

# The Deep-water Red Shrimp Fishery in the Spanish Mediterranean Sea

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## Abstract

The red shrimp (*Aristeus antennatus*, Risso 1816) has been exploited for 50 years in the Spanish Mediterranean. Out of a total of hundred harbours, about 40% have developed a deep-water red shrimp fishery. Abundance of this species is greatest between 500 and 800 m in depth, although their distribution extends down to 2000 m. The red shrimp contributes 900–1 500 tons per year to the Spanish deep-water trawl fishery. In several projects, co-financed by the European Union DG XIV and the Spanish Oceanographic Institute (IEO), data are being obtained on several demersal species, including the red shrimp which is the main target species of the deep-water trawl fishery. A sampling program began in 1991, involving collaboration with fishermen's associations and sampling at various landing sites. Data on catches and fishing effort have been obtained regularly since that year. Observers on board vessels collect data on fleet characteristics, gear types, fishing grounds, mean depth, fishing effort, biomass and abundance of species, both for landings and discards, and size distributions of the target species. Estimation of biological parameters are also obtained periodically. A computerised database is being developed to store all data recorded. For data recording purposes, the total fishing area has been divided into several sub-areas. Red shrimp resources have shown some resilience to overexploitation, although the fleet fishing capacity has increased steadily. The quantity of discards of all species in the fishery represent around 30% of the total catch. Nevertheless, discards of red shrimp are practically zero. The fishery, therefore exploits only adult shrimps, which represent nearly 75% of the total catch biomass. Sampling has shown that females contribute about 70% of the red shrimp catch by weight.

*Key words:* aristeus, deep-water, fishery, Mediterranean, red shrimp, Spain

## Reference

- CARBONELL, A., M. GARCÍA, P. PEREDA, A. ESTEBAN, G. POMAR, M. GAZA, A. TORRES, and J. L. PERÉZ GIL. 2001. The deep-water red shrimp fishery in the Spanish Mediterranean Sea (Symposium Poster). *NAFO SCR Doc.*, No. 85, Serial No. N4472, 8 p.