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Orientation: Sustainable use of marine resources
Specialization Area: Management and Use of resources
Research Area: 2.3 Assessment of fish and shellfish resources



PhD project: Impact of fishing activity on the reproductive potential and effective population size of the spiny spider crab (*Maja brachydactyla*, Balss 1922)

Supervisors: Dr. Andrés Martínez Lage (University of A Coruña)
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Summary: In Galicia, different commercial species are heavily exploited, including the spiny spider crab *Maja brachydactyla*. Galician coast is its main area of exploitation in Spain, both in terms of production (73%) and economic (over 80% of revenues). The main aim of this project is to analyze the potential impact of fishing activities on different aspects of reproductive biology of *M. brachydactyla* that are directly related to the reproductive potential and the effective population size, and ultimately, on the health of the stocks in terms of genetic variability.

For this purpose, the following particular objectives will be addressed:

1. Calculation of the effective population size to study the effect of fishing pressure.
2. Analysis of the influence of the relative size of males and females in the reproductive capacity (in terms of mating compatibility, insemination capacity, success in brood fertilization and quality and viability of the broods and the larvae)
3. Study of multipaternity
4. Study of male competition associated with mating process.

