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University of Aveiro
Nationality: Portuguese

Orientation: Sustainable Use of Marine Resources
Specialization Area: Transformation and Valorization
Research Area: 2.16 New products of marine origin



PhD project: Add Value to the Marine Invaders *Asparagopsis armata* and *Sargassum muticum*

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Summary: The introduction of invasive alien species is a major threat to ecosystem biodiversity, structure and function. The marine red algae *Asparagopsis armata* and the brown *Sargassum muticum* exhibit strong invasive behavior and are included in the list of the 100 “Worst Invasives in the Mediterranean Sea”.

In this work, the economic value of these algae will be enhanced through the isolation and purification of bioactive compounds related with antioxidant, antimicrobial and antifouling activities that can have further sustainable use as natural environment-friendly compounds in several industries. The activated antimicrobial pathways against human pathogenic bacteria will also be studied.

This study will emphasize the economic potential of these algae justifying their collection from the ocean, contributing to an ecosystem balance improvement and restoration.

