New data on lithobiomorph centipedes (Chilopoda: Lithobiomorpha) of the Kemerovo Oblast, southwestern Siberia, Russia

Pavel S. Nefediev[1,2,3*], Sergey L. Luzyanin[4], Gyulli Sh. Farzalieva[5]

[1] Altai State University, Lenina Avenue, 61, Barnaul 656049 Russia.
[2] Tomsk State University, Lenina Avenue, 36, Tomsk 634050 Russia.
[3] Tigirek State Nature Reserve, Nikitina Street, 111, Barnaul 656049 Russia.
[4] Kemerovo State University, Krasnaya Street, 6, Kemerovo 650000 Russia.
[5] Perm State University, Bukireva Street, 15, Perm 614600 Russia.
** Corresponding author*
Pavel Nefediev p.nefediev@mail.ru ORCID 0000-0001-6074-5635
Sergey Luzyanin sl_luzyanin@mail.ru ORCID 0000-0001-9293-4377
Gyulli Farzalieva fgsh@psu.ru ORCID 0000-0001-6769-0788

ABSTRACT. Based on abundant material from the Kemerovo Oblast, southwestern Siberia, Russia, new information on the Lithobiomorpha fauna is presented. One more henicopid centipede, *Lamyctes* (*Lamyctes*) *emarginatus* (Newport, 1844), and five further lithobiid species, *Lithobius* (*Ezembius*) *princeps* Stuxberg, 1876, *Lith*. (*Lith*.) *forficatus* (Linnaeus, 1758), *Lith*. (*Monotarsobius*) *insolens* Dányi et Tuf, 2012, *Lith*. (*M*.) *nordenskioeldii* Stuxberg, 1876, and *Lith*. *vagabundus* Stuxberg, 1876, are recorded from the Kemerovo Oblast for the first time. The distributions of 11 species encountered are mapped within the study area.
How to cite this article: Nefediev P.S., Luzyanin S.L., Farzalieva G.Sh. 2024. New data on lithobiomorph centipedes (Chilopoda: Lithobiomorpha) of the Kemerovo Oblast, southwestern Siberia, Russia // Invert. Zool. Vol.21. No.4. P.515–525. doi: 10.15298/invertzool.21.4.07

KEY WORDS: Henicopidae, *Lamyctes*, Lithobiidae, *Lithobius*, fauna, new records, Siberia.

Новые сведения о многоножках-костянках (Chilopoda: Lithobiomorpha) Кемеровской области, юг Западной Сибирь, Россия

П.С. Нефедьев[1,2,3*], С.Л. Лузянин[4], Г.Ш. Фарзалиева[5]

[1] Алтайский государственный университет, пр. Ленина, 61, Барнаул 656049 Россия.
[2] Томский государственный университет, пр. Ленина, 36, Томск 634050 Россия.
[3] Государственный природный заповедник «Тигирекский», ул. Никитина, 111, Барнаул 656049 Россия.
[4] Кемеровский государственный университет, ул. Красная, 6, Кемерово 650000 Россия.
[5] Пермский государственный университет, ул. Букирева, 15, Пермь 614600 Россия.
[*] Автор для корреспонденции. E-mail: p.nefediev@mail.ru

РЕЗЮМЕ. По обширному материалу из Кемеровской области (юг Западной Сибири, Россия) приводится новая информация о фауне многоножек-костянок. Еще один вид костянок-геникопид, *Lamyctes* (*Lamyctes*) *emarginatus* (Newport, 1844), и еще пять видов костянок-литобиид, *Lithobius* (*Ezembius*) *princeps* Stuxberg, 1876, *Lith*. (*Lith*.) *forficatus* (Linnaeus, 1758), *Lith*. (*Monotarsobius*) *insolens* Dányi et Tuf, 2012, *Lith*. (*M*.) *nordenskioeldii* Stuxberg, 1876 и *Lith*. *vagabundus* Stuxberg, 1876, впервые отмечены в Кемеровской области. Для 11 видов выполнено картирование находок в исследуемом регионе.

Как цитировать эту статью: Nefediev P.S., Luzyanin S.L., Farzalieva G.Sh. 2024. New data on lithobiomorph centipedes (Chilopoda: Lithobiomorpha) of the Kemerovo Oblast, southwestern Siberia, Russia // Invert. Zool. Vol.21. No.4. P.515–525. doi: 10.15298/invertzool.21.4.07

КЛЮЧЕВЫЕ СЛОВА: Henicopidae, *Lamyctes*, Lithobiidae, *Lithobius*, фауна, новые находки, Сибирь.

Introduction

The first data on the lithobiomorph centipede fauna of the Kemerovo Oblast–Kuzbass appeared at the beginning of XXI century. At first, Nefediev (2002) reported lithobiomorph centipedes from a relict lime grove near Kuzedeevo, but without proper species identification. Later, Farzalieva (2018) described a new species, *Lithobius* (*Monotarsobius*) *tanagolus*, partly from the southern parts of the Kemerovo Oblast, viz. the Shorsky National Park and Biyskaya Griva Mt. Range. More recently, Nefediev *et al.* (2020) recorded six more lithobiid species from the study area: *L.* (*Ezembius*) *ostiacorum* Stuxberg, 1876, *L.* (*E.*) *proximus* Sseliwanoff, 1880, *L.* (*E.*) *sibiricus* Gerstfeldt, 1859, *L.* (*M.*) *crassipes* L. Koch, 1862, *L.* (*M.*) *curtipes* C.L. Koch, 1847, and *L.* (*M.*) *fugax* Stuxberg, 1876. Finally, a henicopid centipede, *Lamyctes* (*Metalamyctes*) *africanus* (Porath, 1871), has been found introduced to the Kemerovo Oblast (Nefediev *et al.*, 2020a). Thus, at least 8 species of lithobiomorph centipedes have hitherto been known to occur in the Kemerovo Oblast, representing 2 genera from 2 families. The present paper provides new records of Lithobiomorpha from the study area.

Material and methods

The present study is based on abundant specimens collected by SL in the post-mining recultivated area in the territory of Kuzbass (= Kuznetsk Basin), one of the largest coal mining areas in Russia. The material was collected from 2014 to 2017 in the territories of two coal enterprises, the Kedrovskii and Krasnobrodskii coal mines, as well as adjacent natural habitats. All material is in poor condition, since a 4% acetic acid solution was used for fixing in pitfall traps.

List of localities near the Kedrovskii coal mine:

Kedr-1 — 55°30′39″N, 86°04′00″E, the age of the biocenosis is 7–10 years old; the top of the coal dump with young plantings of *Pinus sylvestris* and *Onobrychis arenaria*; the initial stages of the formation of meadow communities, with areas of rocky placers, without sod; with domination of *Onobrychis arenaria*, *Taraxacum officinale*, *Melilotus officinalis*, *Artemisia sericea*, and *Picris hieracioides*.

Kedr-2 — 55°30′31.46″N, 86°04′12.43″E, the age of the biocenosis is 15–20 years old; the top of the dump after technical and biological reclamation; well-developed meadows with domination of *Dactylis glomerata*, *Taraxacum officinale*, and *Centaurea scabiosa*; woody and shrubby vegetation with *Hippophae rhamnoides*, *Sorbus sibirica* and *Betula pendula*.

Kedr-3 — 55°30′29.70″N, 86°04′52.64″E, *Betula pendula* forest with *Populus tremula* and *Salix caprea* at the bottom of the coal dump; shrub layer with *Padus avium*, *Sambucus sibirica*, *Sorbus sibirica*, and *Viburnum opulus*, glades with forest meadows.

Kedr-4 — 55°33′26.17″N, 86°10′02.75″E, natural ecosystem, sparse *Populus tremula* and *Abies sibirica* forest (= chern taiga forest) with *Betula pendula* and *Picea obovata*, glades with tall-grassed vegetation, dominating with *Aconitum septentrionale*, *Anthriscus sylvestris*, and *Chamerion angustifolium*.

