



Pauropoda (Myriapoda) from Great Smoky Mountains National Park, U.S.A., with descriptions of four new species

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Abstract

As a part of the All-Taxa Biodiversity Inventory of Great Smoky Mountains National Park (Tennessee, North Carolina, U.S.A.) a collection of 192 specimens of Pauropoda has been studied. Eighteen species belonging to six genera in three families have been identified. Four of the species in Pauropodidae are new to science and described: *Decapauropus arcuatilis* n. sp., *Stylopauropus plicatus* n. sp., *Donzelotauropus dividiuus* n. sp. and *Donzelotauropus tenuitarsus* n. sp. With the four new species the number of known species in GSMNP now stands at 49. A key is presented to the genera collected up to now in GSMNP.

Key words: Myriapoda, Pauropoda, new species, taxonomy, USA. biogeography

Introduction

The pauropods have never been comprehensively studied in the U.S.A. and up to recently little has been published from the Southern Appalachian region. What is known from Great Smoky Mountains National Park (Tennessee, North Carolina) was summarized by Scheller & Bernard (2005), 45 species from eight genera, indicating a fauna of high diversity. Below is added further material of different origin from there, among them four species new to science.

The type material has been deposited in the U.S. National Museum of Natural History, Washington. Specimens of new species are listed as type specimens and nontypes, and besides collection data the specimens are categorized by life stage (ad., subadult, juvenile) followed by the number of pairs of legs. Measurements are given for holotypes, with ranges of variation in adult paratypes given in parentheses.

Order Tetrameroceata

Family Pauropodidae Lubbock, 1867

Genus *Allopauropus* Silvestri, 1902

***Allopauropus cantralli* Remy, 1958**

Material examined. Tennessee, Blount Co., stop 1 on Highway 411, 1 juv. 3, 22 June 2005, leg. R.T. Allen.—1 specimen.

***Allopauropus carolinensis* (Starling, 1943)**

Material examined. Tennessee, Blount Co., Gregory Cave, outside and upslope of entrance, litter between boulders, 2 subad. 8(♀), 2 juv. 6, 6 juv. 5, 2 juv. 3, 27 July 2006, and Gregory Cave, litter inside bars at entrance, 1 juv.