

## GEORISSUS SUBSTRIATUS HEER, 1841 (COLEOPTERA: GEORISSIDAE) IN THE IBERIAN PENINSULA; RECTIFICATION THE RECORDS FROM PORTUGAL

Шатровський, О. Г. *Georissus substriatus* Heer, 1841 (Coleoptera: Georissidae) на Піренейському півострові; уточнення даних із Португалії. *Вісник Харківського ентомологічного товариства*. 2025. Т. XXXIII, вип. 1–2. С. 5–7. DOI: 10.36016/KhESG-2025-33-1-2-1.

*Georissus substriatus* уперше наводиться для Іспанії за уточненими даними. Для Португалії приведено нове місцезнаходження за даними перевизначення екземпляру з колекції Мануеля Паоліно де Олівейра (Університет Коїмбри). Надається огляд загального поширення виду та наведена мапа. 4 рис., 14 назв

**Ключові слова:** Coleoptera, Hydrophiloidea, Georissidae, мулонощі, *Georissus substriatus*, Паоліно Олівейра, Піренейський півострів, Іспанія, Португалія.

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*Georissus substriatus* is recorded for the first time for Spain, according to revised data, for Portugal is given new locality, according to re-identification of the specimen from the collection of Manuel Paolino de Oliveira (University of Coimbra). An overview of the general distribution of the species is given and a map is provided. 4 figs, 14 refs.

**Keywords:** Coleoptera, Hydrophiloidea, Georissidae, minute mud-loving beetles, *Georissus substriatus*, Paolino Oliveira, Iberian Peninsula, Spain, Portugal.

**Introduction.** The species of the family of minute mud-loving beetles (Georissidae) are quite rare in collections because of requiring special methods of collecting. Their imagines (average about 1.5 mm length) live on damp soil along the banks of the wetlands. They cover themselves with sand particles and are therefore distinguishable only when moving. They can fly to light. Adults are saprophagous. Larvae live in the same biotopes but are predators (Fikáček, Trávníček, 2009).

The world fauna comprises 80 species (Short, Fikáček, 2011), of which 24 are known from Palearctic; in the West Europe there are 5 species (Przewoźny, 2022).

A world overview of the genus *Georissus* was given by Hebauer (2004). However, the data on the distribution of species for today are presented unevenly: Central Europe is studied better than its South and East parts and especially than the Asiatic part of Palearctic. For Portugal, the first data on *Georissus* are known from the Catalogue of Beetles of the country (Oliveira, [1887]). In this catalogue two species of the genus *Georissus* are mentioned: *G. crenulatus* (P. Rossi, 1794) (under the name of the junior synonym *G. pygmaeus* (Fabricius, 1798)) and *G. costatus* Laporte, 1840.

**Material and methods.** The specimen of *G. substriatus* Heer, 1841 was found by me in the collection of Manuel Paolino de Oliveira, stored in the Science Museum of the University of Coimbra (SMUC).

The general distribution of the species was retrieved in general from the data of Mascagni (2008) and from the base of the Global Biodiversity Information Facility (GBIF, 2025). The proposed distributional map (Fig. 1) is created with the software Google Maps.

Macrophotography of the specimen (Figs 2–4) was done with a Leica Z6 APO microscope in the National Museum of Natural History and Science in Lisbon (MNHNC). The images were taken and stacked using Microscope Software Platform Leica Application Suite X 5.20.26130 and corrected in Photoshop CC2017.0.0 software.

**Results and discussion.** Most distributional data of *G. substriatus* are available from Central Europe: Switzerland (Cosandey, Chittaro, Sanchez, 2023), Hungary (Merkl, 2006), Germany (Köhler *et al.*, 2019). Most of these records and one point from Austria are included in the base of Global Biodiversity Information Facility (GBIF, 2025). In the Mediterranean, there is information from various localities: the Balkan Peninsula (Brojer, 2023), Bulgaria (Guéorguiev, Ljubomirov, 2009), Italy (Mascagni, 2006), Portugal (Quelluz) and Morocco (Mascagni, 2008). The cited above Catalogue of Hydrophiloidea of Palearctic contains as the countries of distribution of *G. substriatus* also Romania and Greece; Portugal and Morocco were not included there.

