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Article



New species of terrestrial isopods (Isopoda: Oniscidea) from Sardinia*

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*In: Cerretti, P., Mason, F., Minelli, A., Nardi, G. & Whitmore, D. (Eds), Research on the Terrestrial Arthropods of Sardinia (Italy). Zootaxa, 2318, 1–602.

Abstract

Four new species of terrestrial isopods from Sardinia are described: *Alpioniscus thanit* **sp. nov.** (Trichoniscidae), *Halophiloscia cristagalli* **sp. nov.** (Halophilosciidae), *Alloschizidium maymon* **sp. nov.** and *Alloschizidium magrinii* **sp. nov.** (Armadillidiidae). *Alpioniscus thanit* and *Alloschizidium magrinii* were collected in endogean environments, *Halophiloscia cristagalli* on granitic beaches of small islands in the northern and western part of Sardinia, and *Alloschizidium maymon* from a cave. The diagnostic features and the affinities of the new species are discussed.

Key words: Isopoda, Oniscidea, Trichoniscidae, Halophilosciidae, Armadillidiidae, new species, Italy, Sardinia

Introduction

Due to its geographic position in the middle of the western Mediterranean Sea, its peculiar and well known geological history and its environmental heterogeneity, Sardinia is of extreme interest for naturalistic studies. The terrestrial isopods are an ideal biological model for faunistic and biogeographical studies, due to their reduced dispersal ability and strong stenoecy. Considering the rich literature, starting from the first monograph of Arcangeli (1925), this group of organisms seemed to be reasonably well known in Sardinia. Despite these premises, while studying our old collections and some new records of Oniscidea from our recent research trips to the island, we discovered four new species which are described herein: a second species for Sardinia of the genus *Alpioniscus* Racovitza (*A. thanit* **sp. nov.**, family Trichoniscidae) collected in an endogean environment, a halophilous species (*Halophiloscia cristagalli* **sp. nov.**, family Halophilosciidae), and two species of *Alloschizidium* Verhoeff (family Armadillidiidae), one cavernicolous (*A. maymon* **sp. nov.**) and one endogean (*A. magrinii* **sp. nov.**).

Material and methods

Specimens are stored in 75% ethanol and identifications are based on morphological characters. For each new species the material examined, a diagnosis, description, etymology and remarks are given. Terminology used in species descriptions is mainly based on Vandel (1960, 1962). The taxa are illustrated with figures prepared with the aid of a camera lucida mounted on Wild M5 and M20 microscopes.

The material is deposited in the collection of the Museo di Storia Naturale dell'Università, Sezione di Zoologia "La Specola", Florence (MZUF).