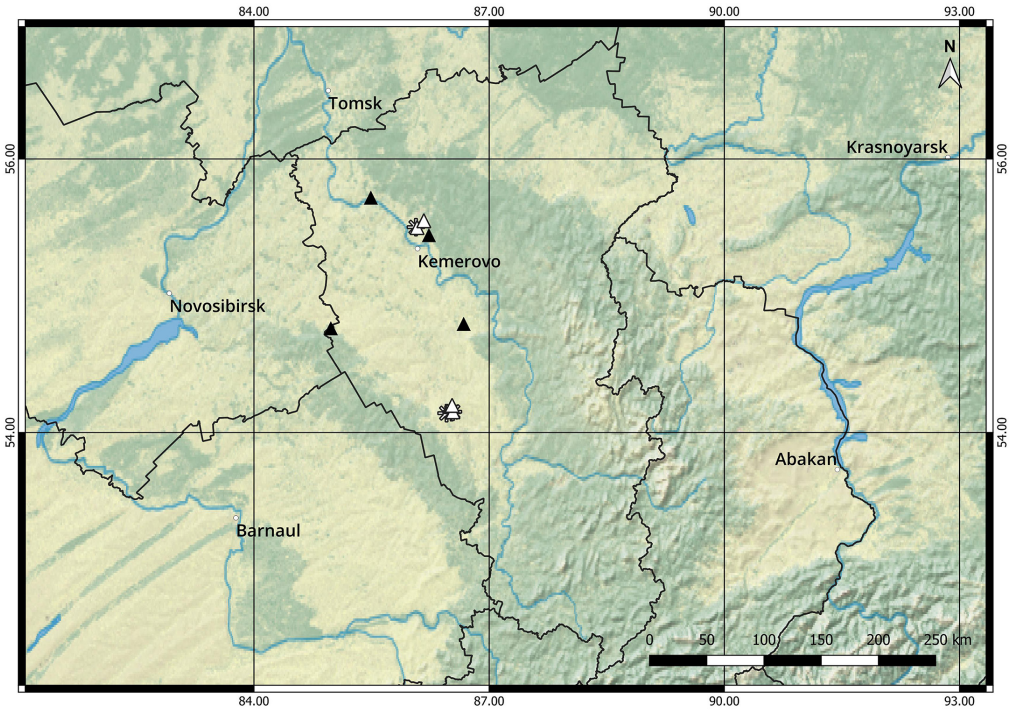
List of localities near the Krasnobrodskii coal mine:

Krbr-1 — 54°08′40.88″N, 86°27′27.04″E, the age of the biocenosis is 2 years old; plateautically aligned top of the dump after technical and biological reclamation; 2–3 years old plantations of *Pinus sylvestris* with domination of *Amaranthus retroflexus*, *Convolvulus arvensis* and *Artemisia absinthium*.

Krbr-2 — 54°09′06.84″N, 86°31′19.09″E, the age of the biocenosis is 7–10 years old; plateautically aligned top of the dump after technical and biological reclamation; meadows in the initial stages of formation with individual trees of *Populus balsamifera*, *Hippophae rhamnoides* and *Salix caprea*; without sod; with domination of *Artemisia sericea*, *Chenopodium aristatum* and *Euphorbia virgata*.

Krbr-3 — 54°09′16.99″N, 86°31′40.73″E, the age of the biocenosis is 25–30 years old; terrace ledge of the dump after technical and biological reclamation; *Betula pendula* forest with domination of *Calamagrostis epigeios*, *Cirsium setosum*, *Fragaria viridis*, and *Melilotus albus*.

Krbr-4 — 54°09′19.2″N, 86°32′18.1″E, the age of the biocenosis is 25–30 years old; mixed-grassed meadow with Poaceae, at the bottom of the coal dump; single trees of *Padus avium*, *Salix caprea*, *Salix viminalis*, and *Betula pendula*; with domination of *Achillea millefolium*, *Arctium tomentosum*, *Artemisia vulgaris*, *Achillea asiatica*, *Aconogonon alpinum*, and *Agrimonia pilosa*.



Map 1. Distribution of *Lamyctes* (*Lamyctes*) *emarginatus* (asterisk) and *Lithobius* (*Ezembius*) *ostiacorum* (triangle) in the Kemerovo Oblast. Previously known localities marked in black, new records given in white.
Карта 1. Распространение *Lamyctes* (*Lamyctes*) *emarginatus* (звездочка) и *Lithobius* (*Ezembius*) *ostiacorum* (треугольник) в Кемеровской области. Черным отмечены ранее известные места находок, новые находки отмечены белым.

Krbr-5 — 54°12′10.76″N, 86°31′41.34″E, natural ecosystem, *Betula pendula* plots with sparse *Populus tremula* and *Salix caprea*, open glades with mixed-grassed meadow with Poaceae; with domination of *Calamagrostis arundinacea*, *Calamagrostis epigeios*, *Calamagrostis obtusata*, and *Cimicifuga foetida*.

The distribution maps were composed using QGIS 3.32.1Lima.

Abbreviation: s.l. — same locality.

The material treated here has been deposited in the collections of the Kemerovo State University, Kemerovo, Russia (KSU), and the Perm State University, Perm, Russia (PSU), as indicated below. Literature references to the species concern the Kemerovo Oblast only.

Taxonomic part

Family Henicopidae

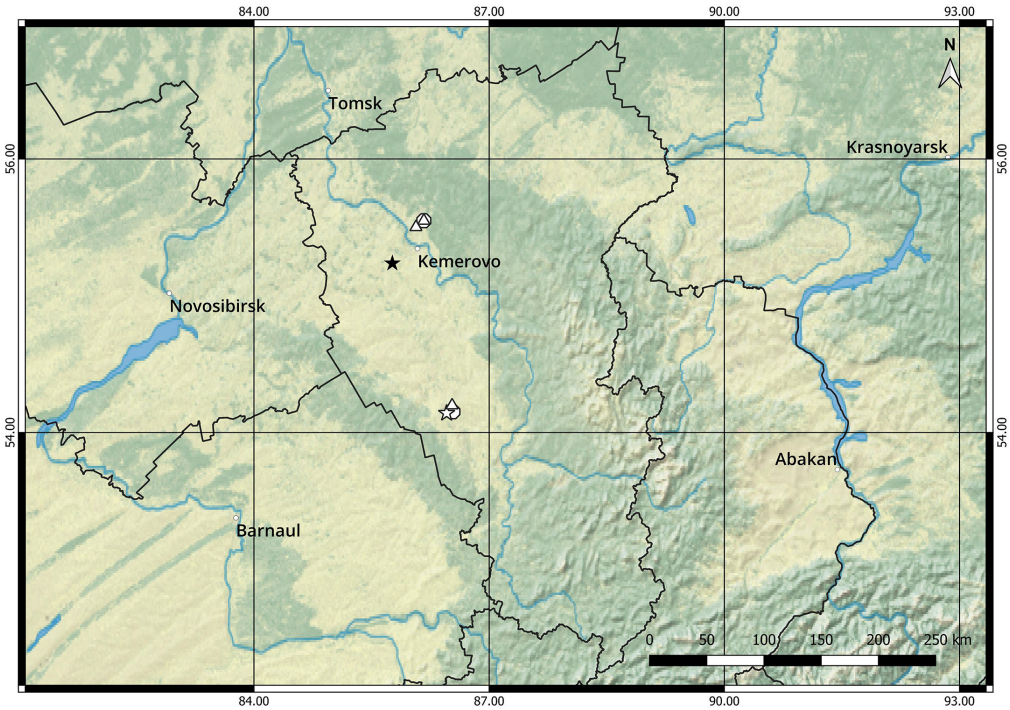
Lamyctes (*Lamyctes*) *emarginatus* (Newport, 1844)

Map 1.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 1 ♀ (PSU-1760), Kedr-1, 21.VII.2015; 1 ♀ (PSU-1760), s.l., 30.VII.2015. **Prokopyevsk District**: 1 ♀, Krbr-1, 18.VI.2016; 3 ♀♀ (PSU-1786), s.l., 28.VI.2016; 23 ♀♀, s.l., 8.VII.2016; 19 ♀♀, 1 juv. (PSU-1787), s.l., 28.VII.2016; 3 ♀♀ (PSU-1786), s.l., 9.VIII.2017; 1 ♀ (PSU-1769), Krbr-2, 13.VII.2015; 1 ♀, Krbr-3, 25.VII.2014; 1 ♀, Krbr-4, 25.VII.2014; 1 ♀, s.l., 23.VII.2015; 1 ♀, s.l., 20.VII.2017, all S.L. Luzyanin leg.

DISTRIBUTION. Originally described by Newport (1844) as *Lithobius emarginatus* from New Zealand, this species has now been distributed over the whole world by anthropochore introductions (Farzalieva, Esyunin, 2008; Stoev *et al.*, 2010; Nefediev *et al.*, 2016). In Asian Russia6 it is recorded from the Tomsk, Tyumen and Sakhalin oblasts (Sakhalin Island and the Kuriles), as well as from the Altai Krai (Nefediev *et al.*, 2016). This species has been found introduced very recently to Middle Asia (Tajikistan) (Dyachkov, 2024).

REMARKS. This species is new to the fauna of the Kemerovo Oblast.



Map 2. Distribution of *Lamyctes* (*Metalamyctes*) *africanus* (star), *Lithobius* (*Ezembius*) *princeps* (octagon) and *Lithobius* (*Monotarsobius*) *nordenskioeldii* (isosceles triangle) in the Kemerovo Oblast. Previously known localities marked in black, new records given in white.
Карта 2. Распространение *Lamyctes* (*Metalamyctes*) *africanus* (пятилучевая звезда), *Lithobius* (*Ezembius*) *princeps* (восьмиугольник) и *Lithobius* (*Monotarsobius*) *nordenskioeldii* (равнобедренный треугольник) в Кемеровской области. Черным отмечены ранее известные места находок, новые находки отмечены белым.

Lamyctes (*Metalamyctes*) *africanus* (Porath, 1871)

Map 2.