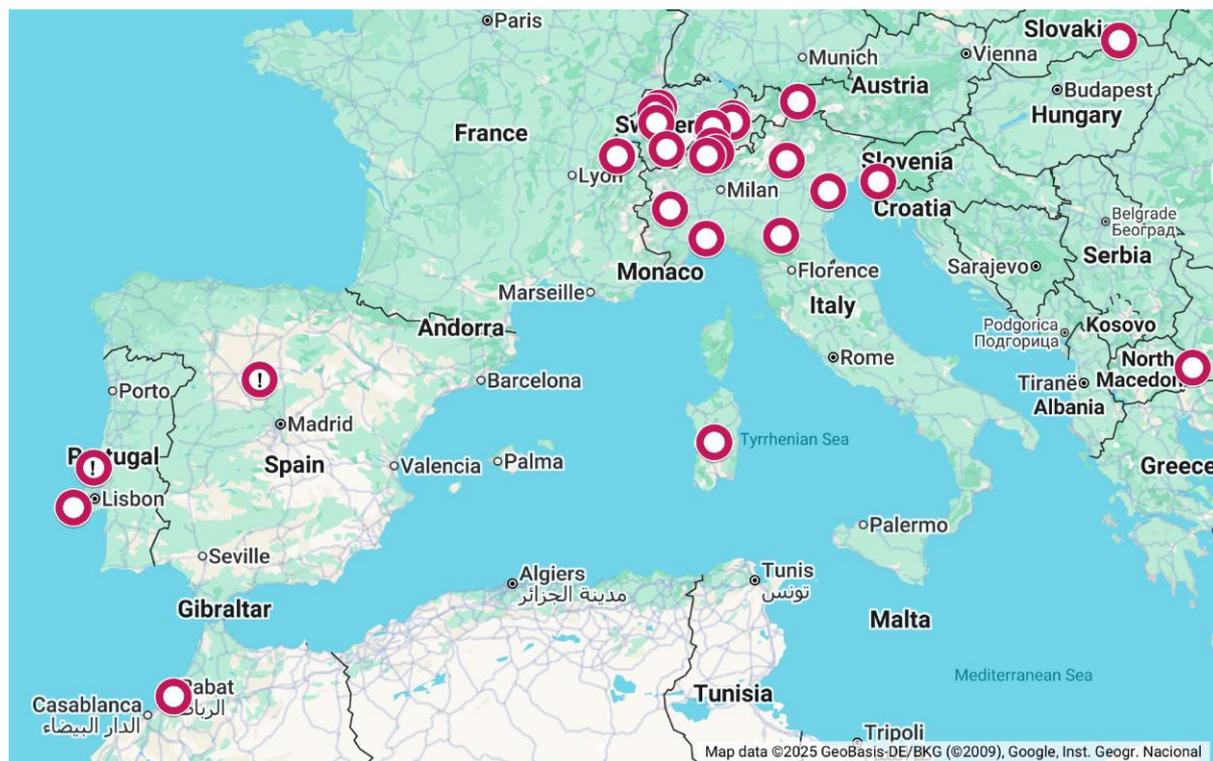
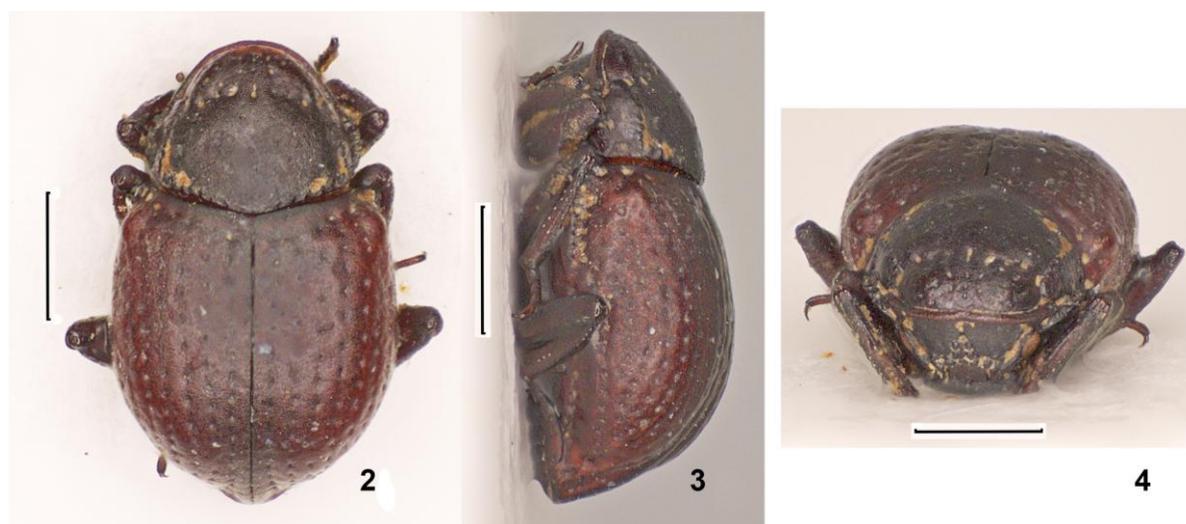


Fig. 1. Locations of *Georissus substriatus*: data from the Iberian Peninsula marked with ‘!’ are presented for the first time.



Figs. 2–4. *Georissus substriatus* from P. Oliveira’s collection: 2 — dorsal view, 3 — lateral view, 4 — frontal view. Scale bar = 0.5 mm.

One locality in the GBIF base without given coordinates is written as ‘Portugal: Lusitania: Quellar, locality: Cuéllar’ (Wanat, Stefaniak, 2025). But in fact, this is the place of the Spanish municipality Cuéllar (41°24’3”N, 4°18’49”W) in the province of Segovia. The specimen is stored in Richard Scholz’s collection in the Museum of Natural History of Wrocław University (Poland). It is dated as May 1910 and was probably collected by A. Schatzmayr. This is the first record of the species for the Spain.

All specific records of *G. substriatus* and the new ones are mapped (Fig. 1). Most of the known places are confined to foothill and mountainous areas. In Bulgaria it was found only at an altitude of 600–1,000 m in July–August (Guéorguiev, Ljubomirov, 2009).

The specimens very similar to *G. substriatus* have been collected in Kyrgyzstan (Litovkin, 2019), but the author of the article himself has doubts about their belonging to this species at this stage of research, due to the significant gap from other known localities.

## Family GEORISSIDAE Laporte, 1840

### Genus *Georissus* Latreille, 1809

#### *Georissus substriatus* Heer, 1841

**Material.** Portugal, Coimbra, VIII. 1882 (Oliveira) — 1 spec. (SMUC, inventory number 1513), defined by Oliveira as *G. pygmaeus* (Figs 2–4).

**Conclusions.** *Georissus substriatus* is recorded for the first time from Spain — according to revised data, for Portugal — is mentioned new locality according to re-identification of the specimen from the collection of Paolino Oliveira.

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