Zootaxa 3710 (4): 354–362
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.3710.4.4
http://zoobank.org/urn:lsid:zoobank.org:pub:A6F18E0D-C723-479B-8E73-2C4B3CED34E5

Speleonectes cokei, new species of Remipedia (Crustacea: Speleonectidae) from a submerged ocean cave near Caye Chapel, Belize

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Abstract

Speleonectes cokei **n. sp.** is the 15th species of *Speleonectes* to be described. It is the first remipede described from a submerged cave off the mainland of Belize. The species is the third found along the Caribbean coast of the Yucatan Peninsula. *S. cokei* can be distinguished from *S. tulumensis* Yager, 1987 and *S. fuchscockburni* Neiber et al., 2012 by the number of antenna 1 segments, number of antenna 2 exopod setae, spines on maxilla 1 segment 2, and caudal rami to anal segment length.

Key words: remipede, *Speleonectes*, Belize, seafloor cave, anchialine cave

Introduction

All remipedes to date have been collected in submerged caves. Most species have been found in anchialine caves, or caves with entrances on land but having subsurface connections to the sea. *Speleonectes cokei* **n. sp.** is the second species to be collected from a cave whose entrance begins on the ocean floor; the other is *S. kakuki* Daenekas et al., 2009 from the Bahamas. Seafloor caves are very common in the Bahamas where they are called ocean blue holes.These caves typically have a tidally influenced incurrent and excurrent near the entrances and little or no terrestrial influence. However the passages may extend toward and under land or be extensive enough that there is less water flow. It is these quieter passages where remipedes have been collected.

The description of *Speleonectes cokei* brings the number of species in the genus *Speleonectes* to 15. It is the third species to be described from the Yucatan Peninsula area.

All measurements for body length are from the anterior edge of the cephalic shield to the end of the caudal rami, excluding setae. Trunk segments are defined as those posterior to the maxilliped, all of which bear swimming appendages with the exception of sometimes the posteriormost segments. Setation differs slightly among specimens of varying lengths; counts of setae are approximate and based on the largest specimens.

Systematics

Speleonectes cokei, new species

Figures 1–5

Type locality. Caye Chapel Cave, Caye Chapel, Belize

Material examined. Holotype, U.S. National Museum of Natural History (USNM) #1202676, 19.5 mm, 36 trunk segments; collected by Frank Bounting, 17 April 1989. Paratypes: USNM #1202677, 30 mm, 40 trunk segments, partially dissected; USNM #1202679, 13.8 mm, 33 trunk segments; collected by Frank Bounting, 17 April 1989; USNM #1202680, 28.6 mm, 38 trunk segments; head and trunk segment 1 dissected for SEM; collected 23 July 1987 by Jim Coke.

 Accepted by K. Meland: 28 Aug. 2013; published: 16 Sept. 2013