

EXPERIMENTAL ASSESSMENT OF THE VIABILITY OF DEEP-SEA TRAP FISHERY IN THE CANARY ISLANDS.

Airam Guerra-Marrero¹, Lorena Couce-Montero¹, Ana Espino-Ruano¹, David Jiménez-Alvarado¹ and José J. Castro¹.

¹ Biodiversity and Conservation Group (BIOCON), IU-ECOQUA, University of Las Palmas de Gran Canaria, Canary Islands, Spain

airam.guerra@ulpgc.es*, l.couce.montero@gmail.com, ana.espino104@alu.ulpgc.es,
david.jimenezalvarado@gmail.com, jose.castro@ulpgc.es

Abstract:

A previous assessment of the deep-sea living resources of the Canary Islands is of vital necessity for future development of an artisanal trap fishery. In this exploratory study, the faunal composition between 300-2000 meters depth of the Canary archipelago was assessed. Through crustacean and fish traps, the fishing yield and risk of loss of traps were analysed by depth strata. Catch per Unit of Effort (CPUE) showed a considerable decrease with depth, with the highest yields found between 300 and 700 meters deep. Mean CPUE values for fish were 40.87 ± 70.42 g/h and 52.73 ± 82.13 g/h for crustaceans.

Paramola cuvieri, *Cancer bellianus*, *Chaceon affinis*, *Heterocapus* spp., *Pleisionika* spp. and *Helicolenus dactylopterus* *Conger conger* were the species that could support a certain extractive activity, although their economic activity would be limited to the extractive costs. The low profit of the catches due to the risk of loss from the traps (10% per fishing campaign), and the adaptation of the vessels to operate at great depths makes the development of this trap deep-water fishery not an economically viable resource in the Canary Islands.

Key words: CPUE, archipelago, island system, effort, artisanal fishery, crabs, shrimps.