

UDC 595.624

Nefediev P.S.¹, Tuf I.H.², Dyachkov Yu.V.¹, Efimov D.A.³

FIRST RECORD OF SCUTIGERA COLEOPTRATA (LINNAEUS, 1758) IN THE SOUTH OF WESTERN SIBERIA, RUSSIA (CHILOPODA: SCUTIGEROMORPHA: SCUTIGERIDAE)

¹Altai State University, Lenina Avenue, 61, Barnaul 656049, Russia.

E-mail: p.nefediev@mail.ru

²Palacký University, Šlechtitelů 27, Olomouc 77900, Czech Republic.

E-mail: <u>ivan.tuf@upol.cz</u>

³Kemerovo State University, Krasnaya Street, 6, Kemerovo 650043, Russia.

E-mail: efim d@mail.ru

The order, family, genus and species of the house centipede are new to Asian Russia's list: Scutigeromorpha, Scutigeridae, Scutigera Lamark, 1801, and Scutigera coleoptrata (Linnaeus, 1758). All records of the species in the south of western Siberia appear to be associated with synanthropic habitats. Distributional remarks are provided, all currently reported findings being mapped as well.

Key words: house centipede, Scutigera coleoptrata, Scutigeridae, Scutigeromorpha, anthropochore, faunistics, introduction, Siberia.

INTRODUCTION

The centipede fauna of Siberia is very poorly-studied. All former research has been devoted to Lithobiomorpha and Geophilomorpha in natural habitats. Investigating anthropogenic habitats in the south of western Siberia, we have currently found the house centipede *Scutigera coleoptrata* (Linnaeus, 1758). Both the order Scutigeromorpha, and the family Scutigeridae it belongs to, are almost worldwide, distributed in all continents, on all major islands and many oceanic islands with the exception of Antarctica, and many records refer to introduced populations of *Scutigera coleoptrata* (Bonato & Zapparoli, 2011).

The samples treated below have been deposited in the collection of the Altai State University, Barnaul, Russia (ASU).

RESULTS

SCUTIGEROMORPHA Pocock, 1895 **SCUTIGERIDAE** Gervais, 1837 *Scutigera coleoptrata* (Linnaeus, 1758)



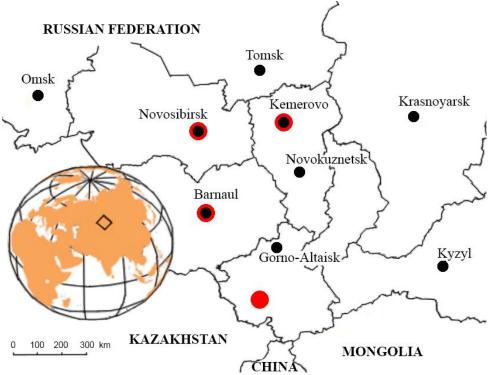


Fig. 1. Distribution map of *Scutigera coleoptrata* (red circle) in the south of western Siberia.

Material examined: 1 male (ASU), Russia, southwestern Siberia, Kemerovo Area, Kemerovo, inside apartment, September 2000, leg. D.A. Efimov; 1 female, 1 juv. (ASU), Russia, southwestern Siberia, Altai Province, Barnaul, "Edelveis" Park, summer 2013, leg. V.M. Mamina; 2 males (ASU), same Province, Barnaul, Vlasikha, under bricks, summer 2013, leg. V.M. Mamina; 4 males, 2 females, 1 juv. (ASU), same Province, Barnaul, inside house, summer 2013, leg. V.M. Mamina; 3 juv. (ASU), same Province, Barnaul, M.A. Lisavenko Research Institute for Horticulture of Siberia, heated hothouse, 16.06.2015, leg. P.S. Nefediev; 1 male (ASU), same Province, Barnaul, JSC "Dekorativnye kultury", seedling hothouse № 10, 26.12.2014, leg. V.M. Mamina; 1 male (ASU), same Province, Barnaul, Altai State University, basement, March-April 2016, leg. D.A. Durnikin; 2 males (ASU), same Province, Barnaul, inside house, 24.04.2016, leg. L.S. Snigireva; 1 female (ASU), Russia, southwestern Siberia, Republic of Altai, Ust-Koksa District, Amur, old sawmill, 22.07.2014, leg. A.A. Streltsova.

Distribution: being indigenous to the Turano-Mediterranean region, *S. coleoptrata* inhabits originally Gibraltar, mainland Portugal and Spain, mainland France including Corsica and mainland Italy including Sardinia and Sicily, Malta, San Marino, Monaco, mainland Greece including islands, Cyprus, Albania, Slovenia,

Macedonia, Serbia, Croatia, Montenegro, Bosnia and Hercegovina, Bulgaria, Hungary, Romania, Ukraine, Azerbaijan, Georgia, European Russia (Ulyanovsk and Penza areas, Stavropol Province), Turkey, Syria, Lebanon, Palestine, Israel, Jordan, Iraq, Iran, Turkmenistan, as well as Morocco, Algeria, Tunisia, Libya and Egypt. Its distribution in surrounding countries is probably connected with man, being introduced into the Canary Islands, the Balearic Islands, the Azores, the Savage Islands, Madeira, the Cape Verde Islands, Finland, Estonia, Denmark, Great Britain including the Channel Islands, Germany, Austria, Czech Republic, Slovakia and Switzerland.

