

## Correction to the mistaken reporting of *Troglophilus neglectus* in Malta

Louis F. Cassar

### Abstract

*Troglophilus neglectus* was mistakenly reported to have occurred in Malta. This short note seeks to amend the said error with a view to update the literature on the orthopterous fauna of the Maltese Islands.

### Zusammenfassung

*Troglophilus neglectus* wurde irrtümlicherweise als in Malta gefunden gemeldet. Dieser kurze Hinweis soll diesen Irrtum berichtigen, um die Literatur zur Orthopterenfauna der maltesischen Inseln zu aktualisieren.

### Introduction

*Troglophilus neglectus* was reported to have been recorded from Malta (HARZ 1986). The relevant text is reproduced below *ad verbatim*, followed by an English translation.

#### Eine neue Höhlenheuschrecke für Malta

Mein lieber Kollege L. F. CASSAR übermittelte mir eine auf Malta, Carso Triestino (T.S.), Grotta dei Partigiani im September 1983 von A. COLLA gesammelte *Troglophilus*-Art, bei der es sich einwandfrei um *neglectus* (KRAUSS) handelt. Ein sehr bemerkenswerter Fund, wenn man bedenkt, daß eine Verschleppung ja nicht in Betracht kommt, die Grille also wohl aus der Zeit stammt, als Malta noch mit dem Festland verbunden war.

Kurt Harz

#### A new cave cricket for Malta

My dear colleague, L. F. CASSAR, sent me a *Troglophilus* species from Malta, Carso Triestino (T.S.), Grotta dei Partigiani in September 1983 that A. COLLA had collected, and which was identified as *T. neglectus* (KRAUSS). A very noteworthy find, no doubt a relict species from the time when Malta was still connected with the mainland.

Kurt Harz

### Historical background

As of 1984, I maintained regular communication with Dr. Kurt Harz; the manner of correspondence during that particular period of time was via conventional mail, as also by means of occasional telephone conversations, and it was through a regular stream of letters that I kept Dr. Harz informed of progress pertaining to Orthoptera. Being a renowned authority, he became my main point of reference, over time mentoring me in this field of taxonomic research. At the time, I was also working on the orthopteran fauna of the Maghreb and the Nile basin.

I informed him of a series of specimens I had received from a colleague in Trieste, Dr Andrea Colla (who later became curator of the Museum of Natural History in Trieste, Italy), comprising, among others, examples of *Troglophilus neglectus*. I subsequently dispatched a batch of duly labeled specimens from Malta, together with a specimen of *T. neglectus*, to Dr. Harz. Indeed, I reported about the specific locality (Grotta dei Partigiani, Carso Triestino) and the collector, A. Colla (HARZ 1986). However, Dr. Harz erroneously assumed that *all* specimens in the parcel were from the Mediterranean island of Malta (pers. comm. Harz-Cassar, August 3<sup>rd</sup> 1986). A proposed rectification of this oversight by the author (pers. comm. Harz-Cassar, 1986) in the subsequent number of ARTICULATA appears to have been overlooked. The present note seeks to resolve this error, based on a genuine misunderstanding, in order to ensure accurate updating of the literature on the Orthopteran fauna of the Maltese islands. As a consequence, the erroneous citing of *Troglophilus neglectus* from Malta has been revised.

## Discussion on potential habitat

The assumption of a relict *Troglophilus* population on Malta by HARZ (1986) is based on existing evidence of the climatic history of the Mediterranean as also on the region's geo-tectonic record (HSÜ 1972, 1983, SUC 1984, MARGALEF 1985). During the Messinian salinity crisis [5.59-5.33Ma], i.e., prior to the Zanclean flood of 5.33Ma which re-established marine conditions in the Mediterranean Basin (HSÜ 1972, KEOGH & BUTLER 1999; BASSETTI et al. 2005) and the subsequent Pleistocene epoch glacio-eustatic sea-level changes, the Maltese Islands are assumed to have been somehow connected with larger landmasses further north (HUNT & SCHEMBRI 1999, CASSAR et al. 2008). The latter resulted in a number of intermittent physical connections in the central Mediterranean (HUNT & SCHEMBRI 1999), as a consequence to lowstands during various extensive glaciation events across central Europe. The fossil and sub-fossil record in material of Quaternary age (including 'reworked' Miocene material) demonstrates incontrovertible evidence of unhindered land-bridge connections with the Sicilian mainland, during which time influxes of biotic immigrants occurred (SOOS 1933, SUC 1984, HUNT & SCHEMBRI 1999, CASSAR et al. 2008).

Due to the karstic nature of the Maltese landscape, resulting from calcareous stratigraphy, various cavernous landforms occur. These largely owe their formation to the agency of water. Dissolution and stream erosion were the principal mechanisms that created such features, some quite extensive e.g. phreatic tubes or subterranean solution tunnels (not unlike an underground river system). In today's drier climatic regime, these cavernous tunnels provide a habitat for various species, including two species of endemic troglobiotic isopods, *Armadillidium aeleni* and *A. ghardalamensis*, and a suite of troglloxenes comprising Chiropteran species and other micro-mammals, together with a host of invertebrates, including the gryllid *Gryllomorpha dalmatina*. Given the existence of suitable cavernous habitats within the Maltese islands, it is therefore not surprising that Kurt Harz assumed that *Troglophilus neglectus* was taken in Malta. It should, however, be noted that no cavernicolous Tettigoniodea species have to date been recorded.

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