Lamyctes (*Metalamyctes*) *africanus* — Nefediev *et al.*, 2020a: 10, fig.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Prokopyevsk District**: 3 ♀♀ (PSU-1786), Krbr-1, 28.VI.2016; 5 ♀♀ (KSU), s.l., 8.VII.2016; 6 ♀♀ (PSU-1787), s.l., 28.VII.2016; 4 ♀♀, s.l., 7.VIII.2016; 5 juv., s.l., 19.VI.2017; 6 ♀♀, 2 juv., s.l., 30.VI.2017; 1 ♀, 1 juv., s.l., 20.VII.2017; 7 ♀♀, s.l., 30.VII.2017; 6 ♀♀, s.l., 9.VIII.2017, all S.L. Luzyanin leg.

DISTRIBUTION. Being originally described by Porath (1871) as *Henicops africana* from Kaffraria (= Eastern Cape, South Africa), this species is probably indigenous to Australia (Qiao *et al*., 2019) where males have been recorded and illustrated (Edgecombe *et al*., 2002). *Lamyctes africanus* has been found introduced to some other localities of mainland Africa and Madagascar, Europe (mainland Great Britain, Czech Republic, Denmark, France, and Germany), Asia (Xizang (Tibet) Autonomous Region, China and Kemerovo Oblast, Russia), North America (mainland USA and the Hawaiian Islands), South America (the Juan Fernández Islands, Chile), as well as to the St. Paul Island (Barber, 1992; Enghoff *et al.*, 2013; Bonato *et al.*, 2016; Dányi, Tuf, 2016; Iorio, 2016; Decker *et al*., 2017; Qiao *et al*., 2019; Nefediev *et al.*, 2020a; Simpson *et al*., 2023).

REMARKS. This species is newly recorded from the Prokopyevsk District of the Kemerovo Oblast.

Family Lithobiidae

Lithobius (*Ezembius*) *ostiacorum* Stuxberg, 1876

Map 1.

Lithobius (*Ezembius*) *ostiacorum* — Nefediev *et al.*, 2020b: 37, 38: map.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU). **Kemerovo District**: 1 ♂, Kedr-3, 4.VII.2014; 1 ♀, s.l., 14.VII.2014; 1 ♂, s.l., 24.VII.2014; 1 ♀, s.l., 21.VI.2015; 1 ♂, s.l., 28.VI.2015; 1 ♂, s.l., 11.VII.2015; 1 ♂, s.l., 21.VII.2015; 1 ♂, 1 juv., s.l., 30.VII.2015; 1 ♂, s.l., 30.V.2016; 1 ♂, s.l., 9.VI.2016; 3 ♀♀, 1 juv., s.l., 20.VI.2016; 2 ♀♀, s.l., 26.VI.2016; 1 ♀, s.l., 8.VI.2017; 4 ♂♂, s.l., 18.VI.2017; 6 ♂♂, 2 ♀♀, s.l., 28.VI.2017; 3 ♂♂, 5 ♀♀, s.l., 9.VII.2017; 3 ♂♂, 3 ♀♀, s.l., 19.VII.2017; 1 ♂, 2 ♀♀ ,4 juv., s.l., 8.VIII.2017; 1 ♀, 1 juv., same District, Kedr-4, 5.VI.2014; 2 ♂♂, s.l., 14.VI.2014; 15 ♂♂, 7 ♀♀, s.l., 24.VI.2014; 7 ♂♂, 7 ♀♀, 1 juv., s.l., 4.VII.2014; 1 ♂, 4 ♀♀, 1 juv., s.l., 24.VII.2014; 2 ♀♀, s.l., 3.VIII.2014; 1 juv., s.l., 13.VIII.2014; 2 ♂♂, 1 juv., s.l., 11.VI.2015; 2 ♂♂, 4 ♀♀, s.l., 21.VI.2015; 1 ♂, 3 ♀♀, 2 juv., s.l., 28.VI.2015; 1 ♂, 5 ♀♀, s.l., 11.VII.2015; 2 ♂♂, 1 ♀, 1 juv., s.l., 21.VII.2015; 3 ♂♂, 7 ♀♀, 1 juv., s.l., 30.VII.2015; 1 ♂, 1 ♀, 5 juv., s.l., 30.V.2016; 5 ♂♂, 2 ♀♀, 3 juv., s.l., 9.VI.2016; 8 ♂♂, 4 ♀♀, 7 juv., s.l., 20.VI.2016; 6 ♂♂, 5 ♀♀, 2 juv., s.l., 29.VI.2016; 1 ♂, 8 ♀♀, 1 juv., s.l., 9.VII.2016; 3 ♂♂, 9 ♀♀, 2 juv., s.l., 19.VII.2016; 2 ♂♂, 5 ♀♀, 4 juv., s.l., 29.VII.2016; 2 ♂♂, 2 ♀♀, 8 juv., s.l., 29.V.2017; 7 ♂♂, 5 ♀♀, 3 juv., s.l., 18.VI.2017; 10 ♂♂, 11 ♀♀, 3 juv., s.l., 28.VI.2017; 16 ♂♂, 20 ♀♀, 5 juv., s.l., 9.VII.2017; 3 ♂♂, 4 ♀♀, 2 juv., s.l., 19.VII.2017; 1 ♂, 6 ♀♀, 1 juv., s.l., 29.VII.2017; 1 ♂, 2 ♀♀, s.l., 8.VIII.2017. **Prokopyevsk District**: 1 ♂, 3 ♀♀, 2 juv., Krbr-4, 4.VIII.2014; 1 juv., Krbr-5, 27.V.2014; 6 juv., s.l., 6.VI.2014; 5 ♂♂, 4 ♀♀, s.l., 25.VI.2014; 4 ♀♀, s.l., 5.VII.2014; 4 ♀♀, s.l., 15.VII.2014; 3 ♀♀, s.l., 25.VII.2014; 1 ♀, s.l., 15.VIII.2014; 24 ♂♂, 8 ♀♀, 1 juv., s.l., 30.V.2015; 28 ♂♂, 15 ♀♀, 6 juv., s.l., 9.VI.2015; 15 ♂♂, 16 ♀♀, 1 juv., s.l., 19.VI.2015; 3 ♂♂, 6 ♀♀, 4 juv., s.l., 26.VI.2015; 25 ♂♂, 26 ♀♀, 3 juv., s.l., 13.VII.2015; 2 ♂♂, 2 ♀♀, s.l., 29.V.2016; 1 ♂, 1 juv., s.l., 8.VI.2016; 2 ♂♂, s.l., 18.VI.2016; 4 ♂♂, 5 ♀♀, s.l., 28.VI.2016; 2 ♂♂, 8 ♀♀, s.l., 8.VII.2016; 4 ♀♀, 1 juv., s.l., 18.VII.2016; 3 ♀♀, s.l., 28.VII.2016; 2 ♂♂, 5 ♀♀, s.l., 7.VIII.2016; 9 ♂♂, 4 ♀♀, 8 juv., s.l., 30.V.2017; 5 ♂♂, 4 ♀♀, 4 juv., s.l., 9.VI.2017; 6 ♂♂, 8 ♀♀, s.l., 19.VI.2017; 18 ♂♂, 9 ♀♀, s.l., 30.VI.2017; 2 ♂♂, 4 ♀♀, 2 juv., s.l., 10.VII.2017; 2 ♂♂, 7 ♂♂, 1 juv., s.l., 20.VII.2017; 2 ♂♂, s.l., 30.VII.2017; 2 ♂♂, 4 ♀♀, s.l., 9.VIII.2017, all S.L. Luzyanin leg.

DISTRIBUTION. Originally described by Stuxberg (1876a, b) from the Yenisei River region (now Krasnoyarsk Krai, central Siberia, Russia), and redescribed a century later from type material (Eason, 1976). In Russia, it occurs in the Irkutsk and Kemerovo oblasts, the Altai and Krasnoyarsk krais, the republics of Altai and Khakassia (Zalesskaja, 1978; Nefediev *et al.*, 2017a, 2018, 2020b, 2021; Nefediev, Farzalieva, 2020); also recorded from northern Mongolia (Poloczek *et al*., 2016, 2017, 2021).

REMARKS. This species is recorded from the Prokopyevsk District of the Kemerovo Oblast for the first time. It seems very likely that this species also occurs in the Novosibirsk Oblast.

Lithobius (*Ezembius*) *princeps* Stuxberg, 1876

Map 2.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU). **Kemerovo District**: 1 ♀, Kedr-4, 14.VII.2014. **Prokopyevsk District**: 1 ♀, Krbr-4, 4.VIII.2014, all S.L. Luzyanin leg.

DISTRIBUTION. Being originally described by Stuxberg (1876a, b) from near the Podkamennaya Tunguska River in the Yenisei River region (now Krasnoyarsk Krai, central Siberia, Russia), then redescribed by Eason (1976) using Stuxberg's type material, with lectotype designation. It was later recorded from Eastern Kazakhstan (Tuf, 2007; Tuf *et al*., 2010; Dyachkov, 2017, 2019), and Asian Russia, viz. the Tyumen and Omsk oblasts (Sergeeva, 2010; Bukhkalo *et al.*, 2014; Nefediev *et al.*, 2017b), and the Republic of Khakassia (Nefediev, Farzalieva, 2020), SW and central Siberia, respectively; also recently recorded from Mongolia (Dyachkov, Farzalieva, 2023).

