

## NOTE

**The Mediterranean ant cricket**  
***Myrmecophilus myrmecophilus* (Savi, 1819), new species**  
**for Portugal (Orthoptera: Myrmecophilidae)**

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**Abstract**

The first record of *Myrmecophilus myrmecophilus* (Savi, 1819) in the Iberian Peninsula is documented, based on a specimen collected in Lisbon in 1841. This finding also represents the first citation of the genus *Myrmecophilus* Berthold, 1827 in Portugal.

**Key words:** *Myrmecophilus myrmecophilus*, Portugal, Iberian Peninsula, historical record.

**Resumen**

***El grillo hormiguero mediterráneo Myrmecophilus myrmecophilus (Savi, 1819), nueva especie para Portugal (Orthoptera: Myrmecophilidae)***

Se documenta el primer registro de *Myrmecophilus myrmecophilus* (Savi, 1819) en la Península Ibérica, a partir de un ejemplar recolectado en Lisboa en 1841. Este hallazgo representa también la primera cita del género *Myrmecophilus* Berthold, 1827 en Portugal.

**Palabras clave:** *Myrmecophilus myrmecophilus*, Portugal, Península Ibérica, registro histórico.

**Laburpena**

***Myrmecophilus myrmecophilus (Savi, 1819) kilker inurrizale mediterranea, espezie berria Portugalerako (Orthoptera: Myrmecophilidae)***

*Myrmecophilus myrmecophilus* (Savi, 1819)-ren Iberiar Penintsularako lehenengo aipua jasotzen da, Lisboaan 1841ean harrapatutako ale batean oinarrituta. Aurkikuntza hau ere bada *Myrmecophilus* Berthold, 1827 generoarean Portugalerako lehenengo aipua.

**Gako-hitzak:** *Myrmecophilus myrmecophilus*, Portugal, Iberiar Penintsula, aipu historikoa.

The myrmecophilous genus *Myrmecophilus* Berthold, 1827 is represented in the Iberian Peninsula by three species (Fig. 1): *M. fuscus* Stalling, 2013, which was recently found in three very distant population groups in Madrid, Catalonia and on the Island of Mallorca (Stalling, 2013); *M. acervorum* (Panzer, [1799]), in the

Barcelona region (Espadaler and Olmo-Vidal, 2011; Stalling *et al.*, 2015); and *M. ochraceus* Fischer, 1853, which is widely distributed in the south of the Iberian Peninsula, mainly from Valencia to Cadiz (Gorochoy and Llorente, 2001). However, due to the wide distribution of *M. fuscus*, the identity of the specimens

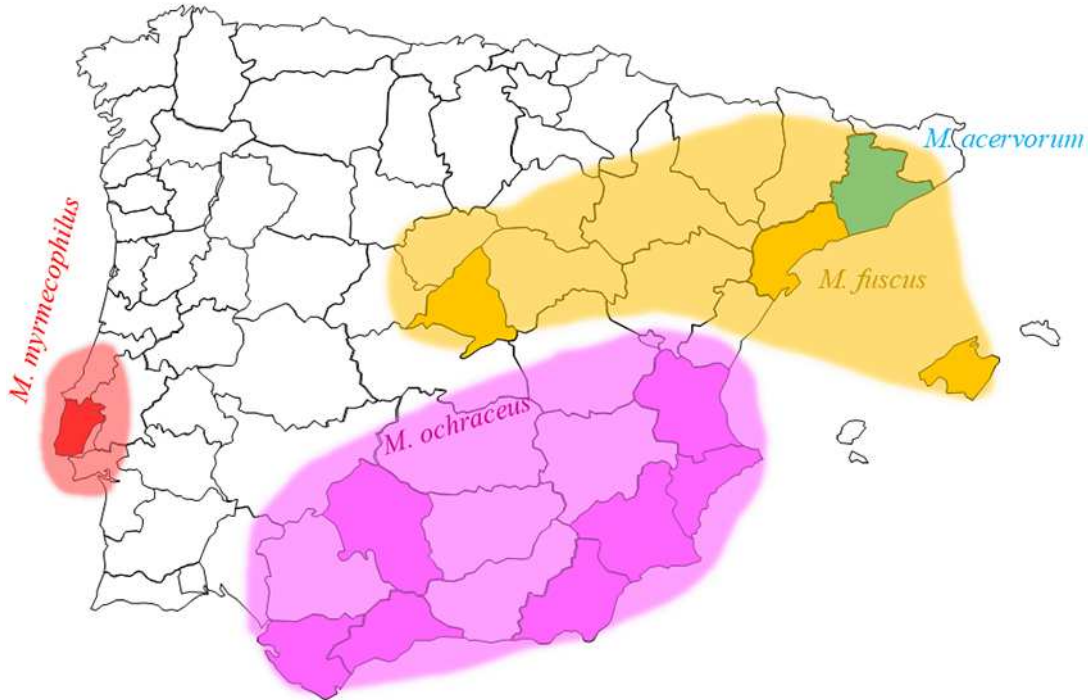


FIGURE 1. Current distribution of all published records of known species of the genus *Myrmecophilus* in the Iberian Peninsula and the Balearic Islands.

located in Valencia might have to be re-evaluated. *Myrmecophilus myrmecophilus* (Savi, 1819) is widespread in the northeastern Mediterranean, presently known from mainland France and Corsica (Braud *et al.*, 2016), mainland Italy (Baccetti, 1966) and Sardinia (Stalling, 2016), Croatia (Skejo *et al.*, 2018), Bulgaria (unpublished data) and Greece (Willemse *et al.*, 2018). An up-to-date overview of the occurrence of ant crickets in Spain is provided by Logachev (2024). So far there are no records of ant crickets in Portugal.

