



<http://dx.doi.org/10.11646/zootaxa.3652.3.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:3A45303E-EAF4-4299-962E-2CD745A48AF3>

## ***Caribboecetes progreso*, a new species of sand-dwelling amphipod (Amphipoda: Corophiidea: Ischyroceridae) from the Gulf of Mexico, with a key for the genus**

CARLOS E. PAZ-RÍOS<sup>1</sup> & PEDRO-LUIS ARDISSON<sup>2</sup>

*Departamento de Recursos del Mar, Cinvestav, Carretera antigua a Progreso, km 6, Apdo. Postal 73, Cordemex 97310 Merida, Yucatan, Mexico. E-mail: <sup>1</sup>cpaz@mda.cinvestav.mx, <sup>2</sup>ardisson@mda.cinvestav.mx*

### **Abstract**

A new species of the genus *Caribboecetes* Just, 1983 is described and illustrated from specimens collected on sandy bottoms of the northern Yucatan Peninsula, southeastern Gulf of Mexico. *Caribboecetes progreso* **sp. nov.** differs from the closely related species *Caribboecetes barbadensis* Just, 1983 and *Caribboecetes jenikarpae* Just, 1984 by the inflated triangular anterolateral flange on basis of gnathopod 2, and from *Caribboecetes justi* Ortiz & Lemaitre, 1997 by the setose anterolateral surface of coxal plate 7 and basis of pereopod 7. Ecological notes for the new species, a morphological comparison, map of distribution and key for all members in the genus are also provided.

**Key words:** Yucatan, western Atlantic, Crustacea, Peracarida, biodiversity, taxonomy

### **Introduction**

Members of the genus *Caribboecetes* Just, 1983 are currently distributed on the American coasts from the tropical western Atlantic and tropical eastern Pacific; they are commonly found on sandy or muddy bottoms in empty mollusk shells or tubes made of sand grains where they achieve high abundances (Just 1983, 1984, 1988).

The genus *Caribboecetes* included eight species until 1997. After that year, the genus was re-diagnosed and divided by Just (1998) to encompass five species: *Caribboecetes barbadensis* Just, 1983 (type species), *Caribboecetes intermedius* Just, 1984, *Caribboecetes jenikarpae* Just, 1984, *Caribboecetes justi* Ortiz & Lemaitre, 1997, and *Caribboecetes pteryicornis* Just, 1984. The remaining species (*Caribboecetes crassicornis* Just, 1984, *Caribboecetes magellani* Just, 1984, and *Caribboecetes squamiferus* Just, 1984) were transferred to a new erected genus by Just (1998), *Ambicholestes*. Besides the five nominal species, the genus *Caribboecetes* also includes two generic species: *Caribboecetes* sp. sensu Just, 1984 and *Caribboecetes* sp. A sensu LeCroy, 2007.

The present paper describes *Caribboecetes progreso* **sp. nov.** from the Yucatan coast, southeastern Gulf of Mexico, another species inhabiting sandy bottoms in the tropical western Atlantic, increasing thus the diversity of the genus to six species. The new species is highly abundant in the Yucatan coast, nevertheless its occurrence as a new species had been overlooked. For instance, when it was found for the first time, it was misidentified as *Corophium multisetosum* Stock, 1952 by Ardisson and Castillo-Fernández (2004), an unrecorded species in the Gulf of Mexico so far. Later studies in the area continued reporting the new species as *C. multisetosum* (Rodríguez-Pliego *et al.* 2011; Wijnhoven *et al.* 2011). The present study contributes to clarify this misunderstanding.

### **Material and methods**

The material examined herein was derived from three benthic studies in the northern Yucatan Peninsula, southeastern Gulf of Mexico. The first one was a spatio-temporal sampling along the central sector of the Yucatan State, Mexico (Ardisson & Castillo-Fernández 2004). The environmental characteristics, sampling design, sampling device and samples processing of this study are described in detail by Rodríguez-Pliego *et al.* (2011). To