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Psammophilous halacarid mites (Trombidiformes, Halacaridae) from the North Coast of São Paulo State, Brazil

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Abstract

Five halacarid species are reported from the Brazilian coast for the first time. *Scaptognathides delicatulus*, formerly known only from its type locality in Kuwait; *Scaptognathus gibbosus*, known from Galapagos and Somalia; and *Scaptognathus insularis* known from northeastern Australia, have their distributions extended. Along with these new records, *Halacaroides antoniazziae* **sp. nov.** and *Acarochelopodia caissara* **sp. nov.** are described. *Halacaroides antoniazziae* **sp. nov.** differs from its congeners by the presence of three subgenital setae in males and none in females, 41–44 perigenital setae and two posterior external genital acetabula in males. *Acarochelopodia caissara* **sp. nov.** has a rounded anterior epimeral plate margin, the posterior epimeral plates are partially divided into two halves but anteriorly joined by a narrow band, the dorsal setae on tarsus I are grouped 1:2, and the anterior and posterior dorsal plates have a length: width ratio of 1.61–1.77 and 1.60–1.70, respectively.

Key words: taxonomy, Acari, distribution, Brazil, southwestern Atlantic

Introduction

Halacaridae comprises more than a thousand species in 63 genera, most of them marine (Bartsch 2009). At least half of the halacarid genera may be found in the interstitial sand. Among them, *Acarochelopodia*, *Actacarus*, *Anomalohalacarus*, and *Scaptognathides* are almost exclusively psammic (Bartsch 2004a). Interstitial species share adaptations for living in crevicular spaces, such as elongate and spindle-shaped body and reduced and often divided idiosomal plates.

Until the present, only *Acaromantis vespucioi* Pepato & Tiago, 2004 (Simognathinae) was reported from Brazilian sand beaches (Pepato & Tiago 2004). This article reports five new records and species in four genera from psammic environments.

Material and methods

The mites were collected at the North Coast of São Paulo State (southeastern Brazil) by researchers participating in the project "Benthic marine biodiversity on the State of São Paulo" (BIOTA/FAPESP Program) and by one of the authors (A. R. Pepato).

The specimens were obtained from intertidal sand samples collected in the beaches São Francisco, (23º45'S, 45º25'W) and Pitangueiras (23º49'S, 45º25'W), both in São Sebastião, and in the beaches Picinguaba and Fazenda, these very close each other, in Ubatuba (23º20'S, 44º50'W). Qualitative and quantitative samples were examined. The stracta where the mites were found is given in centimeters.

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