

Title

Mediterranean Sea acidification: a systematic review on the impact on target ecosystems

Specialisation

Biogeosciences, Marine Biology, Phytoplankton, Taxonomy, Ecology

Description

As carbon emissions increase and carbon dioxide levels (CO₂) in the atmosphere rise, so does the concentration of CO₂ in the ocean. The ocean has been efficiently and continuously absorbing CO₂ and is absorbing so much CO₂ that it is changing its chemistry resulting in 'ocean acidification'. This poses a threat to open ocean and coastal marine ecosystems, including the Mediterranean Sea. Impacts of ocean acidification on marine organisms will vary, because different groups exhibit a wide sensitivity. Iconic Mediterranean ecosystems such as sea grass meadows, Coralligene reefs and Vermetid snail reefs are threatened by ocean acidification and warming, however much less is known on the impacts at the ecosystem and Mediterranean basin wide scale.

This project will perform a systematic literature review on the state of knowledge related to target keystone Mediterranean species sensitive to ocean acidification. It aims to detect Mediterranean marine ecosystem vulnerability and propagated influences amongst and between a variety of organisms and their physical environments, and societal impacts.

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