



First fossil record of the pseudoscorpion family Pseudochiridiidae (Arachnida, Chelonethi, Cheiridioidea) from Dominican amber

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Abstract

Pseudochiridium lindae sp. is described from Dominican amber (Miocene), representing the first fossil record of the family Pseudochiridiidae. The extant species *Pseudochiridium insulae* Hoff, 1964 is newly recorded from the Dominican Republic. *Paracheiridium vachoni* Vitali-di Castri, 1970 is transferred to the genus *Pseudochiridium* With, 1906 (n. comb.). The correct publication date for family-group names based on Cheiridiinae Hansen is shown to be 1894.

Key words: Pseudoscorpions, fossils, Miocene, Dominican amber, taxonomy.

Introduction

Pseudochiridiidae are small, infrequently collected pseudoscorpions with a patchy distribution in the tropics and subtropics. Two genera and twelve extant species have been described from sub-Saharan Africa, Madagascar, the Indian Ocean, the Oriental Region and the Caribbean (Harvey 1991). An unidentified species of *Pseudochiridium* With has also been recorded from Mexico (Mejía & Guerrero 1993; Ceballos 2004) and it seems very likely that the family will be found in South America. Almost nothing is known about the biology or ecology of Pseudochiridiidae, but they have been found in leaf litter, under tree bark, in caves and in the nests of birds and mammals. Although most pseudoscorpion families with bark-inhabiting species have been found in amber, the Pseudochiridiidae have previously lacked a fossil record. The first fossils of this family are described here from Dominican amber, representing a new species of the genus *Pseudochiridium* m

Material and Methods

The fossils were purchased from Amberdepot Inc., St Louis, MO, U.S.A. and came from the Palo Alto mines (La Toca formation) near Santiago, Dominican Republic. Amber from these mines is considered to date from the Miocene, with an age of about 20 My (Iturralde-Vinent & MacPhee 1996). The holotype was in small piece of clear golden-yellow amber measuring $11 \times 9 \times 5$ mm, but following additional preparation it is now in an offcut measuring $6 \times 5.5 \times 2$ mm. It is in good condition, but some parts (left chela and tibiae/tarsi of left leg IV and right leg II) have been disarticulated and both chelae are obscured by debris. It is likely that the specimen was dead before being trapped in the resin. Other inclusions with the holotype comprise the carcass of a male spider with webbing and debris, two ants, and a fragment of a large insect wing. The paratype female is preserved in a small piece of golden-yellow amber ($23 \times 12 \times 7$ mm), which is slightly clouded by fine particles. This specimen is very close to the surface of the amber and small parts of the carapace, poste-