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First records of peracarid crustaceans from the Cayo Matias Ocean Blue Hole, SW Cuba, with the description of two new species

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Abstract

First records of peracarid crustaceans obtained from the Cayo Matías Ocean Blue Hole, southwestern Cuba, are documented. In addition, two new species of isopod and amphipod are herein described. *Gnathia micheli* **n. sp.** (Isopoda, Gnathiidae) and *Boca normae* **n. sp.** (Amphipoda, Aristiidae) were associated with filamentous algae at a depth of 20 m. Both represent the first report for a blue hole and the amphipod constitutes the first record of the genus for Cuba and the Caribbean Sea. Three other isopods, i.e. *Gnathostenetroides* sp., *Cirolana parva*, and *Cirolana crenulitelson*, and the cumacean *Procampylaspis* sp. are documented for the first time from the same blue hole.

Key words: Crustacea, Peracarida, new species, Caribbean Sea

Resumen

Los primeros registros de crustáceos peracáridos del blue hole Cayo Matías, suroeste de Cuba, son documentados. Además, dos especies nuevas de isópodo y anfípodo son descritas en este trabajo. *Gnathia micheli* **n. sp.** (Isopoda, Gnathiidae) y *Boca normae* **n. sp.** (Amphipoda, Aristiidae) estaban asociadas con algas filamentosas a 20 metros de profundidad. Ambas especies representan el primer registro para un blue hole, mientras el anfípodo constituye el primer registro del género para Cuba y el Mar Caribe. Fueron registrados también, tres isópodos *Gnathostenetroides* sp., *Cirolana parva*, *Cirolana crenulitelson*, y el cumáceo *Procampylaspis* sp., por primera vez para el mismo blue hole.

Palabras clave: Crustacea, Peracarida, especies nuevas, Mar Caribe

Introduction

Blue holes, or submarine caves, are shallow marine ecosystems located on continental shelves, islands, or bank of the coral reef systems that connect with extensive, strongly tidal, submerged cave systems (Gutu & Iliffe 1998). Most of the caves associated with blue holes are fault caves with parallel walls and collapsed rubble on the bottom (Kornicker & Iliffe 2000). In Cuba, these submarine caves occur mainly in the archipelagos along the north and south of the island (pers. obs.). The fauna of these systems has poorly been studied, while activities in these areas have been limited mostly to scuba diving.

An oceanographic cruise was organized to collect benthic fauna associated with different marine environments in southwestern Cuba. Peracarid crustacean species were collected from the Cayo Matias Ocean Blue Hole. Representatives of the families Gnathiidae, Cirolanidae and Gnathostenetroididae (Isopoda, Flabellifera and Asellota), and Aristiidae (Amphipoda, Gammaridea) seem to be important in this type of ecosystems.

This paper presents the first records of peracarid crustaceans of an Ocean Blue Hole in Cuba, and description of new species of the genera *Gnathia* (Isopoda) and *Boca* (Amphipoda) are provided.