



First record of *Platypsyllus castoris* Ritsema, 1869 (Coleoptera: Leiodidae) from Siberia

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Abstract: Holarctic species *Platypsyllus castoris* Ritsema, 1869 previously noted in Palearctic only Europe and European part of Russia is found in Siberia (Russia, Altai Krai) for the first time. This species was collected on Eurasian beaver (*Castor fiber* Linnaeus, 1758).

Key words: beetles, Platypsyllinae, Russia, beaver, faunistic, new record

INTRODUCTION

Genus *Platypsyllus* Ritsema, 1869 (Leiodidae: Platypsyllinae) is represented by one Holarctic species – *Platypsyllus castoris* Ritsema, 1869. The beetles are ectoparasitic (as both adults and larvae) primary on the two species of beavers (*Castor fiber* Linnaeus, 1758 and *C. canadensis* Kuhl, 1820), less often of otters (*Lontra canadensis* (Schreber, 1777) and *Lutra lutra* (Linnaeus, 1758)), possibly other aquatic animals living near beaver lodges (Belfiore 2006, Peck 2006, Arzanov et al. 2013).

MATERIAL AND METHODS

The material has been collected by second author. All specimens were collected in a fur of hunted beavers (*Castor fiber*), and are stored in the Collection of aquatic invertebrates of the Papanin Institute for Biology of Inland Waters of the Russian Academy of Sciences (Yaroslavl Oblast, Borok, Russia, IBIW RAS) and F. Badaev personal collection (BPC).

Photography was taken using a stereomicroscope MC-5-ZOOM LED with ToupCam 10.0 MP CMOS camera. Photography enhanced by using Helicon Focus 7.6.4.

RESULTS

Family Leiodidae Fleming, 1821

Subfamily Platypsyllinae Ritsema, 1869

Genus *Platypsyllus* Ritsema, 1869

Platypsyllus castoris Ritsema, 1869

(Fig 1)

Material examined. Only adults: 1♂, 2♀♀, Russia: Western Siberia, Altai Krai, Kytmanovsky Distr., env. Sosnovy Log vill., Kamenka River, on beaver, 23 Aug 2019, coll. F. Budaev, IBIW RAS; 2♂♂, 5♀♀, same place, env. Staraya Taraba vill., Balakhcha River, on beaver, 27 July 2020, coll. F. Budaev, BPC.



Fig. 1. *Platypsyllus castoris* Ritsema, 1869, male from Sosnovy Log vill, dorsal view. Photo by A. Sazhnev.

Distribution. The species have Holarctic distribution. In North America species know from Canada, United States (Peck, 2006), in Palaearctic *Platypsyllus castoris* recorded for Europe (Belgium, Belarus, The Czech Republic, France, Germany, Latvia, The Netherlands, Norway, Poland, Slovakia, Sweden and Switzerland) (Perreau 2015) and the European part of Russia, where the species is known from Voronezh (Prokin & Kirejtshuk 2007), Rostov (Arzanov et al. 2013) and Saratov (Sazhnev et al. 2019) Oblasts.

COMMENTS

The species *Platypsyllus castoris* most likely dispersed between Eurasia and North America via the Bering land bridge together with the beaver (Repenning 1967). New records in the south of the European Russia and Siberia, may be indicate the restoration of the number and range of beavers and their ectoparasite such as *Platypsyllus castoris*. This species is expected to be found in Eastern Siberia and Russian Far East (including variant of invasion together with *Castor canadensis*).

ACKNOWLEDGEMENTS

The studies of the first author were carried out under the framework of the Russian state research project No. 121051100109-1.

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STRESZCZENIE

[Pierwsze stwierdzenie *Platypsyllus castoris* Ritsema, 1869 (Coleoptera: Leiodidae) z Siberii]

Holarctyczny gatunek *Platypsyllus castoris* Ritsema, 1869 – zewnętrzny pasożyt, żyjący głównie na futrze bobrów został znaleziony po raz pierwszy na Syberii (Rosja, Góry Ałtaju). Materiał został zebrany przez drugiego autora. Wszystkie okazy zostały zebrane z futra bobra europejskiego (*Castor fiber*). Nowe stwierdzenia z południa i europejskiej części Rosji oraz z Syberii mogą wskazywać na odnawianie się w liczbie i zasięgu bobra razem z jego ektoparazytem *Platypsyllus castoris*. Znalezienie tego gatunku jest spodziewane również we Wschodniej Syberii i na Dalekim Wschodzie Rosji.

Accepted: 5 June 2021