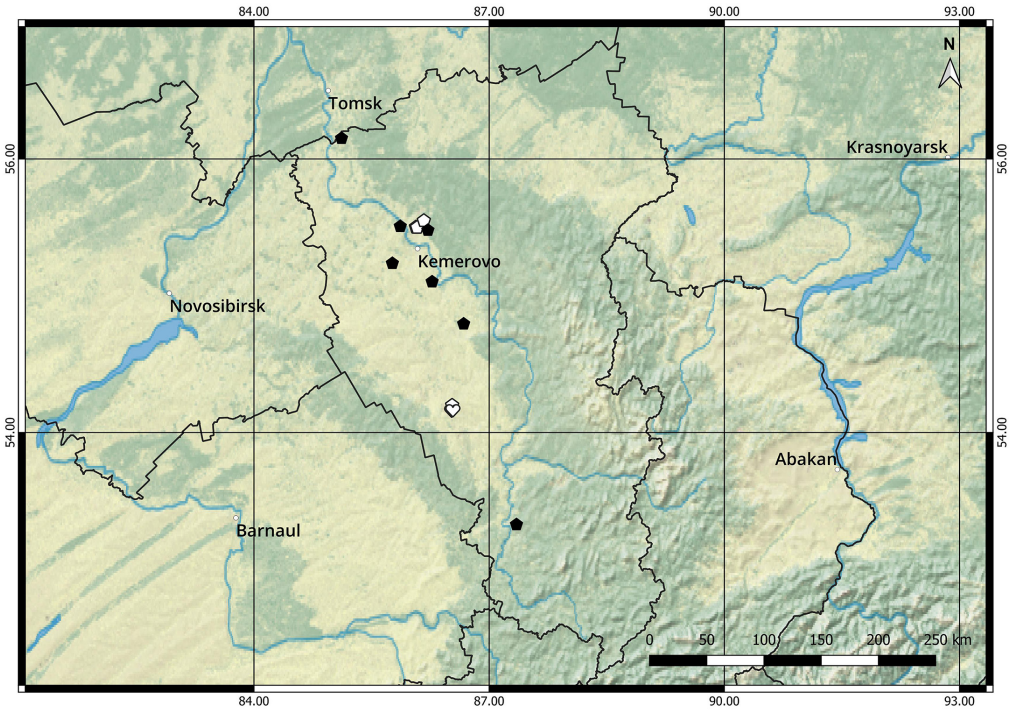
REMARKS. This species is new to the fauna of the Kemerovo Oblast.

Lithobius (*Ezembius*) *sibiricus* Gerstfeldt, 1859

Map 3.

Lithobius (*Ezembius*) *sibiricus* — Nefediev *et al.*, 2020a: 12; 2020b: 39, map.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 1 ♂, 1 ♀, Kedr-1, 26.V.2014; 1 ♂, s.l., 5.VI.2014; 4 ♂♂, 2 ♀♀, s.l., 14.VI.2014; 2 ♂♂, 2 ♀♀, 1 juv., s.l., 24.VI.2014; 3 ♂♂, 2 ♀♀, 1 juv., s.l., 4.VII.2014; 5 ♂♂, 3 ♀♀, 1 juv., s.l., 14.VII.2014; 1 juv., s.l., 24.VII.2014; 6 ♂♂, s.l., 3.VIII.2014; 3 ♂♂, 2 ♀♀, s.l., 13.VIII.2014; 2 ♂♂, 2 ♀♀, s.l., 21.VI.2015; 1 ♀, s.l., 28.VI.2015; 3 ♂♂, 1 ♀, 1 juv., s.l., 11.VII.2015; 2 ♂♂, 1 ♀, 1 juv., s.l., 21.VII.2015; 2 ♂♂, s.l., 20.VI.2016; 1 ♂, 1 juv., s.l., 29.VI.2016; 4 ♂♂, s.l., 19.VII.2016; 2 ♂♂, 1 ♀, s.l., 29.VII.2016; 1 ♂, 2 ♀♀, s.l., 29.V.2017; 1 ♂, 1 ♀, s.l., 8.VI.2017; 3 ♂♂, 2 ♀♀, s.l., 9.VII.2017; 2 ♂♂, 1 ♀, s.l., 19.VII.2017; 2 ♂♂, s.l., 29.VII.2017; 1 ♀, s.l., 8.VIII.2017; 1 ♂, 1 ♀, Kedr-2, 14.VII.2014; 1 ♂, s.l., 3.VIII.2014; 1 ♀, s.l., 13.VIII.2014; 1 ♂, s.l., 1.VI.2015; 2 ♂♂, 1 ♀, s.l., 29.V.2017; 1 ♀, s.l., 8.VI.2017; 1 ♀, s.l., 19.VII.2017; 1 ♀, s.l., 29.VII.2017; 1 ♀, Kedr-3, 14.VII.2014; 1 ♂, s.l., 19.VII.2017; 4 ♂♂, 1 juv., s.l., 29.VII.2017; 1 ♂, 2 juv., s.l., 8.VIII.2017; 2 juv., Kedr-4, 14.VI.2014;



Map 3. Distribution of *Lithobius* (*Ezembius*) *sibiricus* (pentagon) and *L.* (*L.*) *forficatus* (heart) in the Kemerovo Oblast. Previously known localities marked in black, new records given in white.
Карта 3. Распространение *Lithobius* (*Ezembius*) *sibiricus* (пятиугольник) и *L.* (*L.*) *forficatus* (сердце) в Кемеровской области. Черным отмечены ранее известные места находок, новые находки отмечены белым.

3 ♂♂, s.l., 24.VII.2014; 1 ♀, s.l., 3.VIII.2014; 1 ♂, s.l., 11.VI.2015; 1 juv., s.l., 28.VI.2015; 1 juv., s.l., 11.VII.2015; 1 ♂, 1 juv., s.l., 30.VII.2015; 1 ♂, s.l., 29.VII.2016; 4 ♂♂, 1 ♀, 5 juv., s.l., 8.VI.2017; 2 ♂♂, 1 ♀, s.l., 28.VI.2017; 3 ♂♂, 1 ♀, s.l., 9.VII.2017; 2 ♂♂, 1 ♀, s.l., 19.VII.2017; 4 ♂♂, 1 juv., s.l., 29.VII.2017; 3 ♂♂, 2 ♀♀, s.l., 8.VIII.2017. **Prokopyevsk District**: 1 ♀, Krbr-5, 15.VI.2014; 1 ♀, s.l., 25.VII.2014; 2 ♂♂, s.l., 15.VIII.2014; 2 ♂♂, 1 ♀, 1 juv., s.l., 9.VI.2015; 5 ♂♂, 2 ♀♀, s.l., 13.VII.2015; 1 ♂, s.l., 29.V.2016; 1 ♀ (PSU-1776), s.l., 8.VI.2016; 1 juv., s.l., 18.VI.2016; 1 ♂, s.l., 28.VI.2016; 2 ♀♀, s.l., 8.VII.2016; 2 ♂♂, 3 ♀♀, s.l., 18.VII.2016; 1 ♂, 3 ♀♀, s.l., 28.VII.2016; 2 ♂♂, 4 ♀♀, s.l., 7.VIII.2016; 1 ♂, s.l., 19.VI.2017; 5 ♂♂, 1 ♀, s.l., 30.VI.2017; 5 ♂♂, 2 ♀♀, s.l., 10.VII.2017; 3 ♂♂, 1 ♀, 1 juv., s.l., 20.VII.2017; 1 ♂, 1 ♀, s.l., 30.VII.2017; 3 ♂♂, 1 ♀, s.l., 9.VIII.2017, all S.L. Luzyanin leg.

