

**Short note**Submitted: February 15<sup>th</sup>, 2016 - Accepted: March 25<sup>th</sup>, 2016 - Published: June 30<sup>th</sup>, 2016**The presence of the Ant-loving Cricket *Myrmecophilus ochraceus* in Sardinia, Italy (Orthoptera: Myrmecophilidae)**

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**Abstract**The first records of *Myrmecophilus ochraceus* Fischer, 1853 in Sardinia (Italy) are given and a photograph of this species is presented.**Key words:** Orthoptera, Ant-loving Cricket, *Myrmecophilus ochraceus*, Sardinia, Italy.**Introduction**

The Ant-loving Cricket *Myrmecophilus ochraceus* Fischer, 1853 has a wide distribution in the Mediterranean region. Its range reaches from Spain in the West to Greece, Turkey and Syria in the East (Baccetti 1966; Espadaler & Olmo-Vidal 2011; Ünal 2011; Willemse & Willemse 2008). The species is widely distributed in southern Italy, but there have been no mentions of its presence in Sardinia so far (Massa et al. 2012). This study reports the first records of *M. ochraceus* in Sardinia, Italy.

**Material and Methods**

Recently, several ant-loving crickets (*Myrmecophilus* Berthold, 1827) have been found in Sardinia by the author, by Roberto Ratto and by Gianpaolo Ruzzante. The specimens were caught, preserved in ethanol, and subsequently pinned and dried. The museum collection at the Museo Civico di Storia Naturale Giacomo Doria in Genoa, Italy (MSNG), has been revised and an additional record from Sardinia was included in this publication.

**Results**

*Myrmecophilus ochraceus* was found at the following localities (Fig. 1):

**Italy, Sardinia:** Medio Campidano province, Arbus, Capo Pecora, 39.27.26N, 008.23.14E, 25 m, 2 Jun 2014, 1 adult ♀ and 1 adult ♂ (Fig. 2), in the nest of *Messor* sp., 1 ♀ nymph and 4 ♂ nymphs in the nest of *Pheidole* sp., leg. T. Stalling (coll. T. Stalling); Cagliari province, Villasimius,

Isola dei Cavoli, 39.05.11N, 009.31.55E, about 20 m, 9 Jun 1989, 3 adults ♂ and 5 nymphs of unknown sex in the nest of *Messor* sp., leg. M. Mei (MSNG); Cagliari province, Domus de Maria, above Cala Niedda, 38.54.08N, 008.53.37E, 50 m, 12 Dec 2011, 2 adults ♂ in an ant nest, leg. G. Ruzzante (coll. T. Stalling); Cagliari province, Saline di Cagliari, 39.12N, 009.08E, 8 Mar 2011, 1 adult ♂ in the nest of *Messor* sp., leg. R. Rattu (coll. T. Stalling); Cagliari province, Cagliari, Capo Sant' Elia, 39.11N, 009.08E, May 2011, 4 adults ♀, 2 adults ♂, 7 ♀ nymphs, and 1 ♂ nymph in the nest of *Messor* sp., leg. R. Rattu (coll. T. Stalling); Cagliari province, Muravera, Costa Rei, 39.15N, 009.34E, 6 Oct 2012, 1 adult ♂ in the nest of *Messor* sp., leg. R. Rattu (coll. T. Stalling).

**Discussion**

*Myrmecophilus ochraceus* was found at several localities along the southern and south-western coasts of Sardinia, indicating that it might be widespread in Sardinian coastal areas. The presence in Sardinia extends the known extent of occurrence, which is an important criterion for assessing species for the Red List of Threatened Species (IUCN 2012), and therefore for species conservation. The species was probably overlooked before now, or confused with the second species occurring in Sardinia, *Myrmecophilus myrmecophilus* (Savi, 1819). *M. ochraceus* is easily distinguishable from *M. myrmecophilus* with respect to the following characteristics: valvae of female (viewed laterally) are rounded (double-pointed in *M. myrmecophilus*); hairs on the front and antennae are long, distant, and bushy (short and inconspicuous in *M. myrmecophilus*); and basitarsi of the hind legs have only one spine in the proximal



**Fig. 1** – Records of *Myrmecophilus ochraceus* in Sardinia. Based on a map from Yuma, © CC BY-SA 3.0 license.

position (two dorsal spines in the proximal and medial positions in *M. myrmecophilus*).

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**Fig. 2** – *Myrmecophilus ochraceus*, ♂. 2 June 2014, Capo Pecora, Arbus, Sardinia, Italy. Photo by T. Stalling.