

A new record and a new species of the genus *Rhizothrix* (Copepoda: Harpacticoida: Rhizothrichidae) from the deep sea of the Gulf of California

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Abstract.—The biodiversity of the deep-sea of the Gulf of California has received some attention during the last two decades. Preliminary observations have revealed a high diversity of benthic and hyperbenthic copepods. Copepods of the genus *Rhizothrix* were found in sediment samples taken during the Talud X cruise in the Guaymas Basin. These specimens belong to a new species, *Rhizothrix longiseta*. The new species is related to *R. quadriseta* Wells, 1967 from Inhaca Island, Mozambique by the armature complement of the third exopodal segment of the second, third and fourth swimming legs, and of the second endopodal segment of the third swimming leg. The females of these two species can be distinguished by the armature complement of the second endopodal segment of the first and second swimming legs, by the relative length of the inner seta on the third exopodal segment of the second, third and fourth swimming legs, by the shape and number of setae on the exopod of the fifth leg, by the length:width ratio of the caudal rami, and by the number of segments of the antennule. This is the first record of the genus *Rhizothrix* from the deep-sea down to 1570 m depth, and is also the first record of the genus for Mexico. Additionally, *R. reducta noodti* Galhano, 1970 is given full species rank as *R. noodti*.

Keywords: Harpacticoida, Rhizothrichidae, deep sea, Gulf of California

The biodiversity of the deep-sea of the Gulf of California has received some attention during the last two decades (Hendrickx, 2012). Macrobenthos and meiobenthos were sampled during the course of 13 oceanographic cruises since year 2000 in the Gulf of California, Eastern Tropical Pacific and west coast of the Baja California Peninsula (Talud IV to XVI cruises). Preliminary observations on the benthic and hyperbenthic copepods revealed a high diversity of species, including several ancorabolid species; *Ancorabolus hendrickxi* Gómez & Conroy-Dalton, 2002, *Ceratonotus elongatus* Gómez &

Díaz, 2017 and *Dendropsyllus californiensis* Gómez & Díaz, 2017, have been described so far from the deep sea of the Gulf of California. Additionally, some new argesitid species have been recorded and will be published somewhere else. Several individuals of the genus *Rhizothrix* Sars, 1909 were found in sediment samples taken during the course of Talud X cruise in the Guaymas Basin. These specimens belong to a new species, *Rhizothrix longiseta*, and showed to be related to *R. quadriseta* Wells, 1967 from Inhaca Island, Mozambique. This is the first record of the genus *Rhizothrix* from Mexico, and from the deep-sea.