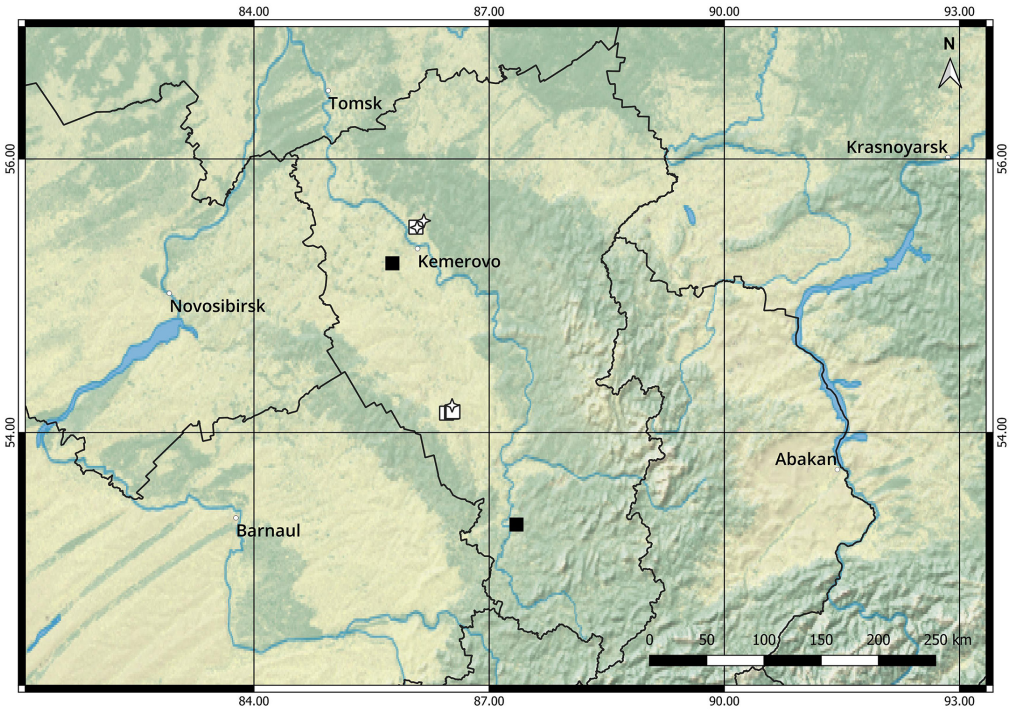
DISTRIBUTION. This species was originally described by Gerstfeldt (1859) from several localities in Siberia and the Russian Far East, then later redescribed by Eason (1976) from one of Stuxberg's female syntypes of *Lithobius fugax* from Krasnoyarsk. To date, this species is widely distributed across the Asian part of Russia, viz. the Tomsk and Kemerovo oblasts, the Altai Krai and the Republic of Altai, all SW Siberia, the Krasnoyarsk Krai, central Siberia, the Irkutsk Oblast, the Zabaikalskii Krai and the republics of Buryatia and Sakha (Yakutia), all eastern Siberia, as well as the Sakhalin and Amur oblasts, and the Primorskii and Khabarovsk krais, all the Russian Far East (Zalesskaja, 1978; Ganin, 1997; Nefediev, Farzalieva, 2020). It is also recorded in Mongolia (Poloczek *et al.*, 2016, 2017, 2021; Dyachkov, Farzalieva, 2023).

REMARKS. This species has hitherto never been recorded from the Prokopyevsk District of the Kemerovo Oblast.

Lithobius (*Lithobius*) *forficatus* (Linnaeus, 1758)

Map 3.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Prokopyevsk District**: 1 juv., Krbr-2, 30.VI.2017; 1 ♀, Krbr-3, 27.V.2014; 1 ♀, s.l., 15.VI.2014; 1 ♀ (PSU-1773), s.l., 26.VI.2015; 1 ♀ (PSU-1773), s.l., 13.VII.2015; 1 ♂, 2 ♀♀ (PSU-1773), s.l., 29.V.2016; 1 ♀, s.l., 28.VI.2016; 1 ♂, 1 ♀, s.l., 7.VIII.2016; 2 ♀♀, 1 juv., s.l., 19.VI.2017; 1 ♂, 3 ♀♀, 3



Map 4. Distribution of *Lithobius* (*Monotarsobius*) *crassipes* (square) and *L.* (*M.*) *insolens* (diamond star) in the Kemerovo Oblast. Previously known localities marked in black, new records given in white.
Карта 4. Распространение *Lithobius* (*Monotarsobius*) *crassipes* (квадрат) и *L.* (*M.*) *insolens* (четырехлучевая звезда) в Кемеровской области. Черным отмечены ранее известные места находок, новые находки отмечены белым.

juv., s.l., 30.VI.2017; 1 ♂, 1 ♀, 1 juv., s.l., 10.VII.2017; 1 ♀ (PSU-1780), s.l., 20.VII.2017; 2 ♀♀ (PSU-1782), s.l., 30.VII.2017; 1 ♀, s.l., 9.VIII.2017; 1 ♀ (PSU-1768), Krbr-4, 26.VI.2015; 1 ♂, s.l., 13.VII.2015; 1 ♀, s.l., 29.V.2016; 1 ♂, 1 ♀, s.l., 8.VI.2016; 1 ♂, s.l., 7.VIII.2016; 1 juv., s.l., 9.VI.2017; 2 juv., s.l., 19.VI.2017; 1 ♀ (PSU-1780), s.l., 30.VI.2017; 1 ♂, s.l., 20.VII.2017, all S.L. Luzyanin leg.

DISTRIBUTION. Being apparently indigenous to Europe (Linnaeus, 1758), this species is highly widespread all over the world, introduced to the Near East, Africa (St. Helena Island), Australia and New Zealand, North and South America, Central Asia (Kazakhstan and Mongolia), and Japan (Zalesskaja, 1978; Farzalieva, Esyunin, 2008; Bonato *et al*., 2016; Nefediev *et al.*, 2016; Hirakizawa, Yamauchi, 2021). In Russia, this species has hitherto been recorded from the European part of the country, in the Urals, the Tyumen and Tomsk oblasts, the Altai Krai, SW Siberia, as well as in the Sakhalin Oblast (Iturup Island, Kuriles), the Russian Far East (Zalesskaja, 1978; Eason, 1997; Farzalieva, 2008; Sergeeva, 2013; Nefediev *et al.*, 2016).

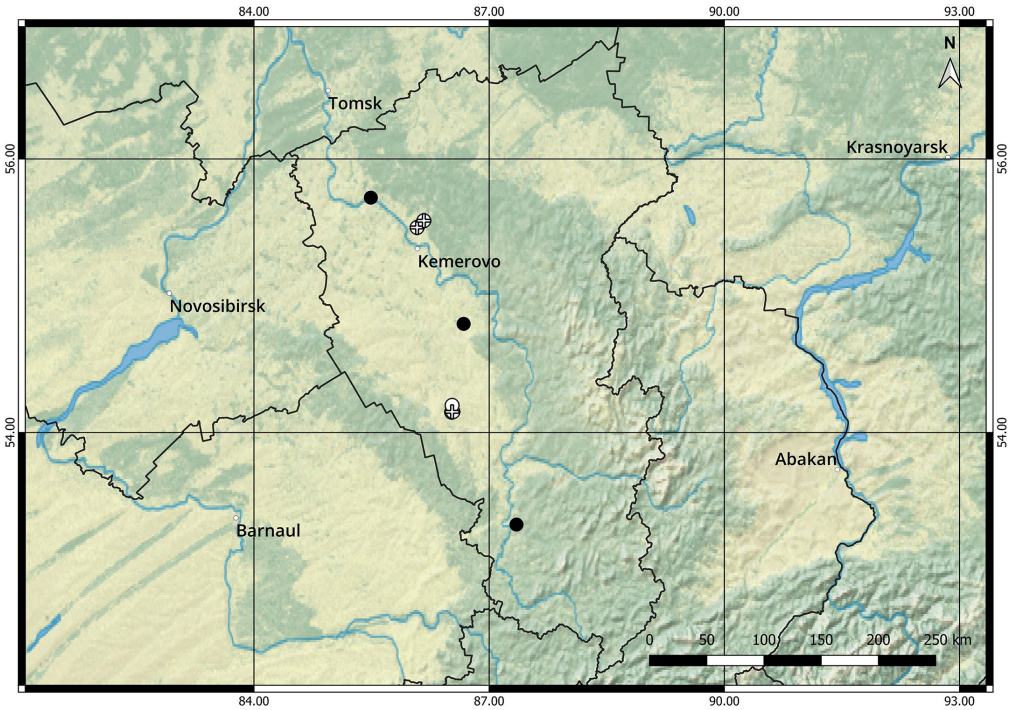
REMARKS. The above records of *Lithobius forficatus* are formally new to the Kemerovo Oblast.

Lithobius (*Monotarsobius*) *crassipes* L. Koch, 1862

Map 4.

Lithobius (*Monotarsobius*) *crassipes* — Nefediev *et al.*, 2020a: 12; 2020b: 40, map.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 1 ♂ (PSU-1761), Kedr-1, 30.V.2015; 1 ♀ (PSU-1761), s.l., 9.VI.2015; 1 ♀ (PSU-1761), s.l., 28.06.2015; 1 ♀ (PSU-1761), s.l., 21.VII.2015. **Prokopyevsk District**: 1 ♂ (PSU-1785), Krbr-1, 30.V.2017; 1 ♀, Krbr-2, 27.V.2014; 1 ♀ (PSU-1770), s.l., 13.VII.2015; 1 ♂, s.l., 29.V.2016; 1 ♀, s.l., 8.VI.2016; 1 ♀, s.l., 8.VII.2016; 1 ♀, s.l., 18.VII.2016; 2 ♀♀ (PSU-1779), s.l., 20.VII.2017; 1 ♂ (PSU-1775), Krbr-3, 29.V.2016; 1 ♂, s.l., 8.VI.2016; 1 ♀ (PSU-1775), s.l., 8.VII.2016; 1 ♂ (PSU-1771), Krbr-4, 19.VI.2015, all S.L. Luzyanin leg.



