Carla Ofélia Ferreira da Silva

University: Universidade de Aveiro Nacionality: Portuguesa





Orientation: Gestión Integral del Mar Specialization Area: Análisis y evaluación ambiental Research Line: 3.6 Contaminación e impactos ambientales

PhD project: Marine Invaders – Impact of the invasive macroalgae Asparagopsis armata in marine and coastal environments

Supervisors: Marco Lemos

Summary:

Invasion by exotic species is one of the main threats to the oceans. In this PhD work, the target species of study is the red algae *Asparagopsis armata*. This algae is able to overlap with other native species by easily occupying coastal ecosystems, occasionally forming red tides. This phenomenon is seen at certain times of the year, on the Portuguese coast, especially on the Peniche beaches. Besides the rapid propagation, it has a very threatening characteristic for our coastal biodiversity: this alga is chemically defended. This means a negative impact on the life present in tide pools and areas with high *A. armata* density. This algae can cause effects on invertebrate communities over a period of time equivalent to a tide.

Thus, the main objective of this work is to unveil the impacts and understand how this invasive species acts in the coastal systems. This type of biological pollution - which is a result of global changes, causing major ecological problems, such as loss of biodiversity, is becoming more and more worrying.