

Thereuoneminae Verhoeff, 1905 (Chilopoda: Scutigermorpha: Scutigeridae), a new subfamily for the Russian fauna

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Abstract

Thereuonema tuberculata (Wood, 1862), genus *Thereuonema* Verhoeff, 1904, and subfamily Thereuoneminae Verhoeff, 1905 are recorded from Russia for the first time. A distribution map and illustrations are provided.

Keywords

Biodiversity, fauna, Maritime Territory, new records, Russian Far East

Introduction

The family Scutigeridae Leach, 1814 contains two subfamilies: Scutigerinae Leach, 1814 and Thereuoneminae Verhoeff, 1905 (Edgecombe 2011). The first one is represented by *Scutigera coleoptrata* (Linnaeus, 1758) in Russia (Sseliwanoff 1884; Muralewicz 1929; Nefediev et al. 2016; Zuev 2016; Zuev, Evsyukov 2016), while the latter subfamily has never been recorded. The present paper provides the first record of a member of Thereuoneminae, *Thereuonema tuberculata* (Wood, 1862), from Russia.

Material and methods

The material was collected by Yu.V. Dyachkov; specimens were taken by hand, preserved in 70% ethanol, and deposited in ASU (see abbreviations below).

The taxonomy follows Edgecombe (2011). Localities were mapped with SimpleMappr (Shorthouse 2010).

The specimens were examined with an Olympus SZX16 stereo microscope and an Olympus BX51 microscope; photographs were taken using an Olympus DP74 or Olympus XC50 digital cameras. Tergite, gonopods, and legs were mounted in permanent slides using euparal.

Abbreviations: ASU – Altai State University (Barnaul, Russia), juv. – juvenile.

Results

Family Scutigeridae Leach, 1814

Subfamily Thereuoneminae Verhoeff, 1905

Genus *Thereuonema* Verhoeff, 1904

Thereuonema tuberculata (Wood, 1862)

Figures 1–8

Material. 1♀ (ASU No. 508), 10♂♂, (ASU No. 509), 1♀ (ASU No. 510), 1♂ (ASU No. 512), 5♀♀, 3 juv. ♀♀ (ASU No. 513), 1♀ (ASU No. 514), 1♀ (ASU No. 515), Russia, Maritime Territory, Khasansky District, 8 km NE from Khasan (urban-type settlement), Golubiniy Utes Mt., N42°24'35", E130°44'59", 15–20 m, in grass, under stones, 14–17 July 2022.

Distribution. Eastern China (incl. Taiwan), Korean Peninsula, Japan (Würmli 1975; Stoev, Geoffroy 2004; Dunlop et al. 2017), and Russia (new); introduced to Great Britain (Barber 2011) and North America (Reeves, Miller 2022).

Remarks. Based on molecular data, Yang et al. (2022) hypothesized that cryptic species could exist in *T. tuberculata*. Therefore, the identity of specimens from Russia should be clarified by molecular analysis.

This species, genus *Thereuonema*, and subfamily Thereuoneminae are recorded from Russia for the first time.

Conclusions

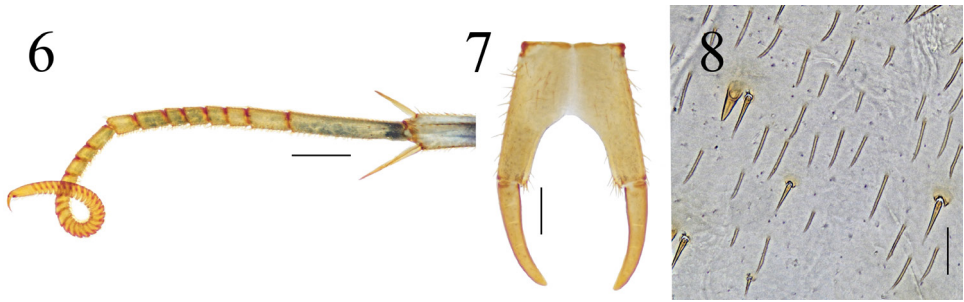
To date, at least two species from the family Scutigeridae are known to occur in Russia: *Scutigera coleoptrata* (subfamily Scutigerinae) and *Thereuonema tuberculata* (subfamily Thereuoneminae).



Figure 1. Distribution of *Thereuonema tuberculata* (Wood, 1862) in Russia.



Figures 2–5. *Thereuonema tuberculata* (Wood, 1862), dorsal view (2, 3 – male, ASU No. 512; 4, 5 – female, ASU No. 508): **2** – habitus of male; **3** – head of male, **4** – head of female, **5** – habitus of female. Scale: 2 mm (2, 5), 0.5 mm (3–4).



Figures 6–8. *Thereuonema tuberculata* (Wood, 1862) (female, ASU No. 514): **6** – tarsus of leg 10, lateral view; **7** – gonopods, ventral view; **8** – surface of stomatotergite 7, dorsal view. Scale: 0.5 mm (6), 0.2 mm (7), 0.05 mm (8).

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