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Short communication

FIRST FINDING OF HETEROCERUS WOODRUFFI (PACHECO, 1975) (COLEOPTERA: HETEROCERIDAE) IN PERU

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Abstract

The first record of *Heterocerus woodruffi* Pacheco, 1975 (Coleoptera: Heteroceridae) in Peru is presented. The discovery raises the number of Heteroceridae species in the Peruvian fauna to six. *H. woodruffi* has since been recorded in Argentina, Bolivia, Brazil, Paraguay, and now in Peru. The article features images of the male *H. woodruffi* and its aedeagus.

KEY WORDS: Heterocerus woodruffi, Coleoptera, Peru

Introduction

The world fauna of the family Heteroceridae MacLeay, 1825 comprises 368 species (Sazhnev, 2023) from eight genera: *Augyles* Schiødte, 1866; *Elythomerus* Waterhouse, 1874; †*Excavotarsus* Li *et al.*, 2020; *Heterocerus* Fabricius, 1792; †*Heterocerites* Ponomarenko, 1986; *Micilus* Mulsant & Rey, 1872; *Tropicus* Pacheco, 1964, and *Haraia* García & Jiménez-Ramos, 2020 (King *et al.*, 2011; Sazhnev, 2023). Of these species, 364 are extant, and four are extinct. The extinct taxa are known from the Cretaceous deposits of Mongolia and China, as well as from the Burmite of Myanmar (Prokin, Ren, 2011; Li *et al.*, 2020). New taxa are described every year. Heterocerids inhabit the edges of various water bodies. Variegated mud-loving beetles are found worldwide, except for high mountains, some oceanic islands, deserts, bogs, high Arctic latitudes, and the Antarctic (Sazhnev, 2020). Adults and larvae that colonize the soft soils of contour biotopes dig an intricate network of tunnels and chambers in the substrate (Mascagni, 2015). As detritivores, Heteroceridae are involved in processing organic matter in detritus food webs, facilitating the transfer of energy and matter between aquatic and terrestrial environments (Sazhnev, 2018).

According to the available literature sources, five species of Heteroceridae are known for Peru (Skalický, 2009): Heterocerus steineri Skalický, 2006, Tropicus bartolozzii Mascagni, 1994, T. maxwelli Skalický, 2009, T. trifidus

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Skalický, 2007, and *T. westerduijni* Skalický, 2009. Among these, two species (*T. maxwelli* and *T. westerduijni*) were described from Peru (Skalický, 2009).

The studied material is deposited in the Zoological Institute of the Russian Academy of Sciences (ZISP RAS) (St. Petersburg, Russia). The species was identified according to the description by Pacheco (1975). The photographs were taken with a Leica MC170 HD digital camera mounted on a Leica M165C stereomicroscope (dorsal view of the habitus of the beetle) and an Olympus DP23 6Mpx digital camera mounted on an Olympus CX43 compound microscope (dorsal view of the aedeagus and spiculum gastrale).

Results

Family Heteroceridae MacLeay, 1825

Tribe Heterocerini MacLeay, 1825

Genus Heterocerus Fabricius, 1792

Heterocerus woodruffi (Pacheco, 1975) (Fig. 1)

Material examined

Peru, region of Loreto, Ucayali Province, 17 km north-northeast of the town of Contamana, Aguas Termales [Aguas Calientes Contamana, 7°13'03.6"S 74°57'06.1"W], 26 July-4 August 2013, one male, leg. N. J. Kluge (ZISP RAS).

Distribution

Argentina, Bolivia, Brazil, Paraguay (Pacheco, 1975; Skalický, 2021), and Peru (this paper).

The species *H. woodruffi* was described in Bolivia in 1975 and has since been recorded in Argentina, Bolivia, Brazil, Paraguay, and now in Peru. The new record brings the number of Heteroceridae in the Peruvian fauna to six.

Unfortunately, little is known about the biology of this species, which is probably confined to river valleys. However, it is noteworthy that the habitus of *H. woodruffi* from Peru is identical to that of *Heterocerus meridianus* (Pacheco, 1975), described by Pacheco 1975. from Brazil. This raises the question: could the images (or parts of them) for these two *Heterocerus* species have been mixed up?

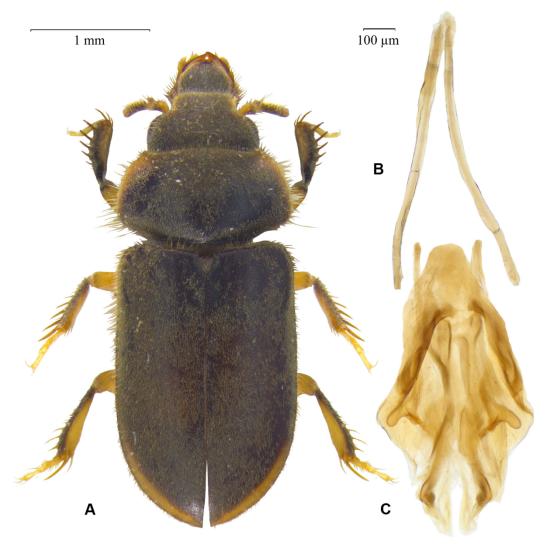


Figure 1. Heterocerus woodruffi (Pacheco, 1975) male from Peru: A) habitus, dorsal view, B) spiculum gastrale, dorsal view, C) aedeagus, dorsal view.

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ПРВИ НАЛАЗ HETEROCERUS WOODRUFFI (PACHECO, 1975) (COLEOPTERA: HETEROCERIDAE) У ПЕРУУ

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Извод

У овом раду објављен је први налаз врсте *Heterocerus woodruffi* Pacheco, 1975 (Coleoptera: Heteroceridae) у Перуу. Овај налаз повећава број врста фамилије Heteroceridae у перуанској фауни на шест. *H. woodruffi* је раније забележен у Аргентини, Боливији, Бразилу, Парагвају, а сада и у Перуу.

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