Also introduced to Afrotropic ecozone (Cameroon, Saint Helena Island, Angola, Kenya, Tanzania, Malawi, Mozambique, Zimbabwe, South Africa), East of Palearctic ecozone (Japan and South Korea), Indo-Malayan ecozone (Taiwan and Vietnam), Australasian ecozone (Australia including Tasmania, New Zealand), Nearctic ecozone (Bermuda's St. David's Island, USA and Canada) and Neotropical ecozone (Mexico, Guatemala, Uruguay, Argentina and Chile); doubtfully present in Andorra, Liechtenstein, Vatican City and central European Russia (Lewis, 1981; Stoev & Geoffroy, 2004; Farzalieva, 2008; Faúndez, 2011; Zapparoli, 2013; Volkova, 2014; Zuev, 2016).

Remarks: the species is recorded for the first time in the south of western Siberia as well as in the Asian part of Russia. *Scutigera coleoptrata* is a strictly synanthropic species, being most common indoors in the city of Barnaul (Altai Province), the city of Kemerovo (Kemerovo Area), and the village of Amur (Republic of Altai), but very rare in a city park. The house centipede is also recently found in the Novosibirsk Area near the Novosibirsk State Pedagogical University in the city of Novosibirsk (A.A. Fomichev, pers. comm.), and also inside an apartment and garages in Sorokino, suburbs of the city of Biysk, Altai Province.

CONCLUSIONS

Both the genus *Scutigera* Lamark, 1801 and *S. coleoptrata* (Linnaeus, 1758), as well as the family Scutigeridae and the order Scutigeromorpha they belong to, are currently reported in the south of western Siberia for the first time. Present records of *S. coleoptrata* in several synanthropic and semi-anthropogenic habitats in the years 2000 and 2013-16, as well as the presence of both sexes and juveniles, suggest that populations of *S. coleoptrata* are established in studied localities.

ACKNOWLEDGEMENTS

We are most grateful to Dr. Gregory Edgecombe (Natural History Museum, London, UK) who kindly edited the English of an advanced draft. We are also thankful to Dr. Vladimir Usenko (Barnaul, Russia), Director of the M.A. Lisavenko Research Institute for Horticulture of Siberia, who allowed the first author to collect

material inside and outside hothouses of his institution. Our deepest gratitude extends to all collectors who donated us their materials for the present study.

REFERENCES

- Bonato, L. & Zapparoli, M. (2011). Chilopoda Geographical distribution. *In*: Minelli A. (ed.). *Treatise on zoology anatomy, taxonomy, biology. The Myriapoda. Volume*1. Leiden-Boston, Brill, 327-337.
- Farzalieva, G.Sh. (2008). The fauna and chorology of Myriapoda from the Urals and Cisuralia. Thesis of Candidate (Ph.D.) of Biological Sci. Degree. Perm. 189 p. (in Russian).
- Faúndez, E.I. (2011). On the presence of *Scutigera coleoptrata* (Linnaeus, 1758) (Chilopoda: Scutigeromorpha: Scutigeridae) in the Metropolitan Region, Chile. *Boletín de la Sociedad Entomológica Aragonesa*, 49, 336.
- Lewis, J.G.E. (1981). *The Biology of Centipedes*. Cambridge-New York, Cambridge University Press, 476 p.
- Stoev, P. & Geoffroy, J.-J. (2004). An annotated catalogue of the scutigeromorph centipedes in the collection of the Muséum National d'Histoire Naturelle, Paris (France) (Chilopoda: Scutigeromorpha). *Zootaxa*, 635, 1-12.
- Volkova, Yu.S. (2014). The fauna of predatory myriapods (Chilopoda) of the Ulyanovsk Area. *Nature of the Simbirsk Volga Region*. Ulyanovsk, 15, 95-103 (in Russian).

432 Біологічний вісник



Zapparoli, M. (2013). Fauna Europaea: Scutigeridae // Fauna Europaea, version 2.6.

Available online at http://www.fauna-eu.org (accessed 25 April 2016).

Zuev, R.V. (2016). Centipedes (Chilopoda) from the Stavropol Territory, northern Caucasus, Russia. *Arthropoda Selecta*, 25(1), 23-38.

Поступила в редакцию 25.02.2016

Как цитировать:

Nefediev, P.S., Tuf, I.H., Dyachkov, Yu.V., Efimov, D.A. (2016). First record of *Scutigera coleoptrata* (Linnaeus, 1758) in the South of Western Siberia, Russia (Chilopoda: Scutigeromorpha: Scutigeridae). *Biological Bulletin of Bogdan Chmelnitskiy Melitopol State Pedagogical University*. 6 (1), 428-432.

crossref http://dx.doi.org/10.15421/201626

© Nefediev, Tuf, Dyachkov, Efimov, 2016

Users are permitted to copy, use, distribute, transmit, and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship.



This work is licensed under a Creative Commons Attribution 3.0 License