

{rokbox title=|Map of sampling sites in Western Mediterranean Sea :: Image: Authors|
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stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-csic-haplosporidium-pinn
ae-parasite-detection-seawater-samples-vazquet-et-al-2023.jpg{/rokbox}

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[Parasite Detection in Seawater Samples.](#)

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Abstract: In this study, we investigated the presence of the parasite *Haplosporidium pinnae*, which is a pathogen for the bivalve

Pinna nobilis

, in water samples from different environments. Fifteen mantle samples of

P. nobilis

infected by

H. pinnae

were used to characterize the ribosomal unit of this parasite. The obtained sequences were employed to develop a method for eDNA detection of

H. pinnae

. We collected 56 water samples (from aquaria, open sea and sanctuaries) for testing the methodology. In this work, we developed three different PCRs generating amplicons of different lengths to determine the level of degradation of the DNA, since the status of

H. pinnae

in water and, therefore, its infectious capacity are unknown. The results showed the ability of the method to detect

H. pinnae

in sea waters from different areas persistent in the environment but with different degrees of DNA fragmentation. This developed method offers a new tool for preventive analysis for monitoring areas and to better understand the life cycle and the spread of this parasite.

Keywords: *Haplosporidium pinnae*, eDNA, ribosomal unit, *Pinna nobilis*, benthic invertebrate, critically endangered