

de novo transcriptome assembly and subsequent annotation and differential gene expression analysis, we were able to identify putative genes involved in fatty acid bioconversion. Taken together with the fatty acid profiles, our results hint that the bioconversion capacity of *P. littoralis* could be a potential acclimation mechanism for the species to mitigate the effects of future ocean warming.

Keywords: Transcriptomics, global change, harpacticoid copepods, fatty acid metabolism

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Meio - and nematofauna living inside polymetallic nodules from the CCFZ

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The mining of polymetallic nodules, which occur in abyssal sediments in oligotrophic oceans, is potentially imminent. The Clarion Clipperton Fracture Zone (CCFZ) in the eastern Tropical Pacific, has gained most attention from industries because it is thought to harbor one of the most extensive high-grade reservoirs. Currently, 18 license areas have been delineated in the CCFZ for the exploration of polymetallic nodules. Studies from the 90's in the Peru Basin, south of the CCFZ, reported for the first time the existence of meiofauna living inside the crevices of nodules, which differed from the fauna present in the surrounding sediments. For the CCFZ, published information on the so-called crevice meiofauna is currently lacking. As mining will remove the nodules, it is important to investigate the associated meiofauna to predict future mining-induced losses in meiofaunal diversity. In the present study, nodules were sampled from the license area of Global Sea Mineral Resources in the eastern CCFZ for the analysis of crevice meiofauna with a focus on the nematodes. Per nodule, 2 to 79 meiofaunal organisms were retrieved, most of which belonged to the phylum of the Nematoda. These nodule data were compared with sedimentary data to estimate the contribution of the nodules to the overall meiofaunal and nematode diversity in the area.

Keywords: Deep-sea mining, Nematoda, biodiversity, crevice meiofauna