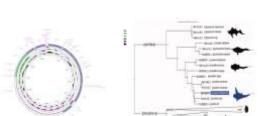


Nair Vilas Arrondo University of Vigo Nationality: Spanish Orientation: Sustainable Use of Marine Resources

Specialization Area: Management and Use of Resources

Research Area: 2.6. Technology applied to resource management







PhD project: Molecular characterization of species of the genus Dipturus and the orders Rajiformes and Chimaeriformes, from Newfoundland, Flemish Cap and Gran Sol

Supervisors: Dr. Montserrat Pérez Rodriguez (IEO-CSIC)

Summary: The Grand Banks of Newfoundland and the Flemish Cap, located in the northwest Atlantic and Gran Sol, located in the Northeast Atlantic, have historically been one of the richest fishing areas in the world and are the most important traditional fishing grounds for the Spanish fishing fleet great height. Chondrichthyans are the fauna group subjected to the most anthropogenic threats of all marine vertebrates, with a global decline in catches due to overfishing (Dulvy et al., 2014). Within this group, great rays and chimaeras are especially vulnerable to fishing and depletion of their populations (Brander, 1981). This current state of conservation and vulnerability is due to its biology, ecology, and life history: Large body size, slow growth, late maturity, production of few large pups, low fecundity, high levels of maternal investment, and long gestation periods. These peculiarities make their identification arduous and difficult, even for experts, resulting in misidentifications and mixed species. In turn, there is scientific evidence of misidentification of the species of chimeras, in the case of the great unknowns that inhabit deep waters. The principal objective of this study is to get the correct identification of rays and chimeras species inhabiting in the Grand Banks of Newfouland and FlemishCap, and Gran Sol combining morphometric and genetics technologies, review of the list of fauna composition and biogeographic distribution of the species of rays and chimeras identified in the 3LMNO divisions of the NAFO regulation area, and review of the IUCN species list in the case study of the species of rays belonging to the Gran Sol bank.