for valuable comments. Material was collected during an expedition of the hydrobiological team of the “Joint Russian-Mongolian complex biological expedition of the Russian and Mongolian Academies of Sciences”, which was performed in the framework of the Russia Research project no 121051100109-1.

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НОВЫЕ УКАЗАНИЯ ВОДНЫХ КЛОПОВ И ВОДОМЕРОК (HETEROPTERA: NEPOMORPHA, GERROMORPHA) ИЗ МОНГОЛИИ

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Поступила в редакцию 18.01.2023

Приведены новые фаунистические указания для 17 видов водных клопов и водомерок из Монголии. Два вида впервые указаны с территории страны: Corixidae: *Sigara (Sigara) striata* (Linnaeus, 1758) и Gerridae: *Aquarius paludum paludum* (Fabricius, 1794). Для 15 видов даны новые указания для провинций (аймаков): Nepidae (1), Notonectidae (3), Corixidae (7), Veliidae (1) и Gerridae (3).

Ключевые слова: фауна, водные клопы, провинция, район.