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Checklist of marine and freshwater halacarid mite genera and species (Halacaridae: Acari) with notes on synonyms, habitats, distribution and descriptions of the taxa

ILSE BARTSCH



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distribution and descriptions of the taxa**

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Abstract

At the end of 2007, the family Halacaridae, superfamily Halacaroidea, included 1118 valid species in 63 genera. The genera and the number of species (in parentheses) are: *Acanthohalacarus* (1), *Acanthopalpus* (2), *Acarochelopodia* (8), *Acaromantis* (11), *Acarothrix* (5), *Actacarus* (24), *Agauae* (42), *Agauides* (2), *Agauopsis* (85), *Anomalohalacarus* (19), *Arenihalacarus* (1), *Arhodeoporus* (31), *Astacopsiphagus* (1), *Atelopsalis* (7), *Australacarus* (5), *Bathyhalacarus* (12), *Bradyagaue* (17), *Camactognathus* (3), *Caspihalacarus* (1), *Coloboceras* (3), *Colobocerasides* (2), *Copidognathides* (3), *Copidognathus* (359), *Corallihalacarus* (1), *Enterohalacarus* (1), *Halacarellus* (47), *Halacaroides* (2), *Halacaropsis* (5), *Halacarus* (75), *Halixodes* (3), *Hamohalacarus* (1), *Himejacarus* (1), *Isobactrus* (26), *Limnohalacarus* (13), *Lobohalacarus* (6), *Lohmannella* (36), *Metarhombognathus* (2), *Mictognathus* (3), *Parasoldanellonyx* (3), *Parhalixodes* (2), *Pelacarus* (1), *Peregrinacarus* (2), *Phacacarus* (1), *Porohalacarus* (2), *Porolohmannella* (1), *Rhombognathides* (6), *Rhombognathus* (103), *Ropohalacarus* (1), *Scaptognathides* (11), *Scaptognathus* (30), *Simognathus* (45), *Soldanellonyx* (9), *Spongihalacarus* (1), *Stygothalacarus* (1), *Thalassarachna* (14), *Thalassophthirus* (1), *Troglohalacarus* (1), *Tropihalacarus* (2), *Werthella* (10), *Werthelloides* (1), *Winlundia* (2), and *Xenohalacarus* (1). More than 1000 species live in marine and brackish water and almost 60 species exclusively in fresh or oligohaline to mesohaline brackish water (< S18‰).

The checklist presents names used for halacarid genera and species of the world, names recognized as valid, synonyms, nomina nuda, names of species inquirendae and species erroneously attributed to the family Halacaridae. All valid species are supplemented with distributional data, namely, biogeographical provinces, depth zones and habitats, and references of descriptions of genera and species.

Key words: Halacaroidea, genera, species, synonyms, references, distribution

Introduction

Two and a half centuries ago, Baster (1758) published observations on marine organisms from the seashore, and one of the plates in that paper shows a marine 'insect' which actually is a mite, and nowadays placed into the family Halacaridae (Trombidiformes (Actinodida) : Acariformes (Actinotrichida) : Acari : Arachnida). Eight decades later, Johnston (1836) described a marine mite under the name of *Acarus basteri*, in honour of J. Baster. That mite nowadays is named *Thalassarachna basteri* (Johnston, 1836) and is commonly found on the shores of the northern Atlantic. The mite illustrated by Baster (1758: plate 10, fig. 7), characterized by long palps, rather wide idiosoma and short, slender first leg pair, may be conspecific with *Lohmannella falcata* (Hodge, 1863).

In the century following Johnston's (1836) description, the number of halacarid mite genera and species had grown steadily. In a compilation of the marine and freshwater halacarid taxa, Viets (1956) mentioned 283 species and 46 subspecies in 24 marine and 11 freshwater genera. Six of the species listed in Viets's paper were considered to be dubious in validity, perhaps not to be halacarid mites. In a more recent list of freshwater mites, K.O. Viets (1987) newly added two halacarid freshwater genera, 18 species and 5 subspecies to the former list. Since those days when Viets (1956) and K.O. Viets (1987) published the mite lists, the number of marine halacarid genera and species has increased considerably. New genera and species have been described, subspecies raised to species rank, but also former valid taxa declared synonyms. Whereas the number of marine taxa has increased more than threefold only a few new taxa have been added to the world's freshwater halacarid fauna. In the most recent compilations, the number of marine species exceeded 1000 (Bartsch 2004c), whereas that of freshwater species reached 56 (Bartsch 2008).

The present checklist presents a list of 1118 species recognized as valid in 63 genera. Subspecies, synonyms, nomina nuda, nomina dubia and names erroneously attributed to the family Halacaridae are included in the list. Misspellings and changes in a species name due to the gender are in general ignored. Data on distribution are given.