Map 5. Distribution of *Lithobius* (*Monotarsobius*) *curtipes* (circle) and *Lithobius vagabundus* (cross) in the Kemerovo Oblast. Previously known localities marked in black, new records given in white.
Карта 5. Распространение *Lithobius* (*Monotarsobius*) *curtipes* (круг) и *Lithobius vagabundus* (крест) в Кемеровской области. Черным отмечены ранее известные места находок, новые находки отмечены белым.

DISTRIBUTION. Originally described by L. Koch (1862) from near Nurenberg,Germany, this species is widely distributed in mainland and insular Europe and the Urals, as well as in northern Africa, the Near East, Arabian Peninsula, Central Asia (Kazakhstan and Uzbekistan), East Asia (insular China, Taiwan), and North America (USA) (Farzalieva, 2008; Nefediev *et al.*, 2016; Dyachkov *et al.*, 2022); false recorded in Mongolia (see Dyachkov *et al.*, 2022).

REMARKS. This species has hitherto been recorded neither in the Kemerovo nor in the Prokopyevsk districts of the Kemerovo Oblast.

Lithobius (*Monotarsobius*) *curtipes* C.L. Koch, 1847
Map 5.

Lithobius (*Monotarsobius*) *curtipes* — Nefediev *et al.*, 2020b: 41, 40: map.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 1 ♀, Kedr-3, 18.VI.2017; 1 ♂, s.l., 8.VIII.2017; 1 ♀, Kedr-4, 5.VI.2014; 1 ♂, s.l., 14.VI.2014; 1 ♀, s.l., 13.VIII.2014; 1 ♂, s.l., 1.VI.2015; 1 ♂, 2 ♀♀ (PSU-1764), s.l., 11.VII.2015; 1 ♀, s.l., 21.VII.2015; 2 ♀♀, s.l., 9.VII.2016; 1 ♂, s.l., 19.VII.2016; 3 ♀♀, 3 juv., s.l., 29.VII.2016; 2 ♂♂, 1 ♀, s.l., 29.V.2017; 1 ♂, 1 ♀, s.l., 8.VI.2017; 1 ♂, s.l., 28.VI.2017; 1 ♂, 3 ♀♀, 1 juv., s.l., 9.VII.2017; 4 ♂♂, 1 ♀, 2 juv., s.l., 19.VII.2017; 1 ♂, 1 juv., s.l., 29.VII.2017; 1 ♂, 2 ♀♀, s.l., 8.VIII.2017. **Prokopyevsk District**: 1 ♂, Krbr-2, 6.VI.2014; 1 ♂, s.l., 15.VI.2014; 1 ♀, Krbr-3, 6.VI.2014; 1 ♀, s.l., 25.VI.2014; 2 ♀♀, s.l., 15.VII.2014; 1 ♂ (PSU-1774), s.l., 13.VII.2015; 1 ♀, Krbr-4, 15.VI.2014; 1 ♀, s.l., 4.VIII.2014; 1 ♂, s.l., 13.VII.2015; 1 ♂, 1 ♀, s.l., 23.VII.2015; 1 ♂, s.l., 7.VIII.2016; 1 ♂, Krbr-5, 20.VII.2017, all S.L. Luzyanin leg.

DISTRIBUTION. Being originally described by C.L. Koch (1847) from Bavaria, Germany, this species is widespread in Europe, the Near East, the Arabian Peninsula, and Central Asia (Kazakhstan and Mongolia) (Zalesskaja, 1978; Farzalieva, Esyunin, 2008; Nefediev *et al.*, 2016; Dyachkov, Farzalieva, 2023; Dyachkov, 2024). In Russia, it is known to occur, ranging from the European part of the country, including the Caucasus, through the Urals to Siberia, viz. the Altai and Krasnoyarsk krais, the Novosibirsk, Omsk, Tyumen, Tomsk and Kemerovo oblasts, the Khanty-Mansi Autonomous and Yamalo-Nenets

Autonomous okrugs, and the Altai and Khakassian republics (Nefediev *et al.*, 2016; Nefediev, Farzalieva, 2020).

REMARKS. The above are the first records of this species from the Kemerovo and the Prokopyevsk districts of the Kemerovo Oblast.

Lithobius (*Monotarsobius*) *insolens* Dányi et Tuf, 2012

Map 4.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 2 juv., Kedr-3, 1.VI.2015; 1 ♀ (PSU-1785), s.l., 21.VI.2015; 6 ♂♂, 2 ♀♀, 5 juv. (PSU-1767), 30.VII.2015; 2 ♂♂, 1 ♀, 1 juv. (PSU-1783), s.l., 29.VII.2017; 1 juv., Kedr-4, 9.VII.2016. **Prokopyevsk District**: 1 juv., Krbr-5, 5.VII.2014; 1 ♀, s.l., 15.VII.2014; 1 ♂, s.l., 25.VII.2014; 1 ♂, 2 ♀♀, s.l., 15.VIII.2014; 1 ♂, 2 ♀♀, 3 juv., s.l., 30.V.2015; 1 ♂, 2 ♀♀, 1 juv., s.l., 9.VI.2015; 3 ♂♂, 3 juv., s.l., 19.VI.2015; 1 ♂, s.l., 26.VI.2015; 7 ♂♂, 3 ♀♀, 1 juv., s.l., 13.VII.2015; 4 juv., s.l., 18.VI.2016; 3 juv., s.l., 28.VI.2016; 2 ♂♂, 1 juv., s.l., 8.VII.2016; 1 ♂, 1 juv. (PSU-1778, KSU), s.l., 18.VII.2016; 1 ♂, s.l., 28.VII.2016; 2 ♂♂, 1 ♀, 3 juv., s.l., 7.VIII.2016; 1 ♀, s.l., 30.V.2017; 1 ♂, 1 ♀, s.l., 19.VI.2017; 1 ♂, 1 juv., s.l., 30.VI.2017; 1 ♂, 2 ♀♀, 3 juv., s.l., 10.VII.2017; 6 ♂♂, 2 ♀♀, 4 juv., s.l., 20.VII.2017; 2 ♂♂, s.l., 30.VII.2017; 1 ♂, 3 ♀♀, s.l., 9.VIII.2017, all S.L. Luzyanin leg.

DISTRIBUTION. This species was originally described as *Lithobius* (*Monotarsobius*) *insolitus* by Farzalieva [2006] from eastern Kazakhstan, later renamed to avoid homonymy [Dányi, Tuf, 2012]. In Russia, it has hitherto been recorded from the Omsk Oblast, the Altai Krai, and the Altai and Khakassian republics [Nefediev *et al*., 2017a, b, 2018; Nefediev, Farzalieva, 2024].

REMARKS. This is the first record of *L.* (*M.*) *insolens* in the Kemerovo Oblast.

Lithobius (*Monotarsobius*) *nordenskioeldii* Stuxberg, 1876

Map 2.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 1 juv., Kedr-1, 11.VII.2015; 3 ♂♂, Kedr-4, 24.VI.2014; 1 ♂, s.l., 4.VII.2014; 1 ♂, s.l., 14.VII.2014; 3 ♂♂, 6 ♀♀, s.l., 24.VII.2014; 1 ♂, 1 ♀, 1 juv., s.l., 3.VIII.2014; 2 ♀♀, s.l., 13.VIII.2014; 1 ♂, 1 ♀ (PSU-1765), s.l., 11.VI.2015; 1 ♀, s.l., 21.VI.2015; 2 ♂♂, 1 ♀ (PSU-1765), s.l., 28.VI.2015; 8 ♂♂, 7 ♀♀, s.l., 11.VII.2015; 3 ♂♂, 13 ♀♀ (PSU-1765), s.l., 21.VII.2015; 4 ♂♂, s.l., 30.V.2016; 2 ♂♂ (PSU-1781), s.l., 9.VI.2016; 1 ♂, s.l., 29.VI.2016; 3 ♂♂, 1 ♀, s.l., 9.VII.2016; 1 ♂, 4 ♀♀, 1 juv., s.l., 19.VII.2016; 9 ♀♀, s.l., 29.VII.2016; 4 ♂♂, 3 juv., s.l., 29.V.2017; 1 ♂, 3 ♀♀, 3 juv., s.l., 8.VI.2017; 5 ♂♂, 1 ♀, 1 juv. (PSU-1781), s.l., 18.VI.2017; 21 ♂♂, 11 ♀♀, s.l., 28.VI.2017; 13 ♂♂, 26 ♀♀, s.l., 9.VII.2017; 5 ♂♂, 35 ♀♀, s.l., 19.VII.2017; 5 ♀♀, s.l., 29.VII.2017; 8 ♀♀, s.l., 8.VIII.2017. **Prokopyevsk District**: 3 ♂♂, Krbr-4, 4.VIII.2014, all S.L. Luzyanin leg.

DISTRIBUTION. Being originally described by Stuxberg (1876a, b) from the Yenisei River region (now Krasnoyarsk Krai, central Siberia, Russia), this species was redescribed based on type material, with lectotype designation (Eason, 1976). This species has hitherto been recorded from the Altai Krai, the Altai and Khakassian republics, and the Irkutsk Oblast, all southwestern, central and eastern Siberia, respectively (Nefediev *et al.*, 2017a, 2018, 2020a, 2021; Nefediev, Farzalieva, 2020).

