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A checklist of the marine Harpacticoida (Copepoda) of the Caribbean Sea

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Abstract

Recent surveys on the benthic harpacticoids in the northwestern sector of the Caribbean have called attention to the lack of a list of species of this diverse group in this large tropical basin. A first checklist of the Caribbean harpacticoid copepods is provided herein; it is based on records in the literature and on our own data. Records from the adjacent Bahamas zone were also included. This complete list includes 178 species; the species recorded in the Caribbean and the Bahamas belong to 33 families and 94 genera. Overall, the most speciose family was the Miraciidae (27 species), followed by the Laophontidae (21), Tisbidae (17), and Ameiridae (13). Up to 15 harpacticoid families were represented by one or two species only. Excluding the Bahamian records, the number of species recorded herein for the Caribbean Basin is 139. The distribution of the species richness within the Caribbean Basin is asymmetrical; the northwestern sector (Mexican Caribbean) is the most speciose, it concentrates up to 45% of the species recorded in the Caribbean. The insular Caribbean is nearly as diverse as the continental areas (75 vs 83 species recorded, respectively). The dominance of taxa related to coastal systems with coarse and fine sands and carbonate sediments reveals the general trend in the type of habitats surveyed in the Caribbean Sea. Up to 37 species found in the Mexican Caribbean represent new records for this country. There are enormous hiatuses in the knowledge of the Caribbean harpacticoids in terms of geographic, bathymetric, and environmental coverage. It is expected this list will grow rapidly and many undescribed forms will be discovered when understudied or unexplored environments are surveyed in detail.

Key words: marine biogeography, benthic communities, invertebrate taxonomy