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Orientation: Integrated Management of the Sea
Specialization Area: Environmental Analysis and Assessment
Research Area: 3.5 Biodiversity and littoral zone ecology



PhD project: Development of a coralline red algae flora (Corallinophycidae, Rhodophyta) in Galicia

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Summary: Coralline red algae (Corallinophycidae, Rhodophyta) are characterized by a stone-like appearance derived from calcite precipitation in their cell walls. They play an ecological role as substratum stabilizers, and they are key species in marine habitats such as maërl beds and the coralligenous. Coralline algae have a worldwide distribution, and occur in diverse habitats and bathymetry. They are present under different morphologies and growth-forms from attached encrusting and erect forms to unattached plants. Coralline algae are frequent in the Atlantic Iberia; however only records of the most common species are found for Galicia, together with information on their distribution and habitat. Recently, several studies focused on some genera pointed out that these groups showed a greater diversity. Therefore, it is necessary to carry out an update of this group with the aim of reassessing their diversity, in this case, by means of a taxonomic and biogeographic study of Galician coralline algae. Genera and species scarcely known will be particularly studied in order to develop a comprehensive flora which updates systematics, and species descriptions, habitat, distribution information are considered, as well as identification keys for the group. It will be applied the methodology commonly used in phycological studies on floristics and taxonomy, which involves the consultation of library sources as well as unpublished data compiled in databases, manuscripts and herbarium. Fieldwork will be carried out at low tide but also by SCUBA diving; collections will be representative of each habitat. Samples will be examined and described supported by specialized literature provided in the laboratory. Subsequently, the material studied will be preserved in SANT Herbarium in order to be permanently accessible to the scientific community.