REMARKS. This species is recorded from the Kemerovo Oblast for the first time.

Lithobius vagabundus Stuxberg, 1876

Map 5.

MATERIAL EXAMINED (all Russia, southwestern Siberia, Kemerovo Oblast, all KSU, if otherwise not indicated). **Kemerovo District**: 3 ♂♂ (PSU-1763), Kedr-3, 11.VI.2015; 2 ♂♂ (PSU-1763), s.l., 21.VI.2015; 1 ♂ (PSU-1763), s.l., 11.VII.2015; 2 ♂♂, s.l., 30.V.2016; 1 ♂, s.l., 19.VII.2016; 5 ♂♂, s.l., 29.V.2017; 5 ♂♂, 1 juv., s.l., 8.VI.2017; 2 ♂♂, s.l., 18.VI.2017; 2 ♂♂, s.l., 28.VI.2017; 1 ♂, 1 ♀, s.l., 9.VII.2017; 3 ♀♀, s.l., 29.VII.2017; 1 ♂, Kedr-4, 14.VI.2014; 7 ♂♂, 3 ♀♀, 3 juv., s.l., 24.VI.2014; 2 ♂♂, 1 ♀, 1 juv., s.l., 4.VII.2014; 1 juv., s.l., 14.VII.2014; 2 ♂♂, 4 ♀♀, 1 juv., s.l., 24.VII.2014; 1 ♀, 3 juv., s.l., 3.VIII.2014; 1 ♂, s.l., 1.VI.2015; 2 ♂♂ (PSU-1766), s.l., 11.VI.2015; 1 ♂, s.l., 21.VI.2015; 1 ♂, 2 ♀♀, s.l., 28.VI.2015; 1 ♂, 3 ♀♀ (PSU-1766), s.l., 11.VII.2015; 1 juv., s.l., 30.V.2016; 4 ♂♂, s.l., 9.VI.2016; 1 ♂, 1 ♀, 1 juv., s.l., 29.VI.2016; 2 ♂♂, 4 ♀♀, 2 juv., s.l., 9.VII.2016; 4 ♂♂, 6 ♀♀, 2 juv., s.l., 19.VII.2016; 2 ♀♀, s.l., 29.VII.2016; 6 ♂♂, 6 juv., s.l., 29.V.2017; 3 ♂♂, s.l., 8.VI.2017; 20 33, 1 ♀, 5 juv., s.l., 18.VI.2017; 8 ♂♂, 1 ♀, 5 juv., s.l., 28.VI.2017; 7 ♂♂, 13 ♀♀, 1 juv., s.l., 9.VII.2017; 3 ♂♂, 6 ♀♀, 2 juv., s.l., 19.VII.2017; 1 ♀, s.l., 29.VII.2017; 1 ♀, 4 juv., s.l., 8.VIII.2017. **Prokopyevsk District**: 1 ♀, Krbr-3, 4.VIII.2014, all S.L. Luzyanin leg.

DISTRIBUTION. Originally described by Stuxberg (1876a, b) from the Yenisei River region (now Krasnoyarsk Krai, central Siberia, Russia), this species was redescribed a century later from Stuxberg's type material (Eason, 1976), with lectotype designation. *Lithobius vagabundus* has hitherto been recorded from the Altai Krai and the Republic

of Altai, both SW Siberia (Nefediev *et al.*, 2017a, 2018; Nefediev, Farzalieva, 2020), as well as from the Republic of Khakassia, central Siberia (Nefediev, Farzalieva, 2024).

REMARKS. Above is the first record of *L. vagabundus* in the Kemerovo Oblast.

Conclusions

At this time, the lithobiomorph centipede fauna of the Kemerovo Oblast comprises at least 14 species from 2 genera and 2 families: *Lamyctes* (*Lamyctes*) *emarginatus* (Newport, 1844)*, *Lam.* (*Metalamyctes*) *africanus* (Porath, 1871), *Lithobius* (*Ezembius*) *ostiacorum* Stuxberg, 1876, *Lith.* (*E.*) *princeps* Stuxberg, 1876*, *Lith.* (*E.*) *proximus* Sseliwanoff, 1880, *Lith.* (*E.*) *sibiricus* Gerstfeldt, 1859, *Lith.* (*Lith.*) *forficatus* (Linnaeus, 1758)*, *Lith.* (*Monotarsobius*) *crassipes* L. Koch, 1862, *Lith.* (*M.*) *curtipes* C.L. Koch, 1847, *Lith.* (*M.*) *fugax* Stuxberg, 1876, *Lith.* (*M.*) *insolens* Dányi et Tuf, 2012*, *Lith.* (*M.*) *nordenskioeldii* Stuxberg, 1876*, *Lith.* (*M.*) *tanagolus* Farzalieva, 2018, and *Lith. vagabundus* Stuxberg, 1876*. The first records from the Kemerovo Oblast are marked with an asterisk (*).

Compliance with ethical standards

CONFLICT OF INTEREST: The authors declare that they have no conflict of interest.

Acknowledgements. We are sincerely grateful to S.I. Golovatch (Moscow, Russia) who kindly checked the English of an advanced draft.

References

Bonato L., Chagas Junior A., Edgecombe G.D., Lewis J.G.E., Minelli A., Pereira L.A., Shelley R.M., Stoev P., Zapparoli M. 2016. ChiloBase 2.0 – A World Catalogue of Centipedes (Chilopoda). Available at http://chilobase.biologia.unipd.it (accessed 15 July 2024).

Bukhkalo S.P., Galitch D.E., Sergeeva E.V., Vazhenina N.V. 2014. [Synopsis of the invertebrate fauna of the southern taiga in western Siberia (basin of the Lower Irtysh)]. Moscow: KMK Scientific Press. 189 p. [In Russian]

Dányi L., Tuf I.H. 2012. *Lithobius* (*Monotarsobius*) *franciscorum* sp. nov., a new lithobiid species from the Altai, with a key to the Central Asian species of subgenus (Chilopoda: Lithobiomorpha) // Zootaxa. Vol.3182. No.1. P.16–28.

Dányi L., Tuf I.H. 2016. Out of Africa: The firs introduced African geophilomorph centipede record from a European greenhouse (Chilopoda: Geophilidae) // Zootaxa. Vol.4067. No.5. P.585–588. https://doi. org/10.11646/zootaxa.4067.5.6.

Decker P., Wesener T., Spelda J., Lindner E.N., Voigtländer K. 2017. Barcoding reveals the first record of *Lamyctes africanus* (Porath, 1871) in Germany (Chilopoda: Lithobiomorpha) // Bonn zoological Bulletin. Vol.66. No.1. P.3–10.

Dyachkov Yu.V. 2017. [The first data on the centipede (Chilopoda: Geophilomorpha; Lithobiomorpha) fauna of the Katun Biosphere State Nature Reserve, Altai Mts] // Ukrainian Journal of Ecology. Vol.7. No.4. P.453–456 [in Russian, with English summary].

Dyachkov Yu.V. 2019. New data on lithobiomorph centipedes (Chilopoda: Lithobiomorpha: Anopsobiidae, Henicopidae, Lithobiidae) from Kazakhstan // Arthropoda Selecta. Vol.28. No.1. P.8–20. https://doi.org/10.15298/arthsel.28.1.02.

Dyachkov Yu.V. 2024. A review of the anthropochore centipede fauna of Middle Asia (Chilopoda) // Arthropoda Selecta. Vol.33. No.2. P.171–174. https://doi.org/10.15298/arthsel.33.2.03.

Dyachkov Yu.V., Farzalieva G.Sh. 2023. An annotated checklist of Chilopoda from Mongolia // Ecologica Montenegrina. Vol.64. P.221–241. https://dx.doi.org/10.37828/em.2023.64.7.

Eason E.H. 1976. The type specimens and identity of the Siberian species described in the genus *Lithobius* by Anton Stuxberg in 1876 (Chilopoda: Lithobiomorpha) // Zoological Journal of the Linnean Society. No.58. P.98–127.

Eason E.H. 1997 (for 1996). Lithobiomorpha from Sakhalin Island, the Kamchatka Peninsula and the Kurile Islands (Chilopoda) // Arthropoda Selecta. Vol.5. No.3/4. P.117–123.

Edgecombe G.D., Giribet G., Wheeler W.C. 2002. Phylogeny of Henicopidae (Chilopoda: Lithobiomorpha): a combined analysis of morphology and five molecular loci // Systematic Entomology. Vol.27. P.31–64.

Enghoff H., Akkari N., Pedersen J. 2013. Aliquid novi ex Africa? *Lamyctes africanus* (Porath, 1871) found in Europe (Chilopoda: Lithobiomorpha: Henicopidae) // Journal of Natural History. Vol.47. Iss.31–32. P.2071–2094. https://doi.org/10.1080/00222933.2012.763062.

Farzalieva G.Sh. 2006. New species of the lithobiid genus *Lithobius* (*Monotarsobius*) (Chilopoda: Lithobiomorpha: Lithobiidae) from eastern Kazakhstan // Arthropoda Selecta. Vol.15. No.2. P.99–117.