In February 2025, during a visit to the Naturhistoriska Riksmuseet (Stockholm, Sweden), the first author reviewed the Orthoptera collection and found an adult female individual of *Myrmecophilus* (Fig. 2) with three unique labels indicating the location and the name of the collector. The typescript said «Lusit.» and «Rosenschöld.» and the collection code «NRM-ORTH0012158».

The specimen was identified to species using the criteria described by Stalling and Birrer (2013) and, in addition, it was compared with specimens of all the European *Myrmecophilus* species from the collection of the second author. The pronotum and tergites of the specimen are densely covered with inclined, distant, and relatively long hairs. The entire body is pale brown. Due to the way the specimen has been preserved, the subgenital plate could not be observed completely, but its edge is clearly flat, without any emargination. The coloration, the hair and the subgenital plate clearly show the typical characteristics of *M. myrmecophilus*.

The origin of the specimen and the interpretation of the label are not immediately clear and required thorough research into the history of the collector. The museum's collection includes some of the material collected by the Swedish naturalist Eberhard Munck af Rosenschöld. All this material retains two

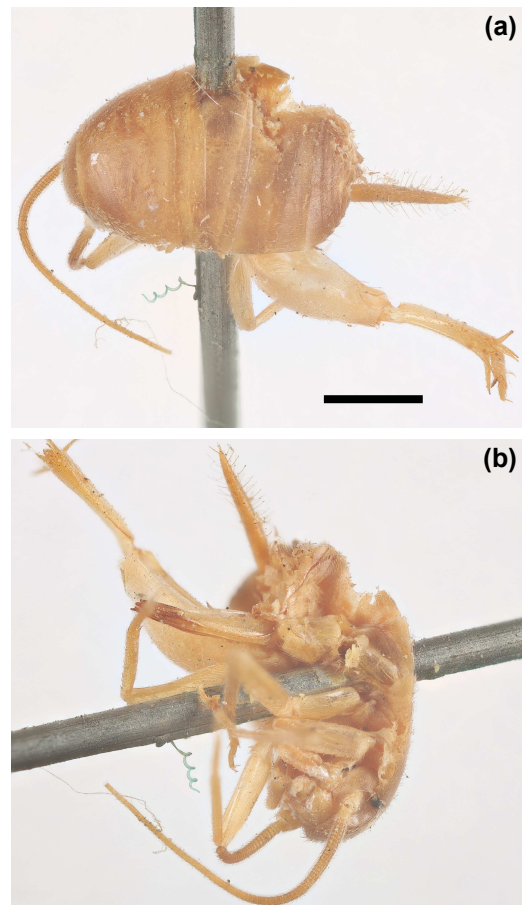
unique labels indicating the location and the name of the collector, written in typescript «Lusit.» and «Rosenschöld». After identifying all the material with this same labeling, there were found many young nymphs of *Gryllus bimaculatus*, *G. campestris*, *Sciobia lusitanica*, and two adults of non-Orthoptera insects: *Enoplop bos* (a hemipteran) and *Liopteris atriceps* (a water beetle). After reviewing all the material, only one *Sciobia lusitanica* nymph had another different label, «Lisbon 19.2.41». This individual does not have the typescript label that said «Lusit.».

In 1840, Eberhard Munck af Rosenschöld accepted a position as a doctor on the Oxehufvud expedition (1840–1841), and later, in 1843, he settled in Paraguay until the end of his life (Nordisk familjebok, 1913). However, the trip was plagued by a series of setbacks, and he was forced to make a long stop in Lisbon from the 4<sup>th</sup> January until the 3<sup>rd</sup> May (Paulin, 1947). Having examined all this information, we can say with a fair degree of certainty that the «Lusit.» label refers to Lisbon, Portugal, and from which period the collection must originate. All the species captured can be found in the area and be located on the date indicated on the label.

So far, we consider this specimen to be the first and only example of *Myrmecophilus myrmecophilus* found in Portugal, in addition to the first record of the genus. The find must date from around 1841. It is unclear whether the species is still present in this country nowadays, and it is necessary to conduct further research to confirm it. The species can be found by checking the nests of the ant genus *Messor* for adult ant crickets, or *Pheidole*, for nymphs. This is another example that public museums are important resources deserving recognition, as they can preserve unique historical specimens that provide valuable biogeographical insights (Suarez and Tsutsui, 2004; Booher *et al.*, 2023).

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**FIGURE 2.** Stacked photograph of the specimen of *Myrmecophilus myrmecophilus* from Portugal: (a) Dorsal position; (b) Ventrolateral position (Scale bar = 1 mm) (Photos: Tobias Malm).

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