

First record of round fungus beetle *Leiodes shigehisai* Hoshina, 2012 (Coleoptera: Leiodidae) from Russia

Первая находка жука-лейодида *Leiodes shigehisai* Hoshina, 2012 (Coleoptera: Leiodidae) из России

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Key words: Beetle, new record, Kamchatka, Japan, Russian Far East.

Ключевые слова: Дальний Восток России, новая находка, жесткокрылые, Камчатка, Япония.

Abstract. A leiodid beetle species *Leiodes shigehisai* Hoshina, 2012 (Coleoptera: Leiodidae), previously known only from the Hokkaido Island, Japan, is recorded for the Russian Far East the first time. The new record extends distribution of the species more than 1200 km northwards.

Резюме. Впервые для российского Дальнего Востока приводится вид жука-лейодида *Leiodes shigehisai* Hoshina, 2012 (Coleoptera: Leiodidae), ранее известного только с острова Хоккайдо в Японии. Новая находка расширяет ареал вида на север более чем на 1200 км.

Introduction

Beetles of the family Leiodidae Fleming, 1821 are one of the least studied monophyletic groups of polyphagous beetles of the series Staphyliniformia Latreille, 1797 (Leiodinae) is insufficiently studied both in some regions and in the Russian Federation as a whole. Genus *Leiodes* includes about 200 species [Newton, 1998] distributed worldwide (mainly in the northern hemisphere) and is the largest genus in the tribe Leiodini Fleming, 1821 [Hoshina, 2012]. Within the Palaearctic, the genus has more than 160 species [Perreau, 2015], and about 20 species from the Russian Far East [Daffner, 1983; Perkovsky, 1988, 1990; Lafer, 1989; Růžička, 2009]. In a last revision of the genus *Leiodes* for Japan and the North Chishima Islands, twenty-four new species were described [Hoshina, 2012]. One of these species has been newly registered for Russia.

Materials and methods

The genital samples were clarified in lactic acid for one day and, after removing excess membranes and tissues with dissecting needles, they were transferred to a clean portion of lactic acid for photography.

The photographs were made using a Leica MC170 HD digital camera mounted on a Leica M165C stereo-microscope and an Olympus DP23 6Mpx digital camera mounted on an Olympus CX43 compound microscope. The photos were processed and combined in Helicon Focus 7.7.4 and Zerene Stacker 1.04 software. Images are created using Inkscape software.

All specimens are deposited in the collection of the Papanin Institute for Biology of Inland Waters Russian Academy of Sciences, Borok, Yaroslavl'skaya Oblast, Russia (IBIW RAS).

The present work is registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:2AEF56E9-4EE5-4FC7-AA A3-D707547EB39D.

Results and discussion

Two males of *Leiodes shigehisai* Hoshina, 2012 were collected in the summer of 2017 from Kamchatskii Krai (Kronotskii Nature Reserve) by I. Kudryashov.

Leiodes shigehisai Hoshina, 2012

Figs 1–4.

Material. Russia: *Kamchatsky Krai*: 2♂♂ — Kronotsky Nature Reserve, Aerodrome cordon, 05–29.VIII.2017 I. Kudryashov leg.

Remarks. The species *Leiodes shigehisai* was described from Japan, Hokkaido, Mts. Daisetsu, Mikura-zawa [Hoshina, 2012] and was previously known only from Hokkaido Island [Hoshina, 2012; Perreau, 2015]. The new locality of *Leiodes shigehisai* is the first record of this species for the territory of Russia, and extends the range of *Leiodes shigehisai* by 1200 km to the north.

Unfortunately, there is no detailed information on the method of collecting *Leiodes shigehisai*. The cordon «Aerodrome» is located in the Kronotsko-Bogachevskaya tundra area on the banks of the Kronotskaya River. The biology of *Leiodes shigehisai* is also unknown, but the species, like many *Leiodes* species, seems to specialise in hypogeous fungi [Newton, 1984; Peck, 2001].



Figs 1–4. Details of morphology of *Leiodes shigehisai* Hoshina, 2012 male: dorsally (1, 3–4) and laterally (2). 1 — external appearance; 2, 3 — aedeagus; 4 — inner sac of the aedeagus. Scale bars: 1 — 1 mm, 2, 3 — 0.1 mm, 4 — 0.02 mm.

Рис. 1–4. Детали морфологии самца *Leiodes shigehisai* Hoshina, 2012: вид сверху (1, 3–4) и сбоку (2). 1 — внешний вид; 2, 3 — эдеагус; 4 — внутренний мешок эдеагуса. Масштаб: 1 — 1 мм, 2, 3 — 0,1 мм, 4 — 0,02 мм.

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