Farzalieva G.Sh. 2008. [The fauna and chorology of Myriapoda from the Urals and Cisuralia]. PhD Thesis. Perm: Perm State University. 189 p. [In Russian]

Farzalieva G.Sh., Esyunin S.L. 2008. A review of the centipede (Lithobiomorpha, Henicopidae, Lithobiidae) fauna of the Urals and Cis-Ural Area // Entomological Review. Vol.88. No.5. P.598–623. https://doi.org/10.1134/S0013873808050102.

Ganin G.N. 1997. [Soil invertebrates of the Ussuri Region]. Vladivostok-Khabarovsk: Dalnauka Publ. 160 p. [In Russian]

Gerstfeldt G. 1859. Ueber einige zum Theil neue Arten Platoden, Anneliden, Myriapoden und Crustaceen Sibiriens, namentlich seines östlichen Theiles und des Amur-Gebiets // Mémoires L'Académie Impériale des Sciences. St. Petersbourg. T.8. S.1–36.

Hirakizawa N., Yamauchi T. 2021. First records of *Lithobius* (*Lithobius*) *forficatus* (Linnaeus 1758) (Chilopoda: Lithobiomorpha: Lithobiidae) from mainland Hokkaido, Japan // Acta Arachnologica. Vol.70. No.1. P.1–5. https://doi.org/10.2476/asjaa.70.1.

Iorio E. 2016. Confirmation of the presence of *Lamyctes africanus* (Porath, 1871) in France (Chilopoda, Lithobiomorpha: Henicopidae) // Bulletin of the British Myriapod & Isopod Group. Vol.29. P.44–48.

Koch C.L. 1847. System der Myriapoden // L. Herrich-Schäffer (Hrsg.). Kritische Revision der Insectenfauna Deutschlands. Regensburg: Friedrich Pustet. Bd.3. H.1–40. S.1–270.

Koch L. 1862. Die Myriapodengattung *Lithobius*. Nürnberg: J.L. Lotzbeck. 94 S.

Linnaeus C. 1758. Systema naturae. Regnum Animale. Editio Decima. Holmiae. Vol.1. 824 p.

Nefediev P.S. 2002. [The fauna and ecology of myriapods (Myriapoda) of a relict lime grove (village of Kuzedeyevo)] // Student i nauchno-tekhnicheskii progress: Biologiya. Materialy XL Mezhdunarodnoi nauchnoi studencheskoi konferentsii. Novosibirsk: Novosibirsk State University Publ. P.35 [in Russian].

Nefediev P.S., Farzalieva G.Sh. 2020. New records of lithobiid centipedes from Siberia, Russia (Chilopoda: Lithobiomorpha: Lithobiidae) // Arthropoda Selecta. Vol.29. No.2. P.185–198.

Nefediev P.S., Farzalieva G.Sh., Efimov D.A. 2020a. New data on lithobiomorph centipedes (Chilopoda, Lithobiomorpha) from anthropogenic habitats of Siberia // Far Eastern Entomologist. No.418. P.9–14. https://doi.org/10.25221/fee.418.2.

Nefediev P.S., Farzalieva G.Sh., Tuf I.H. 2017a. A preliminary review of the fauna of the Altai State Nature Biosphere Reserve, southwestern Siberia, Russia (Chilopoda: Lithobiomorpha, Geophilomorpha) //Arthropoda Selecta. Vol.26. No.3. P.217–224.

Nefediev P.S., Farzalieva G.Sh., Tuf I.H., Efimov D.A. 2020b. The first records of lithobiid centipedes (Chilopoda: Lithobiomorpha: Lithobiidae) from the Kemerovo Area, southwestern Siberia, Russia // Invertebrate Zoology. Vol.17. No.1. P.36–43.

Nefediev P.S., Farzalieva G.Sh., Tuf I.H., Nedoev Kh.Kh., Niyazov S.T. 2018. Millipede and centipede assemblages on the northern and southern slopes of the lowland Altais, southwestern Siberia, Russia (Diplopoda, Chilopoda) // P. Stoev, G.D. Edgecombe (eds.). Proceedings of the 17th International Congress of Myriapodology, Krabi, Thailand. ZooKeys. Vol.741. P.219–254.

Nefediev P.S., Knyazev S.Yu., Farzalieva G.Sh., Tuf I.H. 2017b. A contribution to the myriapod fauna of the Omsk Area, Siberia, Russia (Myriapoda: Diplopoda, Chilopoda) // Arthropoda Selecta. Vol.26. No.2. P.113–118.

Nefediev P.S., Tuf I.H., Farzalieva G.Sh. 2016. Centipedes from urban areas in southwestern Siberia, Russia (Chilopoda). Part 1. Lithobiomorpha // Arthropoda Selecta. Vol.25. No.3. P.257–266.

Newport G. 1844. A list of the species of Myriapoda, order Chilopoda, contained in the cabinets of the British Museum, with synoptic descriptions of forty-seven new species // Annals and Magazine of Natural History. Vol.13. P.94–101.

Poloczek A., Pfeiffer M., Schneider R., Müchlenberg M. 2016. The Chilopoda (Myriapoda) of the Khentey-Mountain Range, Northern Mongolia. Communities of different forest-types under a varying fire regime // European Journal of Soil Biology. Vol.74. P.114–120.

Poloczek A., Pfeiffer M., Schneider R., Muehlenberg M., Nefediev P. 2017. The myriapods (Chilopoda and Diplopoda) of the Khentey-Mountain Range. Communities from different forest-types under a varying fire regime // B. Bayartogtokh, Ch. Dulamsuren (eds.). Abstracts of the International Conference on "Biodiversity research of Mongolia", Ulaanbaatar, Mongolia. Ulaanbaatar: National University of Mongolia Press. P.35–36.

Poloczek A., Nefediev P.S., Pfeiffer M. 2021. Centipedes and millipedes (Chilopoda, Diplopoda) of the Khentey Mountain Range, northern Mongolia // Erforschung biologischer Ressourcen der Mongolei (Halle/Saale). Bd.14. P.317–327.

Porath C.O. von. 1871. Myriopoda Africæ australis in Museo Regio Holmiensi asservata, recensuit. Pars I. Chilopoda // Öfversigt af Kongliga Vetenskops-Akademiens Förhandlingar. Årg.28. No.9. P.1135–1167.

Qiao P., Qin W., Ma H., Zhang T. 2019. Two new species of lithobiid centipedes and the first record of *Lamyctes africanus* Porath (Chilopoda: Lithobiomorpha) in China // Journal of Natural History. Vol.53. Iss.15–16. P.897–921. https://dx.doi.org/10.1080/00222933.2019.1606355.

Sergeeva E.V. 2010. [Species diversity of centipedes (Chilopoda) in the southern taiga subzone of Western Siberia] // Proceedings of the All-Russian scientific and practical conference "Scientific Tobolsk – 2010". Tobolsk. P.37–39 [in Russian].

Sergeeva E.V. 2013. [Biotopic distribution and number of centipedes (Chilopoda) in Irtysh valley of West Siberia, Russia] // Euroasian Entomological Journal. Vol.12. No.6. P.529–533 [in Russian, with English summary].

Simpson A., Sellers E., Pagad S. 2023. Global Register of Introduced and Invasive Species – Hawaii, United States (ver.2.0, 2022). Invasive Species Specialist Group ISSG. Checklist dataset https://doi.org/10.5066/p9kfftod accessed via GBIF.org on 2024-07-15.

Stoev P., Zapparoli M., Golovatch S., Enghoff H., Akkari N., Barber A. 2010. Myriapods (Myriapoda). Chapter 7.2. // A. Roques *et al.* (eds.). Alien terrestrial arthropods of Europe. BioRisk. Vol.4. No.1. P.97–130. https://doi.org/10.3897/biorisk.4.51.

Stuxberg A. 1876a. Myriopoder från Sibirien och Waigatsch ön samlade under Nordenskiöldska expeditionen 1875 // Öfversigt af Kongliga Vetenskaps-Akademiens Förhandlingar. Årg.33. No.2. S.11–38.

Stuxberg A. 1876b. On the Myriopoda, from Siberia and Waigatsch Island, collected during the expedition of Prof. Nordenskiöld, 1875 // Annals and Magazine of Natural History. Ser.4. Vol.17. P.306–318.

Tuf I.H. 2007. [Diversity of selected taxa of invertebrates in the Altai (East Kazakhstan)] // Modern approaches to biodiversity protection in the context of steady development achievement of the Republic of Kazakhstan. Proceedings of the International Kazakh-Czech Scientific Conference, Ust-Kamenogorsk. P.56–64 [in Czech, with English summary].

Tuf I.H., Dányi L., Kuda F., Chlachula J. 2010. Centipedes of Kazakhstan – new records from Altai // High Mountain Soils Biodiversity. Tbilisi. P.11–12.

Zalesskaja N.T. 1978. [Identification book of the lithobiomorph centipedes of the USSR]. Moscow: Nauka Publ. 212 p. [In Russian]

Responsible editor K.G